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improve the health and safety
of workers and the community.*

September 24, 2009

Ms. Marley Hart, Executive Officer
Occupational Safety & Health Standards Board
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833

RE: Proposed Changes to 8CCR§3395
Heat Illness Prevention in Outdoor Places of Employment

Dear Ms. Hart;

California Industrial Hygiene Council (CIHC) respectfully submits the following comments regarding the proposed changes to Section 3395, the regulations regarding Heat Illness Prevention in Outdoor Places of Employment. Founded in 1990, CIHC represents the Industrial Hygiene profession in California and is affiliated with the American Industrial Hygiene Association (AIHA), a 12,000 member organization. Our Board consists of Certified Industrial Hygienist (CIH) representatives from all of the California local sections of the American Industrial Hygiene Association. The local sections consist of Northern CA, Orange County, Sacramento, San Diego, and Southern CA. Our mission is to bring good science to the legislative and/or regulatory table which impacts the health of workers and the public.

CIHC has consistently agreed with the need for a heat illness standard since the standard was first considered. It is clear the standard, as originally adopted, focused on a significant problem among some employers in the agriculture industry and based on Division representations the standard has made the industry a safer place to work. The changes currently being proposed should alleviate confusion voiced by some employers concerning compliance with this standard. For this reason, CIHC is in favor of the proposed changes.

Temperature extremes present a work stress that is evaluated by professional industrial hygienists. Most of the literature on working in temperature extremes is found in the industrial hygiene scientific literature. Clearly, industrial hygienists (working alongside other occupational health medical professionals) are best suited to respond to temperature extreme working conditions.

Heat stress is defined as the net heat load to which a worker may be exposed from the combined contributions of metabolic heat and environmental factors. CIHC is concerned with the ‘science’ behind the proposed changes, but more specifically as it relates to California employment outside of agriculture, and to employees who may have collateral

outdoor duties or whose jobs take them outdoors for a limited period of time, e.g., construction, warehousing, etc. It is our professional opinion that the proposed changes are not based on scientific principles when evaluating all of California’s workplaces that may be impacted by this regulation. Furthermore, it is our opinion that the proposed changes may have limited affect in protecting non-agricultural workers due to its very limited scope of hydration, shade, and training. This may be a reasonable approach when evaluating a farm worker performing repetitive duties subject to the sun but not necessarily protective for workers who may be performing more rigorous jobs, jobs that require workers to wear protective clothing, or jobs that simply subject workers to other variables that affect their heat load. Without minimizing the need for the changes being proposed, we recommend the Standards Board consider another option for non-agriculture industry employers impacted by this standard. CIHC suggests inclusion in Section 3395, the following:

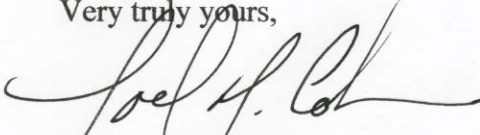
1. In lieu of compliance with Section 3395(c) and (d), every non-agriculture employer whose employees are subject to work in high net heat load environments outdoors shall establish, implement and maintain a Heat Illness Prevention Program for their employees. The program must be in writing and include at a minimum the following elements.
 - a. Identify a person or persons responsible for ensuring the effective implementation of the program
 - b. A procedure for the gradual physiological adaptation of workers to the heat stress (acclimatization).
 - c. A procedure that recognizes and addresses the combined environmental factors that may adversely cause harm to health including:
 - i. Air temperature
 - ii. Humidity
 - iii. Air movement
 - iv. Radiant heat
 - d. A procedure that addresses the factors that affect and/or offer relief to the workers, to include one or more of the following:
 - i. Clothing
 - ii. Hydration
 - iii. Work/rest regimen
 - iv. Level of work, e.g., light, moderate, heavy
 - v. Shade
 - e. A procedure that addresses the condition of each worker, including:
 - i. Weight
 - ii. Physical condition
 - iii. Amount of sweating
 - iv. Other lifestyle issues that may place burden on the worker

- f. (Optional) Employers may conduct heat strain physiologic monitoring using one or more of the following techniques to assist in heat stress management.
- i. Sustained heart rate
 - ii. Body core temperature
 - iii. Recovery heart rate

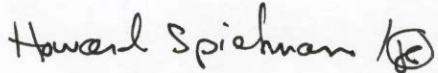
CIHC remains very supportive of the Division's activities to control workplace heat illness. Our recommendations provide for a more comprehensive control and would require employers to decide on the best available controls for their work environment.

We would be happy to work with you and the Division. Should you have any questions concerning the above information, please contact us at 650.349.9737.

Very truly yours,



Joel M. Cohen, MPH, CIH
CIHC Board Member
Project Manager



Howard B. Spielman, PE, CIH, CSP, CEHS
CIHC President