**General**

Under certain conditions, the use of respiratory protective equipment at a UAA facility may be required or advisable. It is essential that the selected equipment is the correct type, is clean and in good working order, and is a good fit. Every user of this protective equipment must be adequately trained in the use, care, and limitations.

**Respirator Selection**

Caution must be used in the selection of a respirator. The respirator must provide adequate protection against the anticipated hazard to which the worker is exposed. Only NIOSH approved respirators will be used.

If there is doubt about functionality, the device providing greater protection must be used. In no case should a respirator be selected which offers less protection than required for the particular conditions under which it is to be used.

**Voluntary Use Of Dust Masks**

When conditions have been demonstrated not to exceed regulated levels of contamination (nuisance levels) of dust or microbial agents, employees may use a paper or N95 respirator as long as they have been provide with access to OSHA Respiratory Protection Appendix D found at [http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9784](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9784). In these cases, no formal respiratory protection program is needed as long as employees are made aware of the protection limitations.

**Selection Criteria**

The following criteria must be considered in making this selection.

1. Identity of the substance(s) and environment for which protection is needed.

2. Physical state of the contaminant (mist, etc., or combination).

3. Permissible exposure limit or toxicity of the substance.

4. Exposure measurements showing the concentration likely to be encountered.
5. Protection factor listed for the respirator type.

6. Possibility of skin absorption or severe eye irritation.

7. Possibility of oxygen deficiency.

8. Limitations or restrictions applicable to the types of respirators being considered which could make them unsafe in the environment involved.

Measurements to determine or predict the potential exposure concentrations will be made by or in consultation with EHS/RMS (786-1351 or ayssg@uaa.alaska.edu).

**Fit Testing**

Any worker required to wear a respirator shall be assured of having a proper fit. This shall be achieved by (1) an initial and semi-annual qualitative or, where required, quantitative fit test; and (2) either a positive or negative pressure fit test each time the respirator is used. Fit testing requirements apply to both disposable and non-disposable respirators.

Respirators should not be worn when conditions prevent a good face seal, as evidenced by failure of any of the fit tests. Such conditions include a growth of beard, sideburns, temple pieces on glasses, or missing dentures. Certain exceptions are granted for positive pressure respirators or as recommended by the manufacturer of the respirator.

In the absence of the manufacturer's facepiece fitting instructions, EHS/RMS will provide detail instructions.

**Use Guidelines**

Insofar as practicable, all individuals who are required to wear respiratory equipment shall be provided such equipment for their exclusive use. An exception to this policy may be permitted for
equipment used for emergency or rescue purposes. The respirator should be marked with the employee’s name to prevent unauthorized use.

When respirators are provided for a particular work activity, they shall be used by all personnel while engaged in that work activity.

No respirator shall be used for any purpose unless the "Respirator Selection Checklist" for that application has been completed (see EHS/RMS Appendix 10).

**User Training**

Any worker required to wear a respirator at any time shall receive training in the proper use, care, and limitations of respirators. Training will be provided by individual departments if qualified or by EHS/RMS or Alaska Department of Labor approved trainers.

**Emergency Use**

Possible emergency use of respiratory protective equipment should be anticipated and planned. Written procedures shall be prepared covering the safe use of the equipment in dangerous atmospheres that might be encountered in an emergency.

Periodic training sessions shall be held for those individuals most likely to use the equipment in an emergency. Training shall include demonstration and practice in putting on the respirator, testing for fit, discussion of the capabilities and limitations of the equipment, etc. The equipment manufacturer's instructions should be closely followed.

If the atmosphere involved is imminently dangerous to life or health, standby persons must be present with suitable rescue equipment. The Risk Management Department must be immediately notified if an area is dangerous so a risk assessment may be made.

**Department Inspections**

Departments will regularly perform inspections in accordance with the following schedule. A record shall be kept of inspection dates, findings, and corrective actions for all respirators maintained for use.
1. All respirators shall be inspected routinely before and after each use, and during cleaning.

2. Equipment designated for emergency use shall be inspected after each use, during cleaning, and at least monthly.

3. Self-contained breathing apparatus shall be inspected monthly.

**Inspection Procedures**

Each respirator user will be thoroughly trained in the proper inspection procedures to ensure that the equipment is in good condition. Inspections will include the following.

1. Check of headstraps for breaks or tears, loss of elasticity, and missing or malfunctioning buckles.

2. Check of facepiece for dirt, cracks, tears, holes, distortion, or any other signs of deterioration.

3. Check of valves for dust, dirt, or detergent residue on the valves or valve scat; cracks, tears, or distortion in the valve material; or missing or defective valve covers.

4. Check of filter elements for correct filter(s), missing or worn gaskets, worn threads, cracks or dents in filter housing, service life indicator and end of service date.

**Repair**

Damaged respirators shall be brought to the immediate attention of the supervisor. Repair shall be done by trained personnel with parts designated for the respirator. If immediate repairs cannot be made and a respirator is needed, a temporary replacement with the same model and size shall be issued.

**Cleaning and Disinfection**

Where respiratory equipment is used routinely, respirators shall be cleaned after each day's use. Cleaning procedure shall include the following.
1. Remove any filters, cartridges, headbands, and disassemble the major respirator parts.

2. Wash all respirator parts (except cartridges and elastic headbands) in a cleaner-disinfectant solution at about 120 degrees F. Use a hand brush to remove dirt.

3. Rinse thoroughly in clean, warm water to remove all traces of detergent, cleaner, sanitizer, and disinfectant.

4. Air dry in a clean area.

5. Inspect all parts; replace with new parts if defective.

6. Reassemble the respirator and insert new or unexpired filters or cartridges. Make sure the seal is tight.

7. Place the respirator in a new plastic bag and seal it for storage.

8. Disposable type respirators shall be used for one shift only, and therefore need no cleaning or disinfecting.

**Storage**
Respiratory protection equipment should be stored in a convenient, clean and sanitary location to protect it from dust, sunlight, heat, extreme cold, excessive moisture, chemicals, and physical damage. Routinely used respirators may be placed in clean plastic bags, stored in a single layer with the facepiece and exhalation valve in a near normal position to prevent the rubber or plastic parts from becoming permanently distorted. Respirators kept ready for rescue purposes or emergency use shall be stored in a cabinet or case located in a non-contaminated but readily accessible area.

**Work Area**
Periodic air sampling shall be done to determine the continued necessity
Surveillance of respiratory protection and to assure that the proper respirators are being used. Employees may be required to wear personal air sampling equipment for this purpose. The information obtained shall be used to fill out or update the Respirator Selection Checklist (Appendix 10).

Medical Approval

No person should be assigned to a task requiring the use of respirators unless it has been determined that they are physically able to perform the work and use the equipment. A physician shall determine what health and physical conditions are pertinent. The respirator user's medical status should be reviewed periodically. Please contact EHS/RMS (786-1351 or ayssg@uaa.alaska.edu) for additional information on required medical approval.

Program Evaluation

Annual inspections shall be made by EHS/RMS to assure the continued effectiveness of the respiratory protection program. More frequent evaluations may be undertaken if the previous program evaluation has identified deficiencies. Inspection dates and general conditions observed will be recorded and kept on file. The inspection will assure that the proper respirators have been selected, employees are wearing respiratory protection when and where necessary, employees are receiving appropriate training, respirators fit properly, and equipment is being properly cleaned, stored and maintained.