SUBJECT: Enforcement of Indoor Ventilation and Temperature in Places of Employment

Purpose:

To guide the enforcement of Minn. Rule 5205.0110 Subpart 2.

Cancellation:

None

References:

1. Minn. Stat. 182.655, Subpart 4, Standards for hazardous substances and harmful physical agents.
4. 2017 ACGIH Documentation of Heat Stress and Strain TLV.

Background:

In 1997, Minn. Rule 5205.0110 Subpart 2 was updated to change from the use of effective temperature to Wet Bulb Globe Temperature (WBGT) as a means to screen for heat stress. The basis for the WBGT temperatures selected and placed into rule was the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV) screening criteria for heat stress in 1996. Since this rulemaking the ACGIH has updated the TLV screening criteria for heat stress several times. The current WBGT screening criteria set by ACGIH are higher than those listed in the Minnesota Rule. The intent of this directive is to clarify that employers that are in compliance with the most current version of the ACGIH TLV will be considered to be in compliance with the Minnesota Rule.
**Action:**

Effective immediately Minnesota OSHA will consider two hour Time Weighted Average (TWA) exposures that are below the most current version of the ACGIH TLV Screening Criteria to be in compliance with Minn. Rule 5205.0110 Subpart 2. Current ACGIH TLV Screening Criteria is identified below:

<table>
<thead>
<tr>
<th>Work Level</th>
<th>Temperature (°C)</th>
<th>Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-100% Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5205.0110 Subpart 2</td>
<td>30.0° C (86.0° F)</td>
<td>26.7° C (80.0° F)</td>
</tr>
<tr>
<td>2017 Screening Criteria</td>
<td>31.0° C (87.8° F)</td>
<td>28.0° C (82.4° F)</td>
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<tr>
<td>Heavy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25.0° C (77.0° F)</td>
<td>Not recommended</td>
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</tbody>
</table>

Cite Minn. Rule 5205.0110 Subpart 2 in situations where employees are exposed to two hour TWA’s exceeding the current TLV Screening Criteria. Instruments used by OSHI’s to monitor for heat stress are accurate to within +/- 0.5° Celsius, therefore measurements must exceed 31.5° Celsius (88.7° F) for light work and 28.5° Celsius (83.3° F) for moderate work. A screening criteria is currently not provided by the ACGIH for heavy work. ACGIH recommends a detailed analysis or physiological monitoring for 75 to 100% heavy work. MNOSHA will continue to enforce the existing heavy work level specified in 5205.0110 Subpart 2. Therefore, for heavy work, citations shall be issued for measured WBGT levels exceeding 25.5° C (77.9° F).

James Krueger, Director MNOSHA Compliance
For the MNOSHA Management Team

Distribution: OSHA Compliance and WSC Director

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