

OCCUPATIONAL HEALTH & SAFETY POLICY CODE OF PRACTICE FOR RESPIRATORY PROTECTION

POLICY STATEMENT

Olds College strives to protect the health and safety of the College community. Whenever possible suitable engineering or administrative controls will be used to prevent an exposure to harmful chemicals, dust or reduced oxygen in the air. When these methods are not possible, Olds College will provide, maintain and store the appropriate equipment and ensure that it is properly fitted for each individual employee and student. This Code of Practice is applicable to students and employees at Olds College.

PROCEDURES

1. Hazard Identification

Every manager/supervisor is responsible for identifying the specific hazards in their departments, which would require respiratory protection. These include: an airborne contaminant, a biological contaminant, a process that gives off a dust, fume, gas, mist, aerosol, smoke, or vapour of any kind or quantity that can be hazardous to workers, or an atmosphere containing less than 19.5% or more than 23 % by volume of oxygen.

2. Methods of Control

- Engineering methods such as local exhaust ventilation, addition of clean air to oxygen-deficient spaces, enclosure of a process producing the airborne contaminant and/or substitution of a less hazardous material should be considered.
- Administrative procedures such as safe work procedures may be used when air contaminants are present.

3. Selecting the Respiratory Protective Equipment

The manager/supervisor needs to consider the following in order to purchase the most appropriate respiratory protective equipment. Most safety supply companies have qualified Occupational Hygienists to guide employers in selecting the correct equipment.

There are two main categories of respiratory protection. One type is for conditions that may be Immediately Dangerous to Life or Health (IDLH). The other category is for non-IDLH.

A. IDLH

The following need to be identified and reassessed whenever changes in the products or the process are made:

- Identification of airborne contaminant(s). The chemical name needs to be known - so the most appropriate filter is selected.

- Concentration of airborne contaminant(s). The average workday concentration and the highest short-term concentrations should be determined.
- Concentration of oxygen. Workers working in an oxygen-deficient atmosphere require atmosphere-supplying respiratory protective equipment.

B. Non-IDLH

The following factors determine the choice of respiratory protective equipment for non-IDLH situations. These factors need to be reassessed every time products or processes change.

- Oxygen deficiency. This situation is where the air has reduced oxygen content and is not IDLH - but is hazardous to health. An atmosphere-supplying respirator must be used.
- Physical form. Identify all the physical forms that may be present; dust, mist, fume, fibre, gas, vapour, etc.
- Occupational Exposure Limits (OELs). These determine how great a protection factor is required.
- Length of time during which the respirator will be needed. Certain types are effective for longer periods of time than others.
- Toxic properties. By recognizing the full hazard, a full facepiece rather than a half mask respirator should be chosen for protection against eye irritants.
- Warning properties. If workers are aware of a substance because they detect a smell or their nose, eyes or throat become irritated, they will be aware that there is a poor fit of the mask or that the cartridges are exhausted.
- Need for emergency escape.

C. Approval

In Alberta, respiratory protective equipment must be approved by the U.S. National Institute for Occupational Safety and Health (NIOSH) or by another standards setting and equipment testing organization or combination of organizations acceptable to Alberta Human Resources and Employment, Workplace Health and Safety. The Canadian Standards Association Standard (CSA) Z94.4 is the standard for comprehensive qualitative and quantitative fit testing.

D. Fit

- There is more than one size of facepieces in most models. If a satisfactory fit cannot be achieved, a different type of respirator must be used. However, it must have a protection factor equal to or greater than the original respiratory protective equipment.
- Worker comfort should be accommodated wherever possible to ensure compliance with the Code. Hot, cold or confined working conditions are uncomfortable and the use of respirators will intensify the discomfort.
- Respiratory protection is provided only if the facepiece provides a proper seal. The worker must be clean- where the facepiece contacts the face skin. Unusual facial contours, scars, skin conditions, eyeglasses and

missing dentures will interfere with the seal. The seal should be tested and a “user seal check” should be obtained prior to each use. Manufacturers should provide instructions on how to complete the “user seal test”.

E. Medical Aspects

- Respiratory protective equipment should only be used by workers physically capable of working while wearing it.
- Employees/students should complete a medical history form in Health Services prior to using respiratory protective equipment. The Coordinator of Health and Wellness will review the history. If there are areas of concern, the Coordinator of Health & Wellness will request a medical consultation. Written approval by Health Services for wearing respiratory equipment must be obtained prior to wearing the equipment.

4. Maintenance of Respiratory Protective Equipment

- Respiratory Protective Equipment must be inspected for damage or deterioration, and cleaned according to manufacturer’s instructions after each use.
- If more than one person might be using a respirator, it must be sanitized between uses
- Cartridges and canisters that are near the end of their service life require replacement.
- Worn or damaged valves, straps and other parts should be replaced exactly as specified by the manufacturer. Repairs on self-contained breathing apparatus must only be done by persons trained and certified by the manufacturer.
- Equipment should be stored in ready-to- use condition in a clean and dry location.
- Disposable respiratory equipment should be disposed of after use according to manufacturer’s instructions.

5. Training of those wearing Respiratory Protective Equipment

Training will be arranged by the manager/supervisor and must include:

- Information about the airborne contaminants, including potential health effects, warning properties, etc.;
- Why the particular respiratory protective equipment was chosen, its capabilities and its limitations;
- How to properly put on and take off the respirator;
- How to test for a satisfactory fit; and
- Familiarization with the Code of Practice.
- Training should be reviewed at least every two years and/or whenever there are changes in the products used or the processes involved.

Consultation with the Coordinator of Health & Wellness Services and/or the supplier of the product is available.

