New Heat Stress Regulation Under the *Occupational Health and Safety Act*

Submitted to: Ministry of Labour, Immigration, Training and Skills Development

Submitted by: Ontario Bar Association

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ONTARIO BAR ASSOCIATION
A Branch of the Canadian Bar Association

L'ASSOCIATION DU BARREAU DE L'ONTARIO
Une division de l'Association du Barreau canadien

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Executive Summary

The Ontario Bar Association ("OBA") appreciates the opportunity to provide comments to the government on the proposed approach for a standalone heat stress regulation under the *Occupational Health and Safety Act* ("*OHSA*"). The OBA recognizes the paramount importance of taking all reasonable precautions to protect worker's health and safety, and the impact that extreme temperatures have on the economy.

The OBA supports the government's policy goal of introducing a standalone regulation to address the impact of heat stress on workers. Currently, *OHSA* imposes a general duty on employers to take every precaution reasonable in the circumstances for the protection of a worker, which may include protecting workers from heat stress. As the occurrence of extreme heat is expected to increase, a standalone and specific regulation is warranted.

The following is a summary of our comments, which are more fully set out below:

- The standalone regulation should be simple to understand and implement. The current proposal is complex and requires the use of numerous specialized measurement tools and equations, which would be particularly burdensome on smaller employers.
- If the American Conference of Governmental Industrial Hygienists (ACGIH) guidelines are being used, some important metrics like metabolic rate calculations and a distinction for unacclimatized workers should be included. Again, these guidelines should also be communicated in an accessible way for workers and employers to understand and implement.
- The supervision requirement for continuous or mostly continuous heavy and very heavy workloads needs clarification.
- The information that employers would be required to give to workers should be standardized, in plain language, and include information about a worker's right of refusal.
- A transition period, based on the size of the employer, should be included by amending the coming into force date.

Ontario Bar Association

Established in 1907, the OBA is the largest and most diverse volunteer lawyer association in Ontario, with close to 16,000 members, practicing in every area of law in every region of the province. Each year, through the work of our 40 practice sections, the OBA provides advice to assist legislators and other key decision-makers in the interests of both the profession and the public and we deliver over 325 in-person and online professional development programs to an audience of over 20,000 lawyers, judges, students, and professors.

This submission was prepared and reviewed by members of the OBA's Labour and Employment Law Section. Members of this section include barristers and solicitors in public and private practice in large, medium, and small firms across every region in Ontario. These members have deep experience and expertise with *OHSA* and its regulations, and represent both management and labour, unionized and non-unionized organizations, and public and private entities.

Comments & Recommendations

A Simpler Method Is Preferable

The proposed method for assessing heat stress by reference to the ACGIH guidelines is complex and confusing. It requires multiple different measurement tools to calculate the Wet Bulb Globe Temperature ("WBGT"), which is determined by reference to the Natural Wet-Bulb Temperature, Globe Temperature, and Dry-Bulb Temperature. Once the WBGT is calculated, there are complex equations that must be used to determine the Time-Weighted Average ("TWA") – WBGT, which vary depending on whether exposure is continuous or intermittent, the different heat levels throughout a workday, the "clothing adjustment factor", and metabolic rate calculations for workers.

Once the values are determined, an employer is then required to refer to the Heat Stress Exposure Limits chart, which separates acceptable exposure limits based on the type of workload (which includes light, moderate, heavy, and very heavy work) and the hourly percentage of work in the particular workload category, and finally to the threshold limits for acceptable temperature ranges. This methodology will be very cumbersome for small employers with limited resources and time. Small employers will likely struggle to comply with or even understand the regulation.

An alternative to the ACGIH methodology is the CDC's guidance on work/rest schedules.[1] This is a far simpler method that only requires taking a standard temperature reading and adjusting based on environmental conditions and humidity. Adjustments follow a simple process of adding *X* degrees to the value depending on whether there is full sun (no clouds), partly cloudy/overcast conditions, or full shade/night work. The process for factoring in

[1] https://www.cdc.gov/niosh/topics/heatstress/recommendations.html

humidity is similarly straightforward. If humidity is 40%, you add 3 degrees to the total value (these values are in Fahrenheit); if humidity is 50%, you add 6 degrees, and so on.

The remainder of this submission comments on the particulars of the consultation paper proposals and presumes that the ACGIH method will be used.

Third-Party Measurements Would Help Simplify the Process

If the regulations apply the ACGIH methodology, it is preferable to have a dedicated third-party authority post the WGBT to be used in the calculations for determining acceptable heat exposure. Obtaining the TWA-WBGT would still require the use of the ACGIH equations, but it simplifies the process and removes the need for employers to purchase multiple specialized tools to calculate it themselves. These values could be sufficiently location-specific if provided by municipalities, regions, or counties.

Metabolic Rate Calculations from ACGIH Should be Included

The consultation paper refers to metabolic rates but does not specifically include the ACGIH calculation that factors in a worker's body weight. While this further complicates an already complex equation, there are good reasons to include it. A task that may be considered "light work" by a young worker with no underlying health issues may not necessarily be "light work" for others. Furthermore, metabolism varies based on sex, which results in higher body temperatures for women. A worker's personal attributes should be considered to ensure that the thresholds do not subject certain workers to unacceptable risks of heat-related illnesses.

Acceptable Alternative Methods Should be Specified

The proposal specifically leaves open the ability to use methods other than the ACGIH standard to assess heat stress if the methodology is in accordance with recognized industrial hygiene practice and equally protects the health of the worker. We do not think this should be left open-ended. Rather, there should be a specific list of acceptable alternative methods that are acceptable to use, with descriptions of how to employ such methods in the

workplace. We would appreciate the opportunity to comment on the Ministry's proposed acceptable alternatives once they are finalized.

There Should Be a Distinction for Unacclimatized Workers

The government's regulations should mirror the ACGIH guidelines by including different thresholds for acclimatized and unacclimatized workers. The ACGIH method differentiates heat exposure limits for acclimatized and unacclimatized workers. Unacclimatized workers, or workers that are not used to hot conditions, will be impacted by heat stress more than acclimatized workers. The consultation paper does not account for this and uses the higher values provided for acclimatized workers. This has the potential to expose unacclimatized workers to temperatures that exceed the ACGIH guidelines, putting them at risk of heat-related illnesses.

The Unacclimatized Worker values also provide an important marker for employers as it represents the point where thermal stress management programs should be considered. This can mitigate against the risks of heat-related illnesses before they happen, while allowing workers to continue their duties.

Supervision of Workers for Heavy or Very Heavy Workloads Needs Clarity

The heat stress exposure limits for continuous or almost continuous heavy and very heavy work does not contain a numerical value. It indicates that in these scenarios, work is only to be carried out under the supervision of a qualified individual. What exactly this supervision entails is unclear – does it require continuous supervision or periodic supervision? Can the supervisor be working on the same jobsite, or does this require a dedicated supervisor that is not working themselves? The trigger for this requirement is also unclear, as it seems to suggest that supervision is necessary regardless of the environmental conditions that inform all other thresholds.

While further clarity here will help resolve these issues, this supervision requirement will be difficult for small employers to comply with, while also posing difficulties for larger employers, particularly municipalities. Many municipal front-line workers self-supervise and do not have direct supervision on the jobsite. They often attend multiple different jobsites to perform different types of work each day. If a third-party supervisor is required, it may impede significant infrastructure work that taxpayers rely on. If regular staff can be trained to meet the supervisor criteria, that would help all types of employers manage their resources.

Further particulars should be provided for what constitutes sufficient training to be considered a supervisor for these purposes. The proposal currently states that a supervisor is "a person who is qualified, because of knowledge, training and experience, to recognize, assess and prevent heat strain and heat-related illness". There is no indication of the type of knowledge, training, or experience that is required. In our view, there should be a Ministry-sponsored standardized training course to ensure that all supervisors have at least a minimum level of competency to fulfill this role.

Information Provided to Employees Should Be Standardized

The consultation paper outlines a requirement for employers to provide workers with information on the measures to be implemented for their protection, the importance of staying hydrated, the signs of heat-related illnesses, and the steps a worker should take if they suspect that they are experiencing heat-related illness. The proposal only speaks to a requirement that workers be provided this information.

This proposal could be improved by the Ministry providing express guidance to employers on how to implement heat stress workplace policies and procedures. Such documentation would be particularly useful to small employers with limited resources. If the contents of the information are left to the employer to formulate, the type of information workers receive

will vary. It is preferable to have a standardized, plain-language document to ensure that all workers receive adequate information from their employers.

An additional topic that should be covered in the information package is a worker's right of refusal. *OHSA* provides that workers may refuse to work or do particular work where they have reason to believe that the physical condition of the workplace is likely to endanger themselves. This is an important right that workers should be reminded of, particularly in the context of heat stress regulations as there may be a scenario where an employer seeks to pressure a worker to disregard the regulation.

There Should be a Transition Period

Once the regulation is fully developed and drafted, there should be a transition period to provide employers with sufficient time to assess their current practices and determine what additional steps they would need to take to comply with the regulation. This will be particularly important for smaller employers with limited resources and time. It would also increase the likelihood that large employers, unions, and law firms release articles in advance of the implementation date, which would be a helpful resource for other employers determining how to implement these requirements.

To this end, we recommend that the regulations come into force 6-12 months after they receive Royal Assent. An alternative to a full transition period is to specifically provide smaller employers with a transition period, similar to the approach that was taken for phasing-in the *Accessibility for Ontarians with Disabilities Act* (*AODA*) obligations. The *AODA* transition period was based on the number of employees in an organization. This approach would provide targeted relief to employers who are most likely to need additional time to comply.

The OBA would welcome the opportunity to provide additional input into draft language of the regulations.