LATINOJUSTICE PRLDEF
475 Riverside Drive, Suite 1901
New York, NY 10115
D: 212.219.3360
G: 800.328.2322

SOUTHEAST REGIONAL OFFICE
4700 Millenia Blvd, Suite 500
Orlando, FL 32839
D: 321.250.2853

SOUTHWEST REGIONAL OFFICE
611 South Congress Ave STE 430
D&E Congress Square II Austin,
TX 78704

January 14, 2025

Andrew Levinson, MPH
Director
Directorate of Standards and Guidance
Occupational Safety and Health Administration (OSHA)
U.S. Department of Labor
200 Constitution Ave NW
Washington, D.C. 20210

RE: Request for comments on OSHA's proposed standard on Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings (Docket No. OSHA-2021-0009)

Dear Director Levinson:

LatinoJustice PRLDEF (LJP) appreciates the opportunity to comment on OSHA's notice of proposed rulemaking on Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings (Docket No. OSHA-2021-0009). LJP submits this comment in strong support of OSHA's proposed rule, which would take decisive action to mitigate the dangers posed by extreme heat. Extreme heat disproportionately affects low-wage, immigrant, and outdoor workers, particularly in agriculture, construction, and warehousing industries. As the climate crisis continues to increase the incidence of extreme temperatures, this rulemaking takes even greater importance.

LJP is a national civil rights organization that serves the Latinx community in all 50 states and all United States territories. Our headquarters is located in New York City and we have satellite offices in Orlando, Florida, and Austin, Texas. We have played a profound role in advancing equity and justice for Latinx communities through impact litigation, individual legal assistance, policy advocacy, and programming that fosters the next generation of Latinx leaders in the legal field and in our communities.

The New York University School of Law Earth Rights Research and Action (TERRA) Clinic combines the tools and tactics of international environmental law and human rights to preserve the conditions for life on Earth for current and future generations of humans and non-humans. Working closely with NGOs, scientists, lawyers, social movements, UN agencies, and grassroots communities from around the world, TERRA students work on cases and projects involving creative litigation in multiple jurisdictions, transnational advocacy campaigns, and strategic research and communications. TERRA's projects tackle existential challenges to environmental justice and human rights, including the climate emergency, the destruction of biodiversity and ecosystems, threats to Indigenous peoples' rights and territories, the global pollution crisis, and large-scale cruelty to animals and other species.

Summary

In this comment, LJP and TERRA Clinic rely on the best available science, existing state rules, and feedback from our community partners to recommend that OSHA revise the proposed rule to:

I. Designate the use of wet bulb globe temperature (WBGT) devices to monitor heat hazards comprehensively;
II. Limit the exception for sedentary indoor work activities to only those performed below a heat threshold of 86°F;

III. Clarify that when air-conditioning systems do not function properly and the ambient temperature reaches or exceeds 80°F for more than 15 minutes, employers are subject to heat requirements;
IV. Adopt the California Standard for calculating compensation for breaks for piece-rate workers, and include this standard in the text of the rule;
V. Mandate accessible break areas and hydration stations for all workers, and define "accessible" as within a 0.25-mile distance from work zones;
VI. Clearly define what temperature constitutes "suitably cool," and require that water provided to workers in hot environments be 60ºF or cooler;
VII. Proposed rules for effective humidity management to prevent heat-related illnesses, especially in workplaces with high ambient temperatures and poor ventilation;
VIII. Mandate phased acclimatization period;
IX. Clarify how required employee representative participation will be facilitated; establish clear enforcement mechanisms for representatives' compensation; and define employee representatives; and,
X. Mandate language accessible training and culturally tailored communication to improve workplace safety outcomes.

We expand on each of these recommendations in the section below.

Recommendations

I. **Paragraph (d): Monitoring Heat Hazards**

Section VII, Paragraph (d)(1), LatinoJustice PRLDEF (LJP) supports OSHA's measures for identifying heat hazards as outlined in the proposed rule. Accurately identifying heat hazards is crucial to preventing heat-related illnesses, and LJP urges OSHA to explicitly recommend the use of on-site monitoring devices for Wet Bulb Globe Temperature (WBGT) whenever feasible. While LJP recognizes the importance of cost-effective compliance options and does not advocate for mandatory WBGT devices, such tools provide superior monitoring capabilities compared to local heat index forecasts.

Section VII, Paragraph (d)(1), allows employers to comply with heat monitoring requirements by using local heat index forecasts or on-site monitoring devices. However, these options are not equivalent in their ability to assess heat hazards.[1] Local forecasts, while cost-effective and accessible through tools like

the OSHA-NIOSH Heat Safety Tool, have inherent limitations. For example, many temperature readings used in forecasts are taken from Automated Surface Observing System (ASOS) units, which are shielded from direct sunlight. [2] As a result, such measurements fail to account for the additional heat stress caused by solar radiation, which can increase temperatures felt by outdoor workers by up to 15°F, according to the National Weather Service.[3]

Moreover, studies have shown that the OSHA-NIOSH Heat Safety Tool app is less reliable under high-risk or extreme-risk heat conditions. Research published in the *Journal of Occupational and Environmental Hygiene* found that while the app effectively identifies minimal to moderate heat risks, it fails to capture high-risk or extreme-risk conditions.[4] For example, the app identified 0% of high- or extreme-risk conditions across various workload types, which underscores the potential hazards of relying solely on this method, especially as climate conditions worsen.[5]

By contrast, WBGT devices offer a more accurate assessment of workplace heat hazards as they account for ambient temperature, relative humidity, wind, and solar radiation. WBGT guidelines also provide actionable recommendations for work-to-rest ratios, hydration breaks, and the use of protective equipment under different heat conditions. Although WBGT devices, such as the Kestrel 5400 WBGT Heat Stress Tracker, may not be economically viable for all employers, OSHA should highlight their advantages and encourage their use where feasible.[6]

In conclusion, LJP recommends that OSHA urge employers to use WBGT devices whenever possible due to their superior ability to monitor heat hazards comprehensively. This recommendation balances the need for accurate heat hazard assessment with the economic realities faced by employers, ensuring improved worker safety while maintaining flexibility for compliance.

II. Paragraph (a)(2)(vi): Sedentary Indoor Work

LJP encourages OSHA to limit the exemption for sedentary indoor work activities in paragraph (a)(2)(vi) to only activities performed below a heat threshold of 86°F. Scientific evidence from OSHA itself supports the claim that exposure to certain temperature thresholds—even while performing sedentary activities—can pose severe health risks. OSHA's website recommends a heat threshold of 86°F wet bulb globe temperature for acclimatized workers performing "light" workloads, which includes "sitting with minimal hand and arm work," and "stooping, crouching, or kneeling."[7] This "light workload" category falls within "sedentary work," which is defined by the standard as involving a combination of "sitting, occasional standing and walking for brief periods of time, and occasional lifting of objects weighing less than 10 pounds."[8] The 86°F threshold is also supported by the World Health Organization ("WHO"), which maintains that temperatures exceeding 86°F for heat-unacclimatized individuals performing sedentary activities are unacceptable.[9]

Exposure to temperatures far above the OSHA and WHO recommended thresholds is likely for sedentary indoor workers in certain states as strings of heat waves continue to topple average record-high temperatures across U.S. cities each summer.[10] In 2023, Phoenix, Arizona set a record with 31 straight days at or above 110°F.[11] This year, a number of cities in California experienced unprecedented temperatures above 110°F.[12] Indeed, 2024 is set to be the hottest year on record globally.[13] States like California, Arizona, and Florida additionally employ some of the highest numbers of greenhouse and plant

nursery workers in the country, who would be defined as sedentary indoor employees under the proposed standard.[14]

Limiting the sedentary indoor work exemption to only activities performed below a particular heat threshold would bring the OSHA standard in line with state rules. California's Heat Illness Prevention in Indoor Places of Employment Standard applies to all indoor workplaces (including those employing sedentary workers) when indoor temperatures meet or exceed 82°F,[15] while Colorado Agricultural Labor Conditions Rules apply to indoor sedentary agricultural work where the measured temperature meets or exceeds 80°F.[16] The Colorado rules further apply the threshold to indoor worksites where the temperature met the threshold at any point in one of the last three workdays.[17] Finally, Oregon Rules to Address Employee and Labor Housing Occupant Exposure to High Ambient Temperatures apply to indoor employees with "rest" and "light" workloads when the heat index meets or exceeds 90°F.[18] LJP's proposed threshold of 86°F falls within the range of various state-level thresholds (80-90°F) and is supported by OSHA's and WHO's existing recommendations informed by the best available science.

In the coming years, climate change will continue to increase the frequency of heat waves, further burdening sedentary indoor workers. By 2030, the U.S. will experience "extreme hot" weather every other year,[19] with summers in some cities warming greater than 6°F on average.[20] With such forecasted increases, it is imperative to limit the exemption to sedentary indoor activities below a specified threshold to ensure workers are properly protected now and in the future.

III. Paragraph (a)(2)(iv): Air Conditioning Malfunctions

LJP encourages OSHA to apply initial heat trigger requirements to indoor-workplace employers in situations where the air-conditioning system does not function properly and the ambient temperature reaches or exceeds 80°F for greater than 15 minutes. This change would merely be a clarification of the current language in paragraph (a)(2)(iv), which requires employers to "consistently maintain[] an ambient temperature below 80°F during work activities" and "expeditiously repair" a broken air-conditioning system.[21] Given that no timeline is provided for what constitutes an "expeditious repair," the clarification will ensure workers are protected in the event of repair delays.

Mandating employer obligations where workplace temperature exceeds 80°F for greater than 15 minutes due to a malfunctioning air-conditioning system would additionally bring the paragraph (a)(2)(iv) exception for air-conditioned work areas in line with paragraph (a)(2)(ii) of the proposed standard. Paragraph (a)(2)(ii) requires that employees in air-conditioned vehicles are not exposed to temperatures at or above the initial heat trigger of 80°F for more than 15 minutes in any 60-minute period, and that any employee exposures of 15 minutes or greater in any 60-minute period subject employers to heat requirements.[22] The clarification to paragraph (a)(2)(iv) would create consistency across the rule, simplifying compliance for employers.

Exposure to high heat for even short intervals presents significant health risks to workers regardless if the work area was previously air-conditioned. Being confined to a poorly ventilated or non-air-conditioned space can increase the risk of heat stroke,[23] and at triple-digit temperatures, the first symptoms of heat exposure can happen in as little as 15 minutes.[24] Moreover, statistically significant performance decrements have been found to occur where workers are exposed to temperatures between 80°F and 91.4°F, even for exposures under 30 minutes.[25]

Finally, state-level heat standards maintain that short-duration heat exposures due to malfunctioning air conditioning or otherwise cannot exceed 15 minutes without employers being subject to heat safety requirements. In California, Colorado, and Oregon, employer requirements apply as soon as indoor employees are exposed to temperatures above 80-82°F for more than 15 minutes in any 60-minute period.[26] Aligning the OSHA standard closer to state-level requirements will allow for uniform implementation across the country, benefitting both employers and employees and facilitating greater compliance with the OSHA standards.

Given the aforementioned forecasted increases in temperatures due to anthropogenic climate change, it is imperative that workers are protected both now and in a hotter future. Clarifying the OSHA standard to conform with the best available science and existing state rules will protect indoor workers from heat-related illness in the event of air conditioning failures.

IV. Paragraphs (e)(8), (f)(2), and (j): Compensated Heat Breaks

LJP strongly supports OSHA's position in the Explanation of Proposed Requirements for paragraph (j) that requirements are implemented at no cost to employees. LJP also strongly supports the related requirement that all workers, regardless of employment structure (hourly or piece rate), are fully compensated for heat breaks required by proposed paragraphs (e)(8) and (f)(2). Compensation for heat breaks is not only a matter of fairness but a critical step to ensure compliance and prevent employer pushback. Workers should not bear any financial penalty for taking mandated breaks designed to protect their health and safety.

LJP supports the California Standard as a baseline framework for calculating the "normal rate of pay" for piece-rate workers who take proposed rule (e)(8) or (f)(2) heat breaks. The Standard provides a practical, established method that prioritizes transparency and fairness. However, LJP believes that the rule should explicitly note that employees must be compensated at least the applicable minimum wage for heat breaks if the California Standard yields a lower rate of compensation.[27] Furthermore, LJP advocates that the standard should not preclude further exploration of alternative approaches. For example, methods that incorporate a heat index factor or address workers' lost productivity bonuses could better account for the realities of agricultural and other piece-rate work, as well as the increase in incidents of extreme heat events that will result from climate change.

LJP strongly encourages OSHA to explicitly include the payment calculation method for piece-rate workers in proposed paragraphs (e)(8), (f)(2), and (j). This inclusion will reduce ambiguity for employers and employees alike, as well as ensure consistent application across industries and employers. Clear and enforceable language in the rule is particularly critical for piece-rate workers, who often face greater challenges in securing fair pay due to variable earnings structures.[28]

In conclusion, LJP supports compensation for heat breaks as enumerated in proposed paragraphs (e)(8), (f)(2), and (j). These paragraphs should explicitly recognize the California Standard of calculating piece-rate pay, disclaim that the Standard does not displace applicable minimum wage laws, and further explore alternative approaches that could account for higher heat indexes and lost productivity bonuses. These measures would reduce ambiguity and help ensure that workers are not penalized for taking potentially lifesaving heat breaks.

V. Paragraph (e)(2)(i): Accessible Break Sites and Water Stations

LJP urges OSHA to revise paragraph (e)(2)(i) to mandate accessible break areas and hydration stations for all workers and to define "accessible" as being located within a 0.25-mile distance from work zones. Specifying this 0.25-mile distance will ensure that all workers can readily access the necessary break facilities during their limited break periods, thereby encouraging safer practices of rest and rehydration that will ultimately prevent symptoms of heat stress.

The 0.25-mile distance specification is already seen in state-level protections for agricultural workers. Under the existing Colorado Agricultural Labor Conditions Rules adopted Jan. 31, 2022, water facilities should be "located as close as practicable to the worksite, no further than 0.25 miles from the worksite for employees accessing the water source by foot, and not otherwise too far for employees to reasonably access."[29] The Washington Safety Standards for Agriculture regulations also require that break facilities such as water are "readily accessible to employees at all times."[30] Both state-level regulations demonstrate that rules regarding drinking water and other break facilities have carefully considered the need to ensure these facilities are conveniently located within reasonable proximity to work zones so that they are actually utilized. The new OSHA regulations must follow suit and take distance into consideration. Moreover, the OSHA Guidance on Field Sanitation for Agricultural Employers suggests that toilet and handwashing facilities should be "close to one another and generally within a ¼ mile walk of your work in the fields."[31] While this Guidance specifically focuses on sanitation facilities, these facilities undoubtedly make up a crucial part of workplace health and safety, suggesting that other, equally necessary break facilities such as rest areas and hydration stations should also be placed within a similar distance from work zones. Designating such facilities to also be located within a 0.25-mile distance from work zones creates uniformity for sanitation, hydration, and other break facilities. This ultimately benefits both employers and employees, as consistency across OSHA regulation and state-level regulation facilitates uniform implementation by employers and therefore greater compliance with the proposed standards.

The Public Comment posted by the Farmworker Association of Florida[32] on OSHA's proposed rulemaking further highlights the importance of break facilities being located close to working areas for workers to stay hydrated and access facilities without being penalized. Several interviewed farm workers were quoted suggesting that break locations that are located too far away from their work areas effectively reduce their ability to take breaks, placing them in further danger of heat stress impacts. Having to walk too far to break facilities means losing precious time, and therefore pay, which incentivizes both employers and workers to skip breaks and opportunities to take measures that further health and safety. Concerns regarding the distance of break and hydration facilities being too far and the related increased risk of heat stress take on greater salience in the context of climate change. As noted in the previous section on sedentary indoor workers (see Section II), climate change will continue to increase temperatures, further burdening those working in hot conditions. With such forecasted increases, it is imperative to specify what constitutes an accessible break station to ensure workers are properly protected now and in the future.

In summary, we encourage the proposed OSHA regulations in paragraph (e)(2)(i) to not only mandate accessible break and hydration stations for all workers, but also to specify that these facilities be located no further than a 0.25-mile distance from work zones. Given our warming world, it is critical that workers are able to readily access such facilities during their limited breaks in order to prevent the symptoms of heat stress.

VI. Paragraph (e)(2)(ii): Regulated Water Temperature

LJP urges OSHA to clearly define what temperature constitutes "suitably cool" drinking water in paragraph (e)(2)(ii). Specifically, OSHA should require drinking water provided to workers in hot environments to be maintained at 60ºF or cooler. Water temperatures can be monitored by low-cost digital thermometers such as those used to monitor temperature in home aquariums.

This specific regulated water temperature proposal comports with several federal government agency regulations and guidelines. The CDC suggests that workers in hot environments should drink water that is less than 59ºF.[33] This, in turn, is supported by research from the Department of Defense indicating that temperatures of 50º-60ºF are best for drinking water in warm environments.[34] The Department of Labor's Mine Safety and Health Administration also recommends that drinking water provided to miners be kept at 50º-60ºF as a method of combating heat stress.[35] Finally, the OSHA Guidance on Protections for Agricultural Workers requires "clean and cool drinking water,"[36] and the OSHA/NIOSH infosheet on Protecting Workers from Heat Illness recommends that drinking water "should be 50-60ºF if possible."[37] These agencies provide persuasive precedents for LJP's proposal that would mandate drinking water for workers at 60ºF or cooler, as is common practice across many industries.

Moreover, existing state-level regulations further suggest that a specified temperature threshold can and should be regulated for drinking water in order to generate effective compliance. The Colorado Agricultural Labor Conditions Rules require drinking water for employees to be kept at 60°F or cooler by any means the employer chooses if the temperature of the work area is to reach 80ºF.[38] The Oregon Rules to Address Employee and Labor Housing Occupant Exposure to High Ambient Temperatures also require drinking water to be "cool" or "cold," defined as 66º-77º F and 35º-65ºF, respectively, if the temperature of the work area is to reach 80ºF.[39] These state-level regulations show that states implementing rules regarding drinking water have taken into consideration the need to numerically specify the temperature ranges at which drinking water should be kept in order to prevent heat stress. A previous public comment on the proposed OSHA rulemaking by the Union of Concerned Scientists also points to the utility of clearly defining a temperature range for "suitably cool" drinking water.[40] LJP similarly urges that the new OSHA regulations in paragraph (e)(2)(ii) specify such temperature ranges to best protect workers and create consistency in regulatory requirements on employers.

It should be noted that the need for OSHA to specify a temperature range for drinking water provided to workers is all the more pertinent in the context of exacerbating climate change. Scientific consensus has developed on the growing climate change crisis and its many impacts on global climate systems, including rising temperatures.[41] This will inevitably lead to more frequent opportunities for humans to experience the dangers of heat stress, making it even more necessary for OSHA rules to specify a range of temperatures for drinking water that will protect workers not only in present climatic conditions, but also in the future as global temperatures continue to rise. Under such shifting climatic conditions, providing sufficiently cool drinking water becomes essential to protecting worker safety. OSHA's Proposed Rules themselves include a large quantity of scientific evidence supporting the benefits of drinking water in preventing heat-related injuries.

An abundance of scientific research further shows that drinking cool water is specifically effective in preventing heat exhaustion and heat stroke.[42] Drinking cold water rather than room temperature water has been shown to limit the rise of core body temperature during physically strenuous exercises.[43] Rehydrating with water at 16ºC (60.8ºF) was found to be best for encouraging higher liquid intake and reducing sweating.[44] The existing scientific consensus, coupled with the context of intensifying climate

change, makes it urgently necessary for the OSHA regulations to specify drinking water temperatures to better protect all workers.

In summary, taking into consideration existing scientific research and regulatory precedent, we encourage the proposed OSHA regulations in paragraph (e)(2)(ii) to numerically specify that water provided to workers should be kept at a temperature range of 60ºF or cooler. Particularly in the context of a warming climate, it is critical that workers can access sufficiently cold drinking water so that they may maintain hydration levels and be protected from symptoms of heat stress.

VII. Paragraph (d): Humidity Management

Employers should implement effective humidity management strategies to mitigate heat stress, particularly in workplaces with poor ventilation or high ambient temperatures. Mandatory dehumidification measures should be required in indoor settings where relative humidity exceeds 60%, and mechanical ventilation systems must be available to regulate humidity and improve air circulation. Training programs must emphasize the risks associated with elevated humidity, such as impaired sweat evaporation, and educate workers on cooling strategies, including the use of shaded or air-conditioned rest areas.

While not mandatory, OSHA should recommend the use of Wet Bulb Globe Temperature (WBGT) monitors as a superior option for assessing heat and humidity conditions. These devices provide a more comprehensive evaluation of environmental stressors compared to traditional methods, enabling employers to make informed decisions to protect workers.

Research from the National Institute for Occupational Safety and Health (NIOSH) and studies published in the *Journal of Occupational and Environmental Hygiene* confirm that effective humidity management and the use of WBGT monitoring can significantly reduce heat-related risks.[45]

VIII. Paragraphs (b), (e)(7), (j) and (h)(1)(iii): Acclimatization Protocols

Acclimatization is a proven preventive measure to reduce heat-related injuries, particularly for new or returning workers. OSHA should mandate a phased acclimatization period lasting 7-14 days, during which workers gradually increase exposure to hot environments. For new hires, workloads should begin at no more than 50% intensity on the first day, incrementally increasing by 10% daily. Supervisors should monitor acclimatization progress and ensure adherence to workload adjustments, particularly during periods of elevated heat indices. Employers should also incorporate baseline medical evaluations to identify individuals with predisposing conditions, such as cardiovascular issues, that heighten heat sensitivity. Guidance from the *Threshold Limit Values (TLV) for Heat Stress* by the American Conference of Governmental Industrial Hygienists (ACGIH) and OSHA's *Heat Illness Prevention Campaign* highlight the importance of acclimatization and workload modifications in reducing heat-related illnesses.[46]

IX. Paragraphs (c)(6), (c)(7), and (d)(3)(iv): Employee Representatives

LJP welcomes the requirements in proposed paragraphs (c)(6), (c)(7), and (d)(3)(iv) that employers consult with non-managerial employees and their representatives in matters of heat-related health and safety. Employees are experts on their own working conditions; meaningfully engaging them in the development and implementation of HIIPP and monitoring plans will help ensure that employers take sufficient measures to guard against heat-related injury.

LJP encourages OSHA to clarify how employers must facilitate employee participation in light of the fact that non-managerial employees might have financial or logistical barriers to participation. LJP supports OSHA's position that employee representatives be compensated for the travel and time associated with their engagement in the development, implementation, and required reviews and updates of the employer's HIIPP and monitoring plans.

LJP advocates for clear enforcement mechanisms to ensure that representatives are compensated fairly and in a timely manner.[47] LJP also recommends that OSHA adopt the same standard for compensating piece-rate workers under these paragraphs as for heat breaks (the California Standard, which is currently implicit in paragraphs (e)(8), (f)(2), and (j)). Consistency across the proposed rule will reduce ambiguity for employees and ease compliance for employers.

LJP strongly supports a clear and inclusive definition of "employee representatives" that centers the voices of workers. A robust definition that specifies that representatives must be worker-selected will prevent employers from appointing representatives who may not advocate effectively for workers. Representatives should be:

1) Elected or designated by their peers to ensure they genuinely reflect worker concerns about matters of health and safety;
2) Non-managerial employees who do not have a conflict of interest or dual loyalty to management; and
3) Empowered to engage meaningfully in the development and monitoring of the Heat Injury and Illness Prevention Plan (HIIPP), including through training opportunities.

In sum, LJP welcomes the participation of employee representatives in the development and implementation of HIIPP and monitoring plans, but recommends that OSHA revise proposed paragraphs (c)(6), (c)(7), and (d)(3)(iv) to clarify how this participation must be facilitated; establish clear enforcement mechanisms for compensation; and define "employee representatives" clearly, inclusively, and in a worker-centric manner. These measures will ensure that worker engagement in heat-related health and safety matters is accessible and meaningfully undertaken.

X. Paragraph (c)(4), (c)(9): Language Accessibility

Workers in industries most affected by heat hazards, such as agriculture and construction, are often from immigrant or non-English-speaking populations. OSHA must prioritize language accessibility to ensure equitable protection for employees, supervisors, and heat safety coordinators.

HIIPP and monitoring plans along with training materials and written communications should be provided in English, Spanish, and other predominant languages, such as Haitian Creole or the Mixtec Indigenous languages, as applicable to the workforce.

Multilingual signage should clearly indicate emergency protocols, water stations, and shaded rest areas. Training should incorporate culturally relevant scenarios to enhance comprehension and effectiveness.

Additionally, OSHA should establish anonymous reporting mechanisms in multiple languages, allowing workers to report unsafe heat conditions without fear of retaliation.

As stated in Recommendation I, the *Que Calor! Campaign* by WeCount! and research from the *Journal of Agromedicine* underscore the importance of accessible training and culturally tailored communication in improving workplace safety outcomes.[48]

Conclusion

LJP appreciates OSHA's commitment to providing greater protections for workers facing extreme heat through this proposed rule. The proposed safeguards are critical in light of climate change, which peer-reviewed scientific studies have shown will cause an ever-greater incidence of extreme heat events. They are also essential for protecting low-wage, immigrant, and outdoor workers, particularly in industries like agriculture, construction, and warehousing, who are disproportionately impacted by high heat.

As outlined in this comment, we strongly encourage OSHA to refine and strengthen the proposed rule in key areas, including heat measurement, indoor protections, air conditioning malfunctions, break compensation, hydration station accessibility, regulated water temperature, humidity management, acclimatization protocols, employee representative engagement, and language accessibility. By adopting LJP's recommendations, OSHA can better safeguard workers facing extreme temperatures now and in the future.

Thank you for the opportunity to submit this comment. We look forward to continued collaboration to protect workers and advance equity in workplace health and safety.

Sincerely,

Roberto Cruz (he/él)
Southeast Regional Managing Attorney
LatinoJustice PRLDEF

Ashley Otilia Nemeth* (she/ella)
Research Scholar & Clinical Project Supervisor
Earth Rights Research and Action (TERRA) Program
Center for Human Rights & Global Justice
New York University School of Law

**Efforts of NYU Clinics, Centers, or Programs do not purport to represent the institutional views of NYU School of Law, if any*

[1] Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings, 89 Fed. Reg.
[2] Brittany Van Voorhees, *Weather IQ: Are temperature readings really taken in the shade?,* WCNC CHARLOTTE (June 12, 2024, 9:54 AM), https://www.wcnc.com/article/weather/weather-iq/temperature-readings-taken-explained/275-d25d4267-53fc-419e-971e-d8ebc1948d72.
[3] NAT'L WEATHER SERVICE, *What is the heat index?*, https://www.weather.gov/ama/heatindex (last visited Jan. 10, 2024).
[4] Danielle Dillane & Jo Anne G. Balanay, *Comparison between OSHA-NIOSH Heat Safety Tool app and WBGT monitor to assess heat stress risk in agriculture*, 17 J. OCCUPATIONAL & ENV'T HYGIENE 181, at 16-17, (2020). ("Moreover, the app was shown to be unreliable in assessing high and extreme risk conditions at any type of workload (low to very heavy), with 0% of either the WBGT-based high risk or extreme risk assignments matching those identified by the app.")
[5] *Id.*
[6] KOREY STRINGER INSTITUTE, *Wet Bulb Globe Temperature Monitoring*, https://koreystringer.institute.uconn.edu/wet-bulb-globe-temperature-monitoring/ (last visited Jan. 10, 2024).
[7] U.S. DEPT. OF LAB., OCCUPATIONAL SAFETY AND HEALTH ADMIN., *Heat Hazard Recognition*, https://www.osha.gov/heat-exposure/hazards (last visited Nov. 18, 2024).
[8] Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings, 89 Fed. Reg. at 70769.
[9] CRTS. FOR DISEASE CONTROL AND PREVENTION & NAT. INST. FOR OCCUPATIONAL SAFETY AND HEALTH, OCCUPATIONAL EXPOSURE TO HEAT AND HOT ENVIRONMENTS: CRITERIA FOR A RECOMMENDED STANDARD 112, https://ghhin.org/wp-content/uploads/2016-106-1.pdf (2016). WHO sets the heat threshold at 89.5°F for fully heat-acclimatized individuals performing sedentary activities. *Id.*
[10] NAT'L OCEANIC AND ATMOSPHERIC ADMIN., *U.S. sweltered through its 4th-hottest summer on record*, https://www.noaa.gov/news/us-sweltered-through-its-4th-hottest-summer-on-record (Sept. 10, 2024).
[11] Denise Chow and Jasmine Cui, *Days and days and days of heat, from the people who lived it*, NBC NEWS, https://www.nbcnews.com/science/environment/days-days-days-heat-people-lived- rcna104833 (Sept. 17, 2023).
[12] Grace Toohey and Keri Blakinger, *Temperature records shattered across the West as intense heat wave drags on*, L.A. TIMES, https://www.latimes.com/california/story/2024-07-09/temperature-records-shattered-west-coast-heat-wave (July 9, 2024).
[13] WORLD METEOROLOGICAL ORG., *2024 is on track to be hottest year on record as warming temporarily hits 1.5°C*, https://wmo.int/news/media-centre/2024-track-be-hottest-year-record-warming-temporarily-hits-15degc (Nov. 11, 2024).
[14] U.S. BUREAU OF LAB. STATS., *Occupational Employment and Wages, May 2023: 45-2092 Farmworkers and Laborers, Crop, Nursery, and Greenhouse*, https://www.bls.gov/oes/2023/may/oes452092.htm (last visited Nov. 18, 2024).
[15] CAL. CODE. REGS. tit. 8, § 3396 (2024).
[16] COLO. CODE OF REGS. § 1103-15, Rule 3.1.1(a) (2024).
[17] *Id.*
[18] OR. ADMIN. R. 437-004-1131, 437-002-0156 (2024).
[19] Beusch et al., *Responsibility of major emitters for country-level warming and extreme hot years*, COMM. EARTH & ENVIRON., Jan. 2022, at 1.
[20] Umair Irfan, Eliza Barclay, and Kavya Sukumar, *Weather 2050*, VOX, https://www.vox.com/a/weather- climate-change-us-cities-global-warming (last visited Nov. 8, 2024).
[21] Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings, 89 Fed. Reg. at 70769.
[22] *Id.*
[23] HARVARD MED. SCH., *Heat stroke (hyperthermia)*, https://www.health.harvard.edu/a_to_z/heat-stroke-hyperthermia-a-to-z (March 24, 2023).
[24] Akshay Syal, M.D., *ER doctors weigh in on what extreme heat does to the body*, NBC NEWS, https://www.nbcnews.com/health/health-news/extreme-heat-temperatures-human-body-doctors- insights-rcna94241 (July 14, 2023).
[25] Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings, 89 Fed. Reg. at 70731.
[26] CAL. CODE. REGS. tit. 8, § 3396 (2024); COLO. CODE OF REGS. § 1103-15, Rule 3.1.1(a) (2024); OR. ADMIN. R. 437-004-1131, 437-002-0156 (2024).

[27] CAL. LAB. CODE § 226.2(a)(3)(A)(ii) adopted the minimum wage as a floor for piece-rate worker compensation when it laid out the California Standard. The International Labour Organization notes that piece-rate pay may be beneficial to both employers and employees, but only when the manner of calculation is fair to both parties and subject to appropriate guardrails (like minimum wage laws). INT'L LAB. ORG., *1.7 Piece Rate Pay*, https://www.ilo.org/resource/17-piece-rate-pay (Dec. 3, 2015).

[28] When abolishing piece-rate pay for garment workers, the California Senate noted that utilizing this payment method allows employers to not only "enable, and even justify, subminimum wage, but it also creates unsafe working conditions." S.B. 62, 2021 Leg., Reg. Sess. (Cal. 2021). Workers of color and immigrant workers are more likely to be subjected to wage theft. CTR. FOR PUB. INTEGRITY, *Ripping Off Workers Without Consequences*, https://publicintegrity.org/inequality-poverty-opportunity/workers-rights/cheated-at-work/ripping-off-workers-with-no-consequences/ (May 4, 2021).

[29] COLO. CODE OF REGS. § 1103-15, Rule 3.2(D) (2024).

[30] WASH. ADMIN. CODE § 296-307-09740 (2024).

[31] U.S. DEP'T OF LAB., *OSHA Field Sanitation for Agricultural Workers*, https://www.dol.gov/agencies/whd/agriculture/field-sanitation/osha-field-sanitation-for-ag-workers (last visited Nov. 18, 2024).

[32] Farmworker Ass'n of Fla., OSHA-2021-0009-6728, Comment on Proposed Rule on Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings (Aug. 13, 2024). https://www.regulations.gov/comment/OSHA-2021-0009-6728.

[33] CRTS. FOR DISEASE CONTROL AND PREVENTION & NAT. INST. FOR OCCUPATIONAL SAFETY AND HEALTH, OCCUPATIONAL EXPOSURE TO HEAT AND HOT ENVIRONMENTS: CRITERIA FOR A RECOMMENDED STANDARD 112, https://ghhin.org/wp-content/uploads/2016-106-1.pdf (2016).

[34] U.S. DEP'T OF DEFENSE, TECH. BULL. MED 507/AFPAM 48-152, HEAT STRESS CONTROL AND HEAT CASUALTY MANAGEMENT, (Mar. 7, 2023).

[35] U.S. DEP'T OF LAB., MINE SAFETY AND HEALTH ADMIN., *Heat Stress: Hazards Prevention and Control*, https://www.msha.gov/sites/default/files/Alerts%20and%20Hazards/Heat%20Stress.pdf (last visited Nov. 18, 2024).

[36] U.S. DEP'T OF LAB., *Protections for Agricultural Workers*, https://www.dol.gov/agencies/whd/agriculture/field-sanitation/protections-for-agricultural-workers#:~:text=Do%20you%20work%20with%20your,Shade%20website (last visited Nov. 18, 2024).

[37] OCCUPATIONAL SAFETY & HEALTH ADMIN. & NAT'L INST. FOR OCCUPATIONAL SAFETY & HEALTH, *OSHA-NIOSH Heat Illness Info Sheet*, https://www.osha.gov/sites/default/files/publications/osha-niosh-heat-illness-infosheet.pdf (last visited Nov. 18, 2024).

[38] *Supra* note 23 at Rule 3.2(A).

[39] OR. ADMIN. R. 437-002-0156 (2024).

[40] Union of Concerned Scientists, OSHA-2021-0009-1656, Comment on Proposed Rule on Occupational Exposure to Heat Injury and Illness (Dec. 22, 2023), https://www.regulations.gov/comment/OSHA- 2021-0009-1656.

[41] Rep. of the Secretary-General on the Work of the Org., U.N. Doc. A/79/1 (Aug. 2, 2024). .

[42] UNIV. OF N.M., *Cool Off: Stay Safe in the Heat*, https://hsc.unm.edu/health/stories/cool-off.html (last visited Nov. 18, 2024).

[43] *See*, William R. O'Donnell et al., *The Impact of Heat Stress on Performance in Competitive Athletes*, 9 J. INT'L SOC'Y SPORTS NUTRITION 44 (2012).

[44] *See*, A. A. Gagnon et al., *Heat Stress and Injury in Athletes: A Review of the Literature*, 49 INT'L J. ATHLETIC TRAINING 58-68 (2014).

[45] *See Id.* at 4; Dillane & Balanay, *supra* note 4, at 9, 18, 19, and 20*;* Aaron W. Tustin, M.D. et al., *Evaluation of Occupational Exposure Limits for Heat Stress in Outdoor Workers — United States, 2011–2016*, 67 MMWR MORBIDITY AND MORTALITY WKLY. REP., 733 (July 6, 2018) ("Because WBGT incorporates four environmental factors (air temperature, relative humidity, wind speed, and radiation [often sunlight]) that contribute to heat stress, it is the recommended workplace environmental heat metric. In 2016, NIOSH reiterated this recommendation in an updated publication that defines WBGT-based occupational exposure limits. The limits were derived from human experiments and have high sensitivity for detecting unsustainable heat stress in laboratory settings. However, few

data have documented the effectiveness of the exposure limits in real-life situations. The current report partially fills this data gap. In this analysis, the exposure limits had 100% sensitivity for identifying fatal levels of heat stress in outdoor industries. This result suggests that the recommended limits are sufficiently protective of most workers.")

[46] *See* Dallon T. Lamarche et. al., *The recommended Threshold Limit Values for heat exposure fail to maintain body core temperature within safe limits in older working adults*, 14 J. OCCUPATIONAL ENV'T HYGIENE 703, at 703 et seq., (2017)*;* ACGIH, *TLV/BEI Guidelines*, https://www.acgih.org/science/tlv-bei-guidelines/ (last visited Jan. 10, 2024).
[47] In this context, "timely" payment should be in accordance with usual payment schedules to avoid the inherent disincentive of using work time for representative duties if compensation is paid later than it otherwise would be for primary work.
[48] *See* WeCount!, Que Calor, at www.we-count.org/quecalor: and, Thomas A Arcury et. al., *Overcoming Language and Literacy Barriers in Safety and Health Training of Agricultural Workers,* 15 Journal of Agromedicine 3, at 236-248 (2010)