

# General respiratory protective equipment requirements in Alberta

All statements, technical information and recommendations contained herein are based on data we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. 3M shall not be liable or responsible for any loss or damage whether direct, indirect, incidental, special or consequential arising out of the selection, use or misuse of respiratory products or the user's inability to use such products.

## General requirements in Alberta's Occupational Health & Safety (OHS) Code

The following outlines some of the general requirements for respiratory protection in Alberta as detailed in the Alberta OHS Code. These requirements apply to all employers that fall under provincial jurisdiction in the Province of Alberta.

### Part 2: Hazard Assessment

All employers are required to assess and control hazards that workers are exposed to in the workplace. This can include chemical, biological, physical and psychosocial hazards. Welding is an example of a workplace activity that often has physical and chemical hazards associated with it (i.e. welding fumes). The hazard assessment must be documented and available to workers. When hazards are identified, the hazards must be controlled or eliminated. The hierarchy of controls is as follows:

1. Elimination or substitution;
2. Engineering;
3. Administrative; and
4. Personal protective equipment (as a last option, when other options have been exhausted).

Specific sections of Part 2 are highlighted below:

*7(1) An employer must assess a work site and identify existing and potential hazards before work begins at the work site or prior to the construction of a new work site.*

*7(2) An employer must prepare a report of the results of a hazard assessment and the methods used to control or eliminate the hazards identified.*

### Part 4: Chemical Hazards, Biological Hazards and Harmful Substances

If the hazard assessment required in Part 2 identifies that workers are or may be exposed to these hazards, employers must ensure that exposure is kept as low as reasonably achievable.

Allowable limits for what employers can expose workers to are listed in Schedule 1, Table 2 of the Alberta OHS Code. Exposures cannot exceed occupational exposure limits (OELs). Industrial hygiene monitoring is required to determine what the worker exposure levels are.

When looking at welding as an example, if there are not adequate engineering controls in place, there is a likelihood for some exposures to exceed OELs. See the Welders Guide to the Hazards of Welding Gases and Fumes for more information, (as listed below). If engineering controls, such as local extraction systems, are not adequate for controlling welding fumes, respiratory protective equipment may be used to control worker exposures.

Specific Sections of Part 4 are highlighted below:

*16(2) An employer must ensure that a worker's exposure to any substance listed in Schedule 1, Table 2 does not exceed its occupational exposure limits listed in Schedule 1, Table 2.*

*16(3) If no occupational exposure limit is established for a harmful substance present at a work site, an employer must ensure that a worker's exposure to that substance is kept as low as reasonably achievable.*

## **Part 18: Personal Protective Equipment**

If the hazard assessment indicates the need for personal protective equipment (PPE), employers must ensure that workers wear appropriate equipment and that they are properly trained in the correct use, care, limitation and assigned maintenance of that equipment.

If respiratory protective equipment is required, a written Respiratory Code of Practice is also required. See the Guideline for the Development of a Code of Practice for Respiratory Protective Equipment. Additional codes of practice may be required as outlined in Schedule 1, Table 1 of the Alberta OHS Code.

Respirators that rely on an effective facial seal require that users are clean-shaven and properly fit-tested prior to using a respirator. All respirators in the province of Alberta must be selected in accordance with CSA Z94.4 2002. The CSA Standard also requires that all workers be medically evaluated prior to wearing a selected respirator.

Respirators must be readily available to protect workers when they are needed. They must be stored to prevent contamination, maintained in a clean condition, inspected before and after use, and serviced in accordance with manufacturer specifications. If respirators are not used routinely, but kept for emergency use, they must be inspected at least monthly to ensure they are in satisfactory working condition.

Specific sections of Part 18 are highlighted below:

*228(1) If the hazard assessment indicates the need for personal protective equipment, an employer must ensure that:*

- (a) Workers wear personal protective equipment that is correct for the hazard and protects workers;*
- (b) Workers properly use and wear the personal protective equipment;*
- (c) The personal protective equipment is in a condition to perform the function for which it was designed; and*
- (d) Workers are trained in the correct use, care, limitations and assigned maintenance of the personal protective equipment.*

*228(2) A worker must:*

- (a) Use and wear properly the appropriate personal protective equipment specified in this Code in accordance with the training and instruction received;*
- (b) Inspect the personal protective equipment before using it; and*
- (c) Not use personal protective equipment that is unable to perform the function for which it is designed.*

*228(3) An employer must ensure that the use of personal protective equipment does not itself endanger the worker.*

*244(4) A worker must use the appropriate respiratory equipment provided by the employer under subsection (3).*

*245(1) If respiratory protective equipment is used at a work site, an employer must prepare a code of practice governing the selection, maintenance and use of respiratory protective equipment.*

*247 An employer must ensure that respiratory protective equipment used at a work site is selected in accordance with CSA Standard Z94.4-02, Selection, Use and Care of Respirators.*

*248(1) An employer must ensure that respiratory protective equipment kept ready to protect a worker is:*

- (a) Stored in a readily accessible location;*
- (b) Stored in a manner that prevents its contamination;*
- (c) Maintained in a clean and sanitary condition;*
- (d) Inspected before and after each use to ensure it is in satisfactory working condition; and*
- (e) Serviced and used in accordance with the manufacturer's specifications.*

*250(1) An employer must ensure that respiratory protective equipment that depends on an effective facial seal for its safe use is correctly fit-tested and tested in accordance with:*

- (a) CSA Standard Z94.4-02, Selection, Use and Care of Respirators; or*
- (b) A method approved by a Director of Occupational Hygiene.*

*250(2) An employer must ensure that, if a worker is or may be required to wear respiratory protective equipment and the effectiveness of the equipment depends on an effective facial seal, the worker is clean-shaven where the face piece of the equipment seals to the skin of the face.*

Note: There are other Parts and Sections of the OHS Act, Regulation and Code that may apply to respiratory protective equipment. The above information is a high level summary.

## **Resources**

Alberta Occupational Health and Safety, Act, Regulation and Code

<http://work.alberta.ca/occupational-health-safety/ohs-act-regulation-and-code.html>

Guideline for the Development of a Code of Practice for Respiratory Protective Equipment

<http://work.alberta.ca/documents/OHS-bulletin-PPE004.pdf>

Respiratory Protective Equipment: An Employer's Guide

[http://work.alberta.ca/documents/WHS-PUB\\_ppe001.pdf](http://work.alberta.ca/documents/WHS-PUB_ppe001.pdf)

Welders Guide to the Hazards of Welding Gases and Fumes

[https://work.alberta.ca/documents/WHS-PUB\\_ch032.pdf](https://work.alberta.ca/documents/WHS-PUB_ch032.pdf)