

CONSTRUCTION INDUSTRY SAFETY COALITION

January 26, 2022

The Honorable Doug Parker
Assistant Secretary
U.S. Department of Labor
Occupational Safety and Health Administration
Room: S2315
200 Constitution Ave., NW
Washington, DC 20210

Re: Construction Industry Safety Coalition
Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings
Docket No. OSHA-2021-0009

Dear Mr. Parker:

The Construction Industry Safety Coalition (“CISC” or the “Coalition”) respectfully submits these comments in response to the Occupational Safety and Health Administration’s (“OSHA” or the “Agency”) Advance Notice of Proposed Rulemaking on Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings. 86 Fed. Reg. 59309 (Oct. 27, 2021). The CISC appreciates OSHA’s consideration of these comments.

The CISC is comprised of numerous trade associations representing virtually every aspect of the construction industry. Workplace safety and health is a priority for all members of the Coalition, and each is committed to helping create safer construction jobsites for workers. Coalition members have been at the forefront of industry efforts to address heat illness on construction worksites and will continue to do so.

While the CISC appreciates OSHA’s rulemaking in this area and the hazards associated with working in extreme heat, the CISC has significant concerns with any regulatory approach that imposes complicated requirements on contractors and requirements that are triggered by threshold temperatures that are common in wide swaths of the country for much of the year. CISC members feel strongly that a regulatory approach – if adopted – must be simple and should integrate the key concepts of “Water, Rest, and Shade.” Because the construction environment is ever-changing and fluid, any regulatory approach must be simple and adaptable. For the same reasons, the CISC encourages OSHA to consider a separate regulatory approach for the industry, as OSHA has done in other rulemakings, such as for Respirable Crystalline Silica.

In this comment, the CISC provides background information on the work of the industry in addressing heat illness and key concerns with any regulatory approach. The CISC then addresses a few key requests for information.

I. Proactive Measures of the Construction Industry.

The construction industry has been at the forefront of efforts to protect workers from the effects of extreme heat. The trade associations that make up the CISC and their members conduct effective safety training on a frequent and regular basis on topics ranging from fall protection to chemical safety to rigging to forklift operator to heat stress. This training provides workers with critical information about common safety and health hazards on the job. CISC members have also developed a variety of toolkits and other materials to help construction employers target their efforts by adopting the methods that make the most sense for the type of work they do. For example, the National Association of Home Builders (“NAHB”) has developed a Heat Stress Safety Toolkit that includes a heat stress video, a written toolbox talk, and references to OSHA, CDC, and NIOSH resources on heat stress in the workplace specific to the construction industry. This toolkit is designed specifically to help home builders mitigate the risks of exposure to heat at their worksites. Likewise, Associated Builders and Contractors (“ABC”) offers members a Toolbox Talk on Sun Exposure for Contractors. Also, the American Road & Transportation Builders Association (“ARTBA”) has developed an interactive Heat and Cold Stress tool that allows users to input a temperature, the type of clothing a worker is wearing, the workload, and whether the worker is acclimatized. Based on the input, the tool will provide guidance on whether the worker is at risk for either heat or cold stress. In addition, the National Roofing Contractors Association (“NRCA”) offers free to its members the NRCA Safety Manual, which contains a chapter on heat stress that can be tailored for each employer/contractor. NRCA also offers Toolbox Talks, a Pocket Guide to Safety, a Targeted Safety and Health Training Series on Heat Stress, and *Professional Roofing* magazine articles and numerous social media-related posts on heat stress-related matters. Finally, the Concrete Sawing & Drilling Association (“CSDA”) has developed a Toolbox Safety Tip on “Preventing Heat-Related Injuries” and has published an article that addresses prevention and treatment of heat illness in their official magazine, *Concrete Openings*. While all different, the materials embody simplicity and are presented in formats that are easy to understand and will penetrate the construction industry, which is dominated by small business.

II. OSHA Must Actively Engage with ACCSH on Any Rulemaking and Conduct a SBREFA Panel.

As an initial matter, the CISC strongly encourages OSHA to actively engage with the Advisory Committee for Construction Safety and Health (“ACCSH”) in the development of any regulatory approach to heat illness. ACCSH is a balanced advisory committee with a unique perspective on the industry and worker safety.

ACCSH was established by the Construction Safety Act to serve an advisory function for the Secretary of Labor in formulating safety standards applicable to the construction industry. OSHA’s own regulations *require* that the Assistant Secretary for Occupational Safety and Health consult with ACCSH “whenever occupational safety or health standards are proposed.” 29 C.F.R. § 1912.3(a). The ANPRM identifies the construction industry as an industry the Agency intends to cover under its anticipated proposal regulating occupational exposure to heat injury and illness. Therefore, OSHA must consult with ACCSH and receive any recommendations that ACCSH may

have regarding the application of the rule in the unique construction environment. At the ACCSH meeting on August 11, 2021, then-acting Assistant Secretary for OSHA Jim Frederick opened the dialogue with ACCSH on this issue by briefly touching on OSHA's plans for addressing heat stress in construction. However, in June 2021, OSHA announced plans to form a National Advisory Committee for an Occupational Safety and Health Heat Illness Prevention Work Group. No such effort has been announced with respect to ACCSH. The regulatory requirement to consult with ACCSH on construction standards exists to ensure experts in construction have an opportunity to advise OSHA on whether and how to promulgate a rule that impacts the industry. As such, OSHA must actively engage with ACCSH regarding recommendations for this upcoming rulemaking.

Furthermore, the CISC encourages OSHA to involve the Directorate of Construction in the rulemaking process. The CISC understands that, as a health standard, the Directorate of Standards and Guidance will be the lead office promulgating any rule. Notwithstanding this, the Directorate of Construction can provide a construction-specific perspective that the CISC believes is important as the Agency considers its approach to protecting workers from heat illness.

In addition, before engaging in rulemaking, OSHA must notify the U.S. Small Business Administration's ("SBA") Office of Advocacy and convene a Small Business Advocacy Review Panel under the Small Business Regulatory Enforcement Fairness Act ("SBREFA") to elicit views of small contractors on the requirements and OSHA's proposed approach. Under SBREFA, when an OSHA proposal is expected to have a significant impact on a substantial number of small entities, the Agency must notify the SBA and the SBA's Office of Advocacy will recommend small entity representatives to be consulted on the proposal and its effect on small entities and businesses. In the ANPRM, OSHA has sought comment on whether small businesses are likely to be impacted by a standard, and if so, ways to minimize that impact. The CISC believes that any proposed rule regarding heat injury and illness prevention will undoubtedly have a significant impact on a substantial number of small entities, given the general make-up of the construction industry, which is dominated by small employers. In construction, most employers are small entities and the CISC encourages direct outreach to them should it proceed to rulemaking. If OSHA welcomes the input of small entities as a source of real-world understanding, any proposed requirements would likely be more narrowly tailored without sacrificing OSHA's mission or the regulatory objective of the rule. The CISC respectfully requests that the Agency convene a SBREFA panel to fully assess the impacts of any proposal on small construction companies.

III. Existing State Standards are Cumbersome, Confusing, and Ineffective.

As OSHA develops its approach, the CISC anticipates the Agency will examine other existing state regulatory approaches to heat illness. Unfortunately, CISC members have found those approaches to be confusing and ineffective, particularly in California.

California's heat illness standard, set forth under Title 8 California Code of Regulations section 3395, applies to multiple industries including agriculture, landscaping, oil and gas extraction, transportation and delivery of heavy materials, and construction. While these industries share

similarities, including outdoor work, each industry is unique which creates distinct issues for each industry when attempting to comply with the California standard.

California's heat regulation requires employers to provide employees with access to potable drinking water that is "located as close as practicable to the areas where employees are working."¹ Where drinking water is not plumbed or continuously supplied, it must "be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift."² Construction sites are temporary in nature. What is "close as practicable to the areas where employees are working" is a subjective standard; nonetheless, Cal/OSHA regularly cites employers for not having water as "close as practicable" to areas where employees are working.

Under California's standard, employees "shall be allowed and encouraged to take a preventative cool-down rest in the shade when they feel the need to do so to protect themselves from overheating."³ If, during the cool-down period, an employee exhibits signs or reports symptoms of heat illness, an employer is required to provide appropriate first aid or emergency response in line with the regulation's requirements. The standard goes on to require that any employee taking cool-down rest periods be monitored and asked whether they are experiencing symptoms of heat illness. Under no circumstances are resting employees to be "ordered back to work until any signs or symptoms of heat illness have abated..."⁴

An issue that employers face when attempting to comply with these provisions is that many symptoms of heat illness are not visibly recognizable. Headache, dizziness, nausea, weakness, irritability, thirst and elevated body temperature are all signs of heat illness, yet none of them are outwardly visible to an onlooker. Another initial indicator of heat illness, excessive sweating, could easily be overlooked as a normal physical reaction of an employee who is properly acclimatized to strenuous work outdoors. Yet, under the standard, an employer who fails to correctly diagnose an employee who is suffering from heat illness and provide them with "appropriate first aid or emergency response" in line with the regulation's requirements will be cited for violating the regulation.

Confusion surrounding how to comply with many of the requirements under California's standard has resulted in inconsistent implementation by employers and unbalanced enforcement by Cal/OSHA.

IV. An 80 Degree Trigger is Impractical.

One of the key considerations with any regulatory approach relates to the point at which mandates would be triggered. As described with the state approaches set forth above, states have adopted different triggers in their regulations regarding heat illness. This has led to confusion and shows

¹ Cal. Code of Regs. § 3395(c).

² *Id.*

³ Cal. Code of Regs. § 3395(d).

⁴ *Id.*

that an ambient air temperature trigger, by itself, is not workable in a nation as vast and diverse as the United States. Ambient air temperature alone is not a feasible trigger because there are many factors that an ambient air temperature reading does not capture, such as humidity, solar load, and acclimatization. High-risk work activities in one region may be low risk in a different region based on the typical climate patterns for the region. For instance, an area in the southeast may present higher risk for heat illness due to the increased levels of humidity that are not present in another region that experiences little, if any, humidity, despite both regions having the same ambient air temperature. Accordingly, any regulatory approach addressing heat injury and illness must account for the unique climatic conditions of each region.

There are multiple tools that OSHA can utilize to assess the potential for heat stress on an individual in a particular region. One of these tools is the Heat Index, which is the measurement of how hot it really feels when relative humidity is factored in with the ambient air temperature.⁵ There are limitations with a Heat Index measurement, however, as it fails to take into account other factors beyond ambient air temperature and humidity, such as solar load, stagnate air, and work clothing. A different tool, the Wet Bulb Globe Temperature (WBGT), factors in wind, solar load, and other weather parameters, in addition to ambient air temperature and humidity.⁶ According to the National Weather Service, WBGT is “a particularly effective indicator of heat stress for active populations **such as outdoor workers** and athletes.” *Id.* (emphasis added). Likewise, a 2018 study supported the use of WBGT-based heat stress exposure limits for workplace heat hazard assessments.⁷ If WBGT is unavailable, this same study advocated for a Heat Index threshold. *Id.* OSHA should adopt a similar approach focused on geographic regions with any regulation addressing heat injury and illness in the construction industry.

That said, a regulatory trigger cannot account for all factors that must be considered in a heat injury and illness regulation, especially in the construction industry. A regulation based on the outdoor air temperature alone (whether measured by the ambient air temperature, Heat Index, or WBGT) does not consider the distinct nature of certain indoor and outdoor construction worksites that may increase the amount of heat in the environment, such as working in an indoor confined space or working outdoors near heat-generating machinery. Likewise, a regulatory trigger does not account personal risk factors of the individual construction worker, such as fitness level or age, nor does it factor in the exertional activity of the work. Therefore, the CISC believes that a comprehensive heat illness and injury regulation must focus on training for individual workers above all else.

V. Acclimatization Must Also be Considered for any Trigger.

When determining whether and how any requirements may be triggered, OSHA must also consider acclimatization. Acclimatization is critical to employee safety. Workers who are exposed to hot work environments initially may show signs of distress and discomfort, such as increased core

⁵ <https://www.weather.gov/safety/heat-index>.

⁶ *Id.*

⁷ See Evaluation of Occupational Exposure Limits for Heat Stress in Outdoor Workers — United States, 2011–2016, Tustin, *et al.* (2018).

temperature and heart rates, headache or nausea, and other symptoms of heat exhaustion.⁸ However, with repeated exposure to hot environments, multiple studies have found that these workers can become acclimated to working in high temperatures.⁹ One study from the National Institute for Occupational Safety and Health (“NIOSH”) found that, after daily heat exposure for 7 to 14 days, most workers experienced a much lower core temperature and heart rate, and a higher sweat rate, with none of the symptoms they experienced initially.¹⁰ Another study found that the benefits of acclimatization can be achieved over a period of just 3 to 7 days.¹¹ Furthermore, a worker can achieve full heat acclimatization with relatively brief daily exposures to the heat. Per the NIOSH study, a worker can achieve heat acclimatization with as little as two hours of heat exposure per day, which may be broken into one-hour exposures.¹² It is clear that the physiological adaptations that workers can achieve through heat acclimatization can reduce the risk of heat-related illness, reduce physiological strain, and improve physical performance.¹³

Acclimatization is best addressed through training and instruction. However, there are scenarios where acclimatization may not be possible. This is particularly true for emergency response or disaster relief teams who travel from one area of the country to another region where there may be a higher risk for heat stress. For example, a disaster response team traveling from the northeast to a hurricane-ravaged region in the south will not be able to go through the acclimatization process as doing so would prevent them providing life-saving relief to individuals in need. Likewise, acclimatization may not prepare an individual worker for sudden extreme weather shifts. In addition, and similar to the limitations of the temperature trigger discussed above, personal risk factors still may increase an individual worker’s risk of heat-related illness. OSHA must take these scenarios into account when developing a heat illness standard so as to avoid unnecessary regulatory obstacles when faced with such scenarios in the construction industry.

VI. Any Regulatory Approach must be Simple, Incorporating the Concepts of “Water, Rest, Shade.”

A regulation that is tailored to the issues shared by construction employers must be simple in order to succeed. The industry is comprised of employers of all sizes with access to varying economic

⁸ Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments, National Institute for Occupational Safety and Health, 32 (February 2016).

⁹ Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments, National Institute for Occupational Safety and Health, 32-34 (February 2016); Heat Safety in the Workplace: Modified Delphi Consensus to Establish Strategies and Resources to Protect the US Workers, Morrissey, *et al.*, 12-13 (2021); Management of climatic heat stress risk in construction: A review of practices, methodologies, and future research, Rowlinson, *et al.*, 6 (2014).

¹⁰ *See* Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments, National Institute for Occupational Safety and Health, 32 (February 2016).

¹¹ Management of climatic heat stress risk in construction: A review of practices, methodologies, and future research, Rowlinson, *et al.*, 6 (2014).

¹² *See* Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments, National Institute for Occupational Safety and Health, 32 (February 2016).

¹³ Heat Safety in the Workplace: Modified Delphi Consensus to Establish Strategies and Resources to Protect the US Workers, Morrissey, *et al.*, 12 (2021).

resources and administrative support. Given that heat illness can progress quickly when unrecognized and untreated, educating employees on how to recognize the signs and symptoms of heat illness to stop the progression of heat illness is the most effective way for employers to protect their employees against the hazard. For this reason, training is essential. To effectively combat the challenges arising from the broad and varied nature of construction sites (e.g., temporary, remote, etc.), a successful standard must incorporate the concepts of “Water, Rest, Shade.” Teaching employees how to recognize the signs and symptoms of heat illness via self-assessment and observation of co-workers, and how to halt the progression of same, will be the most effective way to address the hazard of heat illness confronting employers of all sizes.

Safety programs are only effective if they are implemented correctly. The more complicated a standard is, the greater the chance that it will not be implemented or enforced by an employer. For this reason, any regulation should avoid formulaic requirements (*i.e.*, 15 minutes of rest for every 45 minutes of work) and should instead set forth practical requirements and achievable parameters. Requiring field supervisors to track break times for multiple employees throughout a shift only adds to their existing administrative burdens and sets them up to fail.

VII. Responses to Specific Inquiries.

The CISC has reviewed the specific inquiries included in the ANPRM and responds to some of them below. Please note as well that many of the issues identified by the Agency were discussed above.

A. Multi-employer Worksites

The Agency has requested comment on how multi-employer worksites and other alternative arrangements may impact any regulatory approach to heat. Specifically, the Agency requests comment on the following question:

(10) In addition to traditional work arrangements, are there specific types of work arrangements or multi-employer work arrangements that should be considered when evaluating the health and safety impacts of hazardous heat exposure in indoor and outdoor work environments?

Multi-employer worksites are particularly common in the construction industry. As an initial matter, the CISC notes that the legality of OSHA’s multi-employer citation policy, as applied in enforcement actions, has been called into question on many occasions. OSHA’s multi-employer citation policy is not established in any regulation or statute. Instead, OSHA has adopted this interpretation of 29 U.S.C. 654(a)(2), which generally requires that employers are to follow all of OSHA’s workplace safety rules, in order to place liability on non-employers also present at a work-site. Due to the ambiguity which already surrounds OSHA’s expectations of any given employer under its multi-employer worksite doctrine, application of this policy to a new heat standard will only increase confusion under the rule. In addition, this policy has not been proven to improve workplace safety and health, but instead, can serve as a detriment to worker safety.

Generally stated, under the multi-employer citation policy, a controlling employer is liable for a subcontractor's violations if it fails to take reasonable measures to prevent, detect, and/or abate violations.¹⁴ OSHA asserts that a controlling employer's duty to exercise reasonable care is less than an employer with respect to its own employees.¹⁵ However, OSHA fails to otherwise provide definitive guidelines. Instead, it imposes a self-fulfilling trap—the more a general contractor supervises and engages in the management of subcontractor safety, the more responsibility (and potential liability) is imposed.¹⁶

The policy generally places the onus of supervision on the general contractor, based on the assumption that the general contractor is in a better position to enforce safety hazards for all employees on the job site. This is a false assumption. For example, a construction worksite often features a complex web of relationships consisting of various firms working together, side by side. A general contractor may engage a number of specialty trades subcontractors for their expertise and experience to perform particular tasks. Because of their expertise and experience, these specialty trades subcontractors are often better equipped to perform their tasks safely and in compliance with OSHA standards. Take, for example, roofing subcontractors on a housing project or asphalt layers on a commercial project. The general contractor may not be familiar with the specific hazards of heat presented by the unique and highly-skilled work performed by these firms. The roofers and asphalt layers, however, know the specific mitigation and abatement measures appropriate for their work due to their extensive experience with this work. It would not be appropriate to put a general contractor in charge of heat safety for these skilled tradesmen, simply because the tradesmen have a better understanding of the hazards they may face. For these reasons, OSHA should not place multi-employer obligations on construction industry contractors or subcontractors under a heat standard.

B. Geographic Region

The Agency has also requested comment on how employers and employees in different geographic regions may impact any regulatory approach to heat illness. The Agency asked the following:

(15) How does geographic region contribute to occupational heat hazards and the outcomes experienced by workers? Provide examples and data.

In a nation as vast and diverse as the United States, any regulatory approach addressing heat injury and illness must account for the unique climatic conditions of each geographic region as heat risk will vary based on the location of the work performed. For instance, southern areas may present higher risk for heat illness due to the combination of heat and humidity. Acclimatization must also be considered as part of any regulatory approach to heat illness in the construction industry.

¹⁴ *Suncor Energy (U.S.A.) Inc.*, No. 13-0900, 2019 OSAHRC LEXIS 31, 84, 2019 O.S.H. Dec. (CCH) ¶ 33705 (O.S.H.R.C., Feb. 1, 2009).

¹⁵ *Id.*

¹⁶ *Id.*; see also, *Summit Contractors, Inc.*, No. 05-0839, 2010 OSAHRC LEXIS 61, 31, 23 OSHC (BNA) 1196, 2010 OSHD (CCH) P33,079 (O.S.H.R.C., Aug. 19, 2010) (A “general contractor's duty to detect violations depends on what measures are commensurate with its degree of supervisory capacity.”)

Acclimatization is critical to employee safety. Multiple studies have shown that repeated exposure to hot environments can lead to significant physiological benefits for most workers resulting in reduced risk for heat-related illness and improved physical performance.¹⁷ One study has shown that acclimatization benefits can be achieved in as little as 3 to 7 days,¹⁸ while another study has demonstrated that workers need as few as two hours of heat exposure per day to achieve acclimatization.¹⁹ However, there are situations where acclimatization may not be feasible, particularly for emergency response or disaster relief teams traveling from one area of the country to another region where there may be a higher risk for heat stress. Any regulatory approach to heat illness must account for these scenarios so as not to disrupt the ability of these teams to provide life-saving services.

C. Contributions to Heat Stress in the Workplace

OSHA has requested additional information on what contributes to heat stress in the workplace and unique preventative measures associated with same. For example, OSHA has sought comment on the following:

(48) What factors, beyond those discussed above, contribute to heat stress in outdoor and/or indoor occupational settings?

(59) What engineering controls, administrative controls, or PPE can be used to prevent heat-related illness in indoor and outdoor work settings? Have the qualitative or quantitative effectiveness of these controls been evaluated?

As discussed above, there are a number of factors that contribute to heat stress in the construction industry. These include environmental factors of the region where the work is being performed (*e.g.*, the ambient air temperature, humidity, solar load, and wind speed) and personal risk factors unique to each worker (*e.g.*, age, physical fitness, previous medical conditions, and medications). The nature of the work being performed at the construction site can also contribute to heat stress for certain workers. For example, a construction worker who is working in a small, confined space may be exposed to increased levels of heat when compared to other workers at the same site. Likewise, roofers who work in direct sun and asphalt pavers who work near heat-generating machinery may be exposed to higher levels of heat than other workers.

The construction industry has already developed and implements a number of best practices to protect construction workers from heat-related illness. CISC members use fans at construction sites when possible to increase ventilation and airflow at the site. Likewise, portable air conditioning units can be used to create cooldown break rooms. If these units are not available, vehicles with air conditioning are on site so employees can cool down, if necessary. Work shifts

¹⁷ For a detailed discussion of these studies, see Section V *supra*.

¹⁸ Management of climatic heat stress risk in construction: A review of practices, methodologies, and future research, Rowlinson, *et al.*, 6 (2014).

¹⁹ See Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments, National Institute for Occupational Safety and Health, 32 (February 2016).

can also be scheduled early in the mornings when the temperature is not as hot and mandatory cooldown breaks can be scheduled later in the day when temperatures rise. CISC members also provide workers with various types of PPE to prevent heat-related illness. These include cooling vests, hard hats with wide brims and/or neck flaps to maximize sun protection, and coolers filled with ice and cloths for application on the neck, head, and armpits to bring down core body temperature. CISC members have found that these controls, along with effective training, have protected their workers from heat-related illnesses and injuries.

D. Physiological, Medical Monitoring

OSHA has also sought comment on a difficult and complicated issue: the extent to which worker health and personal information should be gathered by employers when implementing approaches to preventing heat illness. Specifically, OSHA has asked:

(74) What are the best practices for implementing a monitoring program? How effective are the monitoring activities in preventing heat-related illness in workers?

The CISC has significant concerns with any requirement that would place burdens on employers to investigate and manage personal health information that may be relevant to an individual's reaction to heat at the worksite.

Requiring employers to undertake tasks traditionally carried out by health care professionals, such as collecting information regarding an employee's personal risk factors is concerning. Further requiring employers to assess the impact of these factors on an employee's ability to work in the heat, is equally troubling. Historically, construction employers have never collected sensitive information regarding an employee's medical conditions, personal habits or medication schedule. If employers are required to collect this information pursuant to a heat regulation, it will likely lead to unintended outcomes, including increased discrimination claims and allegations of negligence against employers.

Additionally, a large percentage of construction companies in the U.S. are small employers. Small employers are less likely to have the funds and administrative bandwidth to comply with a standard that requires the collection and maintenance of confidential medical information in a legally compliant manner. Arguably, while larger employers may be better equipped to undertake such a task, they will be required to collect and store confidential medical information for a much larger employee population. This will lead to different and additional vulnerabilities, such as increased risk of information mismanagement and data breaches.

Further, employers should not be required to undertake tasks traditionally carried out by health care professionals, such as assessing the impact of personal risk factors on an employee's ability to work in the heat. Construction employers are not medical professionals and requiring construction employers to recognize the onset or abatement of heat illness symptoms is distressing. California's heat illness standard includes a provision to this effect. As discussed above, this has proven unworkable in many respects for California employers as many symptoms of heat illness

are not visibly recognizable or may be easily overlooked as a normal physical reaction of an employee who is properly acclimatized to strenuous outdoor work.

E. Impacts on Small entities

Finally, in a series of questions, the Agency has sought comment on the impacts of any rule on small entities (*see* questions 108-114). The CISC appreciates OSHA seeking information in this area, as most of the construction industry is dominated by small entities. As set forth above, it is incumbent on the Agency to conduct a SBREFA panel to fully assess the impact of the rule on small businesses. Notwithstanding this, the CISC provides some information for the Agency's consideration in this area.

The vast majority of construction contractors are very small. Out of 856,965 total business establishments in the construction industry, 571,422 firms have fewer than 5 employees; only 461 have 500 or more employees.²⁰ Placing burdensome requirements on these small companies will not lead to improved workplace safety and health; instead, OSHA's standard should focus on worker training.

While the hazard presented by heat stress is no greater for small employers than it is for large employers, compliance with complex regulations do create special difficulty for small firms. Small entities tend to have a specialized knowledge in their particular business, but typically do not have the expertise or resources to comply with numerous and complex regulations.

Existing federal resources provide valuable information and tools to help keep employees safe from the hazard of heat stress. The OSHA-NIOSH Heat Safety Tool App is a particularly useful resource when planning outdoor work activities. Its real-time heat index and forecasts can help an employer assess and monitor daily risk levels in their specific geographic location. OSHA provides additional guidance to employers on Working in Outdoor and Indoor Heat Environments. Instead of additional regulatory requirements, OSHA's existing resources should be amplified.

Small entities know the ins and outs of their particular business and are best suited to identify the hazards which may be present in their workplace. Heat stress may present a high risk for certain contractors but may not apply in other situations. OSHA, NIOSH, and other similar government entities offer valuable resources to help employers identify appropriate mitigation and abatement measures with respect to heat stress in the workplace. Worker safety and health will be best served if OSHA were to focus its efforts related to heat stress on worker training instead of forcing compliance by small entities with a complex regulated scheme that may or may not apply to their particular operations.

²⁰ BLS, Graphics for Economic News Releases, Number of Business Establishments by Size of Establishment in Selected Private Industries, March 2021 (available at <https://www.bls.gov/charts/county-employment-and-wages/establishments-by-size.htm>).

VIII. Conclusion.

The CISC appreciates OSHA's consideration of these comments and looks forward to continued engagement with OSHA on this important issue in the future.

Sincerely,

The Construction Industry Safety Coalition

American Road and Transportation Builders Association
American Society of Concrete Contractors
American Subcontractors Association
Associated Builders and Contractors
Associated General Contractors
Association of Equipment Manufacturers
Association of the Wall and Ceiling Industry
Concrete Sawing & Drilling Association
Construction & Demolition Recycling Association
Distribution Contractors Association
Independent Electrical Contractors
Interlocking Concrete Pavement Institute
International Council of Employers of Bricklayers and Allied Craftworkers
Leading Builders of America
Mason Contractors Association of America
Mechanical Contractors Association of America
National Asphalt Pavement Association
National Association of Home Builders
National Association of the Remodeling Industry
National Demolition Association
National Electrical Contractors Association
National Framers Council
National Roofing Contractors Association
National Utility Contractors Association
Natural Stone Council
The Association of Union Constructors
Tile Roofing Industry Alliance