



**WINNIPEG
Air Testing**

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- **Setting Exposure Standard for Products That do Not Have a Standard**
- **Adjusting an Existing Standard for Specific Conditions of the Workplace**

Setting Exposure Standard for Products that Do Not Have a Standard

The Manitoba Workplace Health and Safety Regulation states that if a threshold limit value (an allowable airborne concentration in a workplace intended to protect workers) is not already established, an employer may have to establish an occupational exposure limit for that product themselves. An excerpt from the legislation is provided below:

36.5(1) Subject to subsection (2), if an assessment under section 36.2 determines that the presence of an airborne chemical or biological substance in the workplace creates or may create a risk to the safety or health of a worker, an employer must:

(c) in the case of an airborne substance for which the ACGIH has not established a threshold limit value,

(i) implement control measures in the workplace sufficient to eliminate any risk to the safety or health of a worker, or

(ii) ensure that a competent person establishes an occupational exposure limit for the substance that will ensure that the safety or health of all workers in the workplace will not be placed at risk.

Winnipeg Air Testing will review the available information on the product and produce a detailed assessment summarizing the available information, establishing a numerical allowable concentration for your workplace and the rationale for the number. We have experience in setting exposures for many products ranging from pharmaceuticals to powdered milk.

Adjusting an Existing Standard for Specific Conditions

Occupational exposure limits or OELs are intended to protect normal, healthy workers under normal conditions. In many cases, the conditions are different than the assumptions used to set these standards. In that case, the OEL can be adjusted to compensate for the unusual conditions.

Examples of conditions that may require an adjustment to an OEL include:

- Unusual or extended work hours
- Non-airborne routes of exposure
- Combined exposures of different products
- High physical exertion
- Pregnant worker
- Sensitized worker
- Worker with a pre-existing medical condition (e.g., asthma, liver condition)

In some cases, the review of the specific condition and the basis of the OEL, no adjustment is required. Where there is evidence of the need for an adjustment to the TLV, a document detailing the need and basis for the adjustment as well as a numerical recommendation for an adjusted OEL. The intent of an adjusted OEL is to provide the same degree of safety/protection under the unusual conditions as is provided by the normal OEL under the normal conditions.

The adjustment of an OEL for specific conditions is required under the Manitoba Provincial Health and Safety Regulation.

The steps that must be taken to ensure the safety, health and welfare of workers resulting from the use, production, storage, handling, and disposal of chemical substances are spelled out in Part 36 of the Workplace Safety and Health Regulation, 217/2006. Part 36, Chemical and Biological Substances. A decision diagram of this regulation is shown in Figure 1. The part requiring that the exposure limits be adjusted to take into account conditions in your workplace (Section 36.5(2)) is circled. This section states that when:

- (a) conditions in the workplace, (including, heat, ultraviolet and ionizing radiation, humidity, pressure, length of work shift, work-rest regime, or additive and synergistic effects of materials and workload); or
- (b) the health or physical condition of a worker in the workplace known to an employer; the employer must establish a lower occupational exposure limit for that substance than the limit established by the ACGIH. The occupational exposure limit established by the employer must ensure that the safety or health of workers who are exposed to the substance in that workplace at levels below that limit will not be placed at risk.

Free Consultation

Winnipeg Air Testing would be please to provide a free consultation on either establishing an OEL or adjusting an OEL. Please contact us at 668-314 or by email at contact@winnipegairtesting.com