California Industrial Hygiene Council 3 Waters Park Drive, #226 San Mateo, CA 94403

November 12, 2018

Ms. Amalia Neidhardt Senior Industrial Engineer Division of Occupational Safety and Health California Department of Industrial Relations 1515 Clay Street Oakland, CA 94612

RE: Proposed Indoor Heat Illness Standard

Dear Ms. Neidhardt:

The California Industrial Hygiene Council (CIHC) appreciates the opportunity to again comment on the proposed Indoor Heat Illness Standard. The measurement and control of heat stress is difficult, but CIHC believes that DOSH has included the critical elements to protect workers.

The latest draft is significantly different than prior drafts of the standard, but CIHC believes this latest draft is better. We offer the following suggested changes to this latest draft.

Section (a)(1): We agree with the changes made, but question why duration of exposure was not included. We believe time of exposure to be particularly important for indoor environments. As I am writing this letter, the chiller in our office building stopped working and the temperature in my office reached 82 degrees. Fortunately, management was able to fix the problem within a few hours but my exposure was limited and the problem was resolved. As written, my office would be subject to this standard. CIHC requests that you consider adding TIME to the application, i.e., ... equals or exceeds 82 degrees Fahrenheit for X hours, e.g., 8 hours.

Section (e)(1): We agree with the changes made in the latest draft, however, we believe DOSH missed a significant element of SB1167, signed by the Governor, which states, "In developing the standard, the division shall take into consideration heat stress and heat strain guidelines in the 2016 Threshold Limit Values and Biological Exposure Indices developed by the American Conference of Governmental Industrial Hygienists" [Section 1, 6720]. CIHC believes this is a critical element that should be included in the regulation, but unfortunately has been absent in all drafts to date. NIOSH has adopted a similar standard to the ACGIH. CIHC believes that an employer should have the option of determining whether they are within the TLV (or REL) for indoor heat based on a WBGT rather than purely temperature or heat index. CIHC believes such an addition of the TLV would add sound science to the standard as well as compliance with the direction of the signed bill.

Section (e)(1)(A) Note: CIHC is unclear why maintaining temperature records for 30 years as stated in Section 3204 is warranted. CIHC suggests either deleting this note or stating a more reasonable timetable for maintaining records, i.e., 1 year.

Section (e)(1)(C): CIHC is concerned about the recommendation on the use of instruments to measure temperature or heat index without setting a standard for such equipment. Equipment that can make these measurements has a wide range of price based on their accuracy and precision. We therefore suggest that DOSH consider adding a requirement that the equipment not only be "maintained" but also must be regularly (i.e., annual) calibrated by a reliable source.

Section (e)(2)(A): CIHC agrees with the changes made to this section on engineering controls. However, the recommendation used for increasing humidity and cooling may lead to a problem with biologic growth, which could then become aerosolized. If the new language is to be retained, CIHC recommends the addition that an employer must control biologic growth in this equipment.

Section (g)(1): CIHC does not understand the word, "closely" as used in this section. CIHC suggests either removing the term or defining the term.

Section (h)(2)(D): CIHC suggests removing this requirement as written. This requirement makes little sense, particularly in an indoor environment and it remains unclear how an employer can provide such instruction.

Section (i)(4): CIHC again recommends deleting or defining "close".

CIHC appreciates the ability to be involved in the development of this standard. Please let us know if you have any questions concerning the above-stated points.

Very truly yours,

Jøel M. Cohen, MPH, CIH, FAIHA

Board Member

California Industrial Hygiene Council