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Occupational Safety and Health Standards Board
2520 Venture Oaks ViJay, Suite 350
Sacramento, California 95833

Dear Board Members,

I am writing to address a critical safety concern regarding access to potable drinking water for outdoor workers, particularly those utilizing aerial devices in hazardous environments. As a lineman for a utility company, I am deeply familiar with the challenges posed by prolonged exposure to hot and humid conditions while working aloft.

According to OSHA.gov/heat, "every year, dozens of workers die and thousands more become ill while working in hot or humid conditions." In the Aerial Lift Safety training material produced by Tree Care Academy under OSHA grant SH-26301-SH4, workers should "drink water every 15 minutes" and either "use a water bottle or bladder systems when aloft." In a letter from OSHA on October 17, 2001, to Mr. Chip Terhorst, OSHA specified that an "acceptable method…to reduce heat stress hazards in the workplace…" is "permitting workers to drink water at liberty."

However, the practical implementation of these recommendations is hindered by the lack of accessible water storage options within aerial devices. California Code of Regulations, title 8, section 3395 (8 CCR 3395), mandates that "employees shall have access to potable drinking water" and "the water shall be located as close as practicable to the areas where employees are working." It goes on to state that employees are to have "one quart [of water] per employee per hour." Unfortunately, existing solutions such as bladder systems pose logistical challenges and additional safety risks due to their weight and impracticality.

"California faces temperature increases throughout the state over the next 80 years that will pose considerable health risks to our population, especially to a number of vulnerable groups." (Preparing California for Extreme Heat: Guidance and Recommendations, developed by the California Climate Action Team which includes and is led by the Secretary of Cal/EPA). OEHHA California Office of Environmental Health Hazard Assessment states "Extreme heat events have also become notably hotter in the last decade and are happening more often across the state." According to weather.gov, temperatures in the 80-90 degrees range can cause fatigue while temperatures in just the 90-103 degrees range can cause heat stroke, heat cramps or heat exhaustion. Depending on the humidity levels and work exertion, these temperatures can feel 15 degrees higher than the actual temperature.

During my approximately 3-6 hours spent in the aerial device, the absence of accessible water storage becomes particularly concerning. Most workers resort to carrying water bottles, which are either put in the control box (equivalent to having a water bottle under you brake pedal in your car), laid on the floor of the aerial device (posing a fall hazard), or left on the ground, rendering them inaccessible during critical moments of work.

Access to potable drinking water in an aerial device while aloft means the water needs to be present in the aerial device itself. As suggested above, you can use a bladder system, however, these are not only very costly to the company, but they also add extra weight to the already heavy (FR Rated) work attire an employee is required to wear for safety, and these also add heat due to the exertion of energy to hold this extra weight on the body. Therefore, a lot of companies do not use this option.

The simple answer is to have ***adequate drink holders securely attached to the aerial devices***. This will keep bottles out of the control box and off the floor. It will provide employees with critical lifesaving potable drinking water in his/her separate workspace. Keeping in mind, this separate workspace does not have shade and is a confined area. In addition, this holder will make it where supervisors can see that their employees have their life-saving potable drinking water while in the aerial devices.

To address this issue effectively, I propose a simple amendment to the California Code of Regulations, Title 8, Section 3395 (see attached **Appendix A**), requiring the provision of adequate drink holders securely attached to the aerial devices. This solution not only ensures convenient access to water during working hours but also mitigates potential hazards associated with improvised storage methods.

Furthermore, the implementation of this amendment aligns with OSHA's commitment to reducing heat stress hazards in the workplace, as outlined in OSHA's letter dated October 17, 2001, which emphasizes the importance of permitting workers to drink water at liberty.

The lack of safe working water for outdoor workers can pose significant dangers to their health and well-being. Outdoor workers, such as construction workers, agricultural workers, and utility workers, often face challenging conditions and physical exertion in their jobs. Access to safe and clean water is essential for maintaining hydration, preventing heat-related illnesses, and ensuring proper sanitation practices. In this comprehensive response, we will explore the various risks associated with the lack of safe working water for outdoor workers.

1. Dehydration and Heat-related Illnesses:

One of the primary dangers of inadequate access to safe working water is dehydration. Outdoor workers are more susceptible to dehydration due to increased physical activity, exposure to high temperatures, and limited access to drinking water. Dehydration occurs when the body loses more fluids than it takes in, leading to an imbalance in electrolytes and impairing bodily functions. Mild dehydration can cause symptoms such as thirst, dry mouth, fatigue, and dizziness. However, severe dehydration can lead to heat exhaustion or heatstroke, which are potentially life-threatening conditions.

Heat exhaustion is characterized by heavy sweating, rapid pulse, nausea, headache, and weakness. If left untreated, it can progress to heatstroke, a medical emergency that requires immediate attention. Heatstroke occurs when the body's core temperature rises above 104 degrees Fahrenheit (40 degrees Celsius), leading to confusion, loss of consciousness, seizures, and organ failure. Without access to safe working water for hydration and cooling measures like shade breaks or misting stations, outdoor workers are at a higher risk of developing these heat-related illnesses.

2. Impaired Cognitive Function and Accidents:

Inadequate hydration can also impair cognitive function and decision-making abilities in outdoor workers. Studies have shown that even mild dehydration can negatively impact cognitive performance, including attention span, memory recall, and reaction time. Impaired cognitive function increases the risk of accidents and injuries in hazardous work environments. For example, utility workers handling live deadly wires, construction workers operating heavy machinery or agricultural workers handling sharp tools are more prone to accidents if they are dehydrated and unable to focus properly.

The lack of potable water for outdoor workers poses significant dangers to their health and well-being. Dehydration and heat-related illnesses, impaired cognitive function leading to accidents, and poor sanitation and hygiene practices are among the risks associated with inadequate access to clean water. ***Even a slightly impaired cognitive function can be lethal especially when working with and around live electric wires***. It is crucial for employers and policymakers to prioritize the provision of safe working water for outdoor workers to ensure their safety and promote a healthy work environment.

Public input plays a crucial role in shaping the standards and regulations set by organizations such as ANSI (American National Standards Institute), OSHA (Occupational Safety and Health Administration), and Cal-OSHA (California Division of Occupational Safety and Health).

These organizations are responsible for establishing guidelines and requirements to ensure safety, quality, and efficiency in various industries. While these organizations have experts and professionals who contribute to the development of standards, public input provides a broader perspective and helps incorporate soft skills such as clarity, emotions, teamwork, leadership in problem-solving, goal setting, adaptability, creativity, critical thinking in making informed decisions, and networking. Please see **Appendix B** explaining the cruciality of public input to this solution. Progress may be slow, but the journey towards implementing safety measures on a large scale begins with the first step of drafting new language.

I believe the proposed amendment in attached **Appendix A** is a practical and cost-effective solution that prioritizes the safety and well-being of outdoor workers. By enacting this change, we can prevent tragedies such as the recent dehydration-related fatality in Texas and ensure that no worker succumbs to heat illness, exhaustion, or dehydration due to inadequate access to potable drinking water. ***These injuries and fatalities*** due to lack of access to potable drinking water (that is properly and safely stored) ***are 100% preventable***.

Thank you for considering this matter seriously. I look forward to your response and the opportunity to discuss this proposal further.

Sincerely,

Landon Dees
Representing concerned Lineman &
Other Industries using Aerial Devices

Appendix A

We are requesting the following simple change to the California Code of Regulations, Title 8, Section 3395:

(c) Provision of water. Employees shall have access to potable drinking water meeting the requirements of Sections 1524, 3363, and 3457, as applicable, including but not limited to the requirements that it be fresh, pure, suitably cool, and provided to employees free of charge. The water shall be located as close as practicable to the areas where employees are working**, and if in an aerial device, an adequate drink holder that attaches to the aerial device shall be made available to all workers**. Where drinking water is not plumbed or otherwise continuously supplied, it shall 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. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. The frequent drinking of water, as described in subsection (h)(1)(C), shall be encouraged.

Appendix B

One-way public input can contribute to the development of standards is by providing **clarity**. When standards are being developed or modified, public input can help identify areas that may be ambiguous or unclear. The public can provide feedback on specific language or requirements that may be difficult to interpret or implement. By addressing these concerns, the standards can be made more precise and easier to understand for all stakeholders involved.

Emotions also play a significant role in influencing standards. Public input allows individuals to express their concerns, fears, or frustrations related to specific industry practices or regulations. By considering these emotional aspects, organizations like ANSI, FOSHA, and Cal-OSHA can better understand the impact of their standards on people's lives and well-being. This understanding can lead to the development of more empathetic and effective regulations that consider the emotional aspects of those affected.

Teamwork is another soft skill that can be enhanced through public input. When developing or modifying standards, involving the public fosters collaboration between different stakeholders. By soliciting input from various perspectives such as workers, employers, industry experts, and advocacy groups, a more comprehensive understanding of the issues at hand can be achieved. This collaborative approach ensures that the resulting standards reflect a collective effort rather than being solely dictated by a few individuals.

Leadership in problem-solving is also influenced by public input. The public often brings forth real-world challenges and issues that need to be addressed through standards. By actively seeking public input, organizations can identify emerging problems or areas where existing standards may be inadequate. This proactive approach allows for the development of innovative solutions and ensures that the standards remain relevant and effective in addressing current and future challenges.

Goal setting is another area where public input can have a significant impact. Public input helps organizations understand the needs and expectations of various stakeholders. By incorporating these perspectives, standards can be set with realistic and achievable goals that align with the interests of those affected. This collaborative goal setting process ensures that the standards are practical, measurable, and meaningful to all parties involved.

Adaptability is a crucial soft skill that can be enhanced through public input. Industries are constantly evolving, and new technologies, practices, and risks emerge over time. Public input provides organizations with valuable insights into these changes and helps them adapt to their standards accordingly. By staying responsive to the evolving needs of industries and society, ANSI, FOSHA, and Cal-OSHA can ensure that their standards remain effective and up-to-date.

Creativity is also fostered through public input. The public often brings fresh perspectives, ideas, and innovations to the table. By actively seeking public input, organizations can tap into this collective creativity to develop more innovative and forward-thinking standards. This approach encourages out-of-the-box thinking and helps address complex challenges in novel ways.

Critical thinking in making informed decisions is greatly influenced by public input. When developing or modifying standards, organizations like ANSI, FOSHA, and Cal-OSHA must consider a wide range of factors and potential consequences. Public input provides additional insights and perspectives that may not have been initially considered by the experts within these organizations. By incorporating public suggestions, the decision-making process becomes more robust, comprehensive, and reflective of the diverse needs of stakeholders.

Networking is another soft skill that can be enhanced through public input. By actively engaging with the public, organizations can establish and strengthen relationships with various stakeholders. This networking allows for ongoing communication, collaboration, and feedback exchange. By maintaining these connections, ANSI, FOSHA, and Cal-OSHA can ensure that their standards remain relevant and responsive to the evolving needs of industries and society.

Suggestions provided by the public can significantly influence the modification of a standard. When organizations like ANSI, FOSHA, and Cal-OSHA seek public input, they often receive valuable suggestions and recommendations for improving existing standards or developing new ones. These suggestions may come from individuals who have direct experience in the industry, experts in related fields, or advocacy groups representing specific interests.

Public suggestions can influence modifications to standards in several ways.

First, they can highlight areas where existing standards may be inadequate or outdated. By bringing attention to these shortcomings, the public can prompt organizations to reevaluate and update their standards to address emerging challenges or incorporate new best practices.

Secondly, public suggestions can provide alternative approaches or solutions to specific issues. The diverse perspectives offered by the public can lead to innovative ideas that were not previously considered by the organizations. These suggestions can help improve the effectiveness and practicality of the standards by incorporating fresh insights and approaches.

Lastly, public suggestions can also influence modifications to standards by advocating for specific changes or improvements. When a significant number of individuals or groups express similar concerns or recommendations, it signals a need for action. Organizations like ANSI, FOSHA, and Cal-OSHA are more likely to consider these suggestions seriously and make appropriate modifications to their standards based on the collective voice of the public.

In conclusion, public input plays a vital role in shaping the soft skills incorporated into standards developed by organizations such as ANSI, FOSHA, and Cal-OSHA. Public input enhances clarity by addressing ambiguities and providing feedback on language or requirements. It also brings emotions into consideration, ensuring that standards are empathetic and considerate of people's well-being. Public input fosters teamwork by involving various stakeholders in the development process, leading to more comprehensive and collaborative standards. Leadership in problem-solving is influenced by public input as it brings real-world challenges to the forefront and encourages innovative solutions. Goal setting becomes more meaningful and achievable through public input, while adaptability ensures that standards remain relevant in a constantly evolving landscape. Creativity is fostered by incorporating public perspectives, and critical

thinking is enhanced by considering a wide range of suggestions. Lastly, networking is strengthened through ongoing engagement with the public, ensuring continuous communication and collaboration.