



JOINT SAFETY MANAGEMENT SYSTEM RESPIRATORY PROTECTION

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JOINT SAFETY MANAGEMENT SYSTEM RESPIRATORY PROTECTION

1. SCOPE

This program defines requirements and responsibilities for the proper selection, care, use, maintenance and fitting of respiratory protective devices and for the administration of an effective respirator program.

2. DEFINITIONS

For a glossary of commonly used terms in the respirator program, refer to Appendix I.

3. ADMINISTRATION

The Safety Supervisor will administer the Respiratory Protection Program and coordinate activities to ensure its continuing effectiveness.

4. HAZARD IDENTIFICATION

Workplace hazards must be identified to assess the need for respiratory protection. Hazards may be identified by any of the following methods or by a combination of these methods.

- i. Area Requirements for Respirator Use/Carrying (See Appendix X)
- ii. Area Monitors/Alarm Systems
- iii. Direct Reading Test Equipment (Gas Tests)
- iv. Safe Work Procedures
- v. WHMIS Labels
- vi. Material Safety Data Sheets (MSDS)
- vii. Personal Sample Results
- viii. Area History

5. SELECTION

5.1 All respiratory protective equipment must be approved by the Program Administrator prior to its purchase or use at Howe Sound Pulp and Paper. Only NIOSH/MSHA or other equipment approved by W.C.B. will be accepted for use at Howe Sound Pulp and Paper.

5.2 Respirator selection in the workplace will be consistent with the identified hazard or hazards (See Section 4 above) and with the selection criteria. (See Appendix II)



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6. RESPIRATOR FACIAL FIT

- 6.1 No employee will carry or use any type of face sealing respirator which has not been tested to ensure that a satisfactory facial fit has been obtained.
- 6.2 Tests to determine suitability of facial fit for all face seal dependent respirators will be conducted at least annually, or before use, and recorded as to their results. Fit testing will be performed by the Gatehouse staff and the results recorded.
- 6.3 Fit tests will be conducted as outlined in Appendix III.
- 6.4 Non-employees on the mill site will carry and use "bite type" escape respirators which do not require fit testing. Where requirements for these persons are such that face seal dependent respirators must be used, fit testing and training must be conducted as required for mill employees.

7. RESPIRATOR USE

No one shall enter or work in an unknown or IDLH atmosphere unless using an S.C.B.A. or Supplied Air System equipped with a hip pack.

- 7.1 Employees wearing respirators must be clean shaven where the respirator seals with the face. (See Appendix IV - Beard Policy)
- 7.2 When corrective lenses are required by a person who will, or may use a full face type respirator, they will be of a type approved for use under the facepiece and will not interfere with the sealing surface of the facepiece. Approved eyewear will be supplied initially at Company expense and replaced whenever new prescriptions are required. To obtain this equipment, affected persons should contact the Gatehouse and fill out an optometrist form for MAG 1 safety glasses to take to an optometrist. When this equipment is supplied it is the employee's responsibility to ensure that it is maintained in good condition on their person, or with their respirator, ready for immediate use.
- 7.3 No covering may be used which passes between the sealing surface of the respirator and the wearer's face.



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7. RESPIRATOR USE (cont'd)

- 7.4 Employees will use all respiratory protective equipment in accordance with specific training on that equipment. (See Section 9 - Training)
- 7.5 If one month or more has passed since due date for retraining, the employee must refuse to use the respiratory equipment for which the training is overdue. Immediate retraining may be available through the Gatehouse.

8. CLEANING AND MAINTENANCE

8.1 Personal Escape Respirators

- 8.1.1 Bite block, half mask and full face respirator inspections at the start of each work shift or prior to any use will include immediate correction of any of the following:

- *Worn, damaged, broken or missing parts.*
- *Incorrect types of canisters or cartridges.*
- *General cleanliness and condition of the equipment.*
- *End of service life indicators.*
- *Shelf life dates.*
- *Tightness of connections.*
- *Proper functioning of the equipment.*

8.2 Department Equipment

- 8.2.1 Monthly department inspections by Safety Stewards & Supervisors of area installed SCBA equipment and elevator hoods for all items noted below.

- *Worn, damaged, broken or missing parts*
- *End of service life indicators.*
- *Breathing air bottles at less than 80% full charge (1800psi for 2216psi bottles and 3600psi for 4500psi bottles)*
- *General cleanliness and bottle refill dates.*
- *Tightness of connections.*
- *Proper functioning of the equipment*

The results of these inspections will be recorded on the Department inspection report and on the log sheet inside the SCBA storage box.



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8. CLEANING AND MAINTENANCE (cont'd)

8.2 Department Equipment (cont'd)

8.2.2 Bi-monthly inspections by Department/Area Superintendents will include similar inspection. The results of these inspections will be recorded on the Superintendent's inspection report.

Any problems noted during any of the above inspections which cannot be immediately corrected shall be referred to the Gatehouse staff for repair. Delay in repair or replacement of defective equipment in the field is not acceptable under any circumstances.

8.3 Major Service/Maintenance

8.3.1 All major service and maintenance of any respirator should be referred to the Gatehouse staff.

8.3.2 Criteria and standards for this function are included under Section 9 - Training.

8.4 Escape Respirators

8.4.1 Escape respirators will be dated with the expiry date at time of issue and will be replaced within five years (max), or as required (this is the manufacturer's recommendation).

8.4.2 Escape respirators will be replaced immediately after use, damage or contamination (including soaking with water).

8.4.3 All personal respirators will be checked during annual hearing tests.

9. TRAINING

9.1 The following persons will be trained and given written instructions to ensure the proper function of the respiratory protection program:

- i. The respirator user
- ii. Supervisors of respirator users
- iii. Persons maintaining and servicing respirators
- iv. Persons performing fit testing



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9. TRAINING (cont'd)

- 9.2 Records of the type of training each person has received and the dates of training will be maintained through the Gatehouse.
- 9.3
- i. Every person required to use respirators will be retrained at least annually.
 - ii. Intervals for S.C.B.A./airline respirator users retraining will be according to the training guidelines.
- 9.4 Persons required to perform training functions will be designated and qualified for that purpose.
- 9.5 *Training of respirator users will include:*
- i. Nature, extent and effects of respiratory hazards to which the person may be exposed.
 - ii. Explanation of operation, limitations and capabilities of the respirator.
 - iii. Procedures for inspection/maintenance of the respirator.
 - iv. Donning and removal of the respirator.
 - v. Checking the fit and seals.
 - vi. Practical experience to enable familiarity and confidence with the equipment.
 - vii. Procedures for storage.
 - viii. Dealing with emergency situations or malfunction.

10. REVISION HISTORY

- Rev 00:** New (Oct.28/08)
Change of equipment from Survivair to MSA
- Rev 01:** Revised (March 5/09)
Clean shaven policy updated and fit testing procedures
- Rev 02:** Updated HSPP Logo and respirator selection chart



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APPENDIX I - RESPIRATORY PROTECTION PROGRAM

DEFINITIONS

Accepted Tested and certified by procedures acceptable to WorksafeBC.

Aerosol A dispersion of small solid or liquid particles, e.g. smoke, fog, mist.

Air purifying respirators

A device designed to filter the inhaled air through a filter, cartridge or canister that removes particles, vapours, gases or a combination of these. They may be non-powered (operated by breathing action of the wearer) or powered (containing a blower to supply air through the filter and to the wearer).

Confined space

A tank, sewer, silo, storage bin, process vessel or other enclosure which is not designated or intended for continuous human occupancy, in respect of which, when a person is required to enter, special precautions are necessary to:

- protect the person from a harmful atmosphere or substances, or;
- prevent the person from becoming *entrapped* in existing or introduced material, or;
- otherwise ensure the person's safety.

A *Confined Space* usually has some or all of the following characteristics:

- may have poor *natural ventilation*, or;
- contains or can develop a *hazardous atmosphere*, or;
- provides limited means of entry or exit, or;
- presents a possible *entrapment* hazard, or;
- may require the use of protective equipment, including a capability for immediate rescue of a worker who enters.

Dust Solid particles capable of temporary suspension in air or other gases.



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- Facepiece* The part of a respirator that covers the wearer's nose to below the chin (half mask) or which covers the nose, mouth and eyes (full facepiece). The facepiece includes the head harness, exhalation valve and connections for an air purifying device and/or a source of air.
- Fume* Solid particles generated by condensation from the gaseous state, generally after vaporization from a melted substance, (e.g. during welding).
- Gas* A substance that is in the gaseous state at normal temperature and pressure.
- High Efficiency Particulate Air Filter (H.E.P.A.)*
A high efficiency filter designed to remove airborne particles in a particular size range (99.97% effective for particles above 0.3 microns.)
- Hood* That portion of a respirator which completely covers the head and may cover the neck and portions of the shoulder.
- Immediately Dangerous To Life or Health (I.D.L.H.)*
An atmosphere where the concentration of oxygen or flammable or toxic air contaminants will cause death in a very short time, or will cause irreversible incapacitating effects on the health of a person.
- Mist* A dispersion of small liquid particles.
- Mouthpiece* The portion of a respirator which is held in the wearer's mouth and is connected to an air purifying device.
- MSHA* Mine Safety and Health Administration (U.S. federal regulatory agency).
- NIOSH* National Institute of Occupational Safety and Health (U.S. research and training agency).
- Organic Vapours* For the purpose of this program, includes carbon containing vapours (i.e. mercaptans). For the purpose of respirator selection, (See Appendix II) does not include methanol.



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- Oxygen Deficiency* The concentration of oxygen in air is less than 19.0% by volume.
- Qualitative Fit Test* A fitting test where the person wearing the respirator is exposed to an irritant smoke to determine the suitability (size and seal) of that facepiece for that person.
- Respirator* A device designed to protect the wearer from inhalation of hazardous atmospheres.
- Sanitization* The removal of dirt and agents that may cause infection or disease.
- Service Life* The period of time during which a respirator provides adequate protection to the wearer.
- Smoke* Aerosols, gases and vapours resulting from incomplete combustion.
- Sorbent* A material contained in air purifying respirators that removes toxic gases and vapours from the inhaled air.
- Supplied Air* A respirator which supplies a breathable atmosphere to the wearer independent of the ambient air.