SAFE WORK PRACTICE – RESPIRATORY PROTECTION

PURPOSE

To prevent harmful exposures that might result in occupational diseases caused by breathing air Contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors. Although administrative and engineering control measures are preferable (i.e., ventilation, enclosure or isolation, substitution of less hazardous processes or materials), when airborne hazards cannot be eliminated or sufficiently reduced with engineering or administrative controls, respiratory personal protective equipment is to be used.

RESPONSIBILITIES

Management

- Provide the appropriate respirators, respiratory equipment, replacement filters, cartridges, and materials for workers to clean and store their respirators.
- Train supervisors and workers in safe use of respirators, including fitting, seal checking, wearing, cleaning, maintenance, and storage.
- Report and record all illnesses or injuries that result from breathing hazards and that require medical aid, keeping records of the respirator program, including worker training, fit test results, maintenance and administrative controls.

Supervisors

- Be aware of breathing hazards.
- Have respirators available when needed.
- Participate in the selection, seal checks and fit testing of respirators.
- Wear respirators every time they are needed.
- Properly clean, inspect, maintain and store their respirators.
- Replace any damaged respirator or equipment part.
- Replace disposable respirators when damaged or clogged.
- Report any difficulties during respirator use, such as discomfort, skin irritation or breakthrough of contaminants causing breathing difficulty.

Workers

- Participate in the selection and fitting of their respirator.
- Ensure the right respirator is used for the task. Single-strap dust masks and surgical masks do not provide respiratory protection.
- Be instructed and trained in the proper use of respirators, including how to fit and wear it, clean, inspect, maintain, and store it.
- Participate in fit testing when the respirator is first issued and bi-annually.
- Seal checks their respirator each time it is put on. Make sure nothing interferes with the seal (i.e., facial hair, glasses, or earmuffs).
- Wear respirators when required and follow safe work procedures.
- Clean and inspect respirators and report any damage to a supervisor or employer.

- Place reusable respirators in a clean resealable bag and store it in a clean, safe place such as a cabinet or locker.
- Check for damage and replace as necessary.

Contractors

- Provide instruction and training to their workforce.
- Supply all required respiratory protective equipment and gas detection equipment.
- Develop and document hazard assessments for each work activity requiring the use of respiratory protection.
- Maintain copies of contractor training records, respirator fit test records, air quality monitoring records, Job Hazard Assessments (JHAs) and material safety data (MSDS) at the workplace and be made readily available for inspection at any time.

PREREQUISITES

- All reasonable and necessary precautions and protective measures are taken prior to requiring the use of respiratory protection.
- Follow the manufacturer's instructions and consult CSA Standards for information on the care, maintenance, and storage of respirators.

Training in proper use of respirators shall be given to the following persons:

- the respirator user
- the supervisor of persons using respirators
- the person issuing respirators
- the person performing fit tests and
- the person maintaining and repairing respirators

Training must include information on:

- the respiratory hazard, including potential health effects, warning properties, etc.
- the respirator chosen, including capabilities and its limitations
- proper donning and doffing of respiratory protection
- testing for a satisfactory fit; and
- review of the Safe Work Practice for Respiratory Protection

Training records shall be kept for at least the duration of the employment of the trainee. If working in an IDLH atmosphere, additional training must be provided to ensure entrant safety.

RESPIRATOR SELECTION

- Employees and students requiring respiratory protection must be physically fit to carry out the work while wearing respiratory equipment. A medical assessment should be done before they are assigned to work in areas where respirators may be required.
- Employees must also be psychologically comfortable (i.e., not claustrophobic) about wearing respirators.
- Employees and students with beards, long sideburns, or even a two-day stubble may not wear respirators because the hair breaks the seal between the skin and the respirator mask. Wearing

eyeglasses may also break the respirator seal, meaning that the respirator mask will "leak" and will not provide the needed respiratory protection.

ACCEPTED RESPIRATORS

- Atmosphere supplied respirators: a respirator that supplies the respirator user with breathing air from the source independent of the ambient atmosphere and includes supplied air (SARs) and self-contained breathing apparatus (SCBA) units. They must meet CSA Standard Z180.100 requirements for breathing air.
- Air Purifying Respirators (APRs) have an air-purifying element (i.e. filter, canister, cartridge) which removes specific air contaminants by passing ambient air through this element.
- Special use respirator - supplied air suits; escape only respirators.

TASK	APR CARTRIDGE
Applications include spray painting, welding, soldering and other operations involving metal fumes including those with ozone and nuisance levels of organic vapors.	NIOSH Rating N95
Applications include lead abatement, pharmaceutical manufacturing, metal pouring and welding	NIOSH Rating N100

BEFORE USE:

- Ensure all involved personnel have been trained and fit test (5PPE A Respirator Fit Test).
- Complete a Hazard Assessment (Form 2C) before starting any job requiring the use of respiratory protection. Identify: Contaminants present in the workplace, warning properties, concentration and physical state, appropriate occupational exposure limit(s), routes of entry into the body, if the atmosphere is oxygen-deficient, if a particulate hazard is present, the potential for any oil to become airborne, if concerns are immediately dangerous to life and health, if skin or eye absorption occurs, any irritation characteristics.
- Inspect the respirator (5PPE B Respirator Inspection).

REPAIR, CLEANING AND STORAGE:

- Clean and disinfect respirators after each use, where appropriate.
- Rinse with clean water, or rinse once with a disinfectant and once with clean water. The clean water rinse removes excess detergent or disinfectant that can cause skin irritation or dermatitis.
- Dry on a rack or clean surface or hang from a clothesline. Position the respirator so that the facepiece rubber will not "set" crookedly as it dries.
- Store the respirator at the end of each shift to protect it from dust, sunlight, heat, extreme cold, excessive moisture, and chemicals, for instance in a sealed plastic bag
- Do not mix parts from different manufacturers.
- Record all repairs and inspections.