

BOARD ADMINISTRATIVE PROCEDURE

Administrative Procedure

Administrative
Procedure Number

Respiratory Protection
Program

AP 823

Directional Policy

800- Healthy Schools and Workplaces

Title of Administrative Procedure:

Respiratory Protection Program

Date Approved:

May 2023

Projected Review Date:

2028

Directional Policy Alignment:

This procedure aligns with the 'Healthy Schools and Workplaces' directional policy by providing systematic procedures and protocols related to the use of respiratory protection by staff. This procedure responds to legislative requirements made under the Occupational Health and Safety Act and Ontario Regulations 278, 490, and 833.

Alignment with Multi-Year Strategic Plan:

The Respiratory Protection Program Administrative Procedure (AP) aligns directly with PVNCCDSB's vision to establish a culture of well-being. By establishing clear protocols and procedures for the use, care, and selection of respiratory protection, we are practicing our pillar of *Being Well* and our priority of *Valuing Relationships* by working to ensure our staff are safe, valued and supported.

PVNCCDSB Board Vision, Mission and Strategic Priorities

Action Required:

The Peterborough Victoria Northumberland and Clarington Catholic District School Board is committed to ensuring a safe working environment. Where it is not possible to eliminate or reduce respiratory hazards by means of administrative or engineering controls, respiratory protection will be required to protect the health and safety of workers.

Page 2 of 10 AP-823

1. PURPOSE

1.1. This program outlines the requirements for the selection, use, care, and maintenance of respiratory protection.

1.2. Where it is not possible to eliminate or reduce respiratory hazards through substitution or engineering controls, workers will be required to wear respiratory protection to protect them from exposure to potentially hazardous atmospheres such as airborne contaminants. Where an oxygen deficient or Immediately Dangerous to Life or Health (IDLH) environment exists, work shall not be undertaken by PVNCCDSB staff.

2. SCOPE

2.1. This program applies to all employees who require respiratory protection in the course of their work as well as to those involved in the supervision of such employees, respirator selection and the fit testing process.

3. PROCEDURAL GUIDELINES

3.1. Respiratory Hazard Assessment

- 3.1.1. A Respiratory Hazard Assessment (Appendix A) of the work activities and work area must be completed by the supervisor in all situations where there is reason to believe that a worker will be exposed to a hazardous atmosphere. Where a hazardous atmosphere is suspected, adequate controls (e.g. written plan/ work procedures) must be in place prior to work commencement. Supervisors are encouraged to consult with the Health and Safety Officer.
- 3.1.2. A single Respiratory Hazard Assessment may be conducted for similar work being performed in similar conditions at different locations.
- 3.1.3. In the event an Immediately Dangerous to Life or Health (IDLH) atmosphere or oxygen deficient environment exists or is suspected to exist, work shall not be undertaken by PVNCCDSB staff.
- 3.1.4. Records of Respiratory Hazard Assessments shall be maintained by the Health and Safety Officer to document the initial and ongoing need for respirators.
- 3.1.5 Respiratory Hazard Assessments for bio-aerosols will be conducted in consultation with the Health and Safety Officer and in accordance with CSA Z94.4-18, Selection, Use and Care of Respirators.

3.2. Respiratory Protection (RP) Selection

The Board currently has approved the following respirators for use:

- N95 Disposable Respirators
 - o 3M 8210

Page 3 of 10 AP-823

- o Moldex 2200
- o Moldex 2600
- o Makrite 9500
- o 3M Aura 1870+
- Halyard Fluidshield 3 N95
- Half Face-piece Elastomeric Respirator
 - o 3M 7500 Series
 - 3M 6500 Series

NOTE: Any other respirator type or model must be approved by the Health and Safety Officer and fit tested on applicable staff before use.

NOTE: "Dust masks" and "surgical masks" are not certified as respirators

- 3.2.1. Respirators shall be selected in consultation with the Health and Safety Officer.
- 3.2.2. A respirator must meet the following requirements:
 - All respirators shall be approved by NIOSH or an equivalent certification
 - Each respirator must meet or exceed the applicable assigned protection factors set out in Schedule 2 of O. Reg 833, 'Assigned Protection Factor for Respirators'
- 3.2.3. Respirator selection will be based on the following criteria:
 - worker health and ability to wear a respirator
 - a review of the completed respiratory hazard assessment (Appendix A).
 - legislative requirements and standards
 - work conditions
 - duration of use/exposure
 - characteristics and limitations of respirators
 - respirator assigned protection factors; and
 - manufacturer's recommendations and technical data. Including proper selection of filters, cartridge, canister, or combination filter-cartridge, where applicable
- 3.2.4. Supervisors/Managers will consult with the Health and Safety Officer prior to engaging in critical tasks, implementing changes to processes or equipment, or when conditions or activities would reasonably affect the use of respiratory protection.

3.3. Health Screening and Medical Assessments

- 3.3.1. Prior to utilizing RP or being fit tested for a tight-fitting respirator, the worker will be required to complete a confidential respiratory protection worker screening form (Appendix B).
- 3.3.2 Where a difficulty or concern has been identified in regards to the worker's ability to safely use the required RP, the worker will seek the opinion of a physician prior to being permitted to fit test/use the selected RP.

Page 4 of 10 AP-823

3.3.3. Where a worker is deemed by a physician to be unfit to wear a tight-fitting respirator, other alternatives and considerations will be reviewed, where applicable, as prescribed in the Accommodation AP, AP 503.

3.3.4. The respiratory protection worker screening form shall be returned to and maintained by the Health and Safety Officer for 2 years following its completion.

3.4. Respirator Fit Testing

- 3.4.1. Fit testing shall be used to determine if the worker can obtain a satisfactory seal for each make, model and size of tight-fitting respirator they may be required to wear.
- 3.4.2. The fit tester shall be qualified by knowledge, training and experience in the applicable fit test method/protocol; use, care and maintenance for each identified tight-fitting respirator; and, in verifying a worker's ability to obtain an effective respirator seal (including comfort and fit).
- 3.4.3. A successful qualitative or quantitative fit test result using an approved fit test protocol for all tight-fitting respirators is required prior to utilization of respirators in related work activities.
- 3.4.4. Workers must undergo a fit test for the necessary tight-fitting respirator(s) at a minimum prior to initial use of a tight-fitting respirator, and every two years.
- 3.4.5. Where a worker is required to wear additional personal protective equipment (e.g. eye protection, head protection, etc.) in conjunction with respirator during the course of work, the same personal protective equipment shall be worn during the fit test to ensure compatibility.
- 3.4.6. A fit test shall be carried out when there is a change to the worker's physical condition that could adversely affect the respirator fit and/or function; or, when there is a change in other personal protective equipment that could adversely affect the respirator fit and/or function.
- 3.4.7. The worker must be clean shaven prior to commencement of the fit test and refrain from eating, drinking (except plain water), smoking and chewing gum for a minimum period of 15 minutes prior to the fit test.
- 3.4.8. Fit test results will be documented. Copies of all fit test results will be sent to the Health and Safety Officer and shared with the worker and their supervisor.
- 3.4.9. The fit tester will be responsible for ensuring that respirators are new or adequately cleaned and disinfected/sanitized prior to testing for each worker.
- 3.4.10. Accepted qualitative/quantitative protocols shall follow the procedures identified in CSA Z94.4-18 or greater.
- 3.4.11. Where utilized, quantitative fit testing equipment shall be used, calibrated and maintained as per manufacturer's recommendations. Calibration and maintenance records must be retained by the fit tester.

3.5. Training

Page 5 of 10 AP-823

3.5.1. Each employee required to utilize RP shall be adequately trained in its care, use, maintenance and storage; and, receive refresher training at least every two years.

- 3.5.2. At minimum, the training shall consist of the following subject matter:
 - 3.5.2.1. The Respiratory Protection Program (this AP).
 - 3.5.2.2. Operation, capabilities and limitations of the required RP, including filter, cartridge, or combination filter-cartridge, where required.
 - 3.5.2.3. Hazardous Atmospheres, IDLH Atmospheres, respiratory hazards and emergency situations.
 - 3.5.2.4. Donning and doffing procedures.
 - 3.5.2.5. Proper fitting of the respirator.
 - 3.5.2.6. Worker seal checks.
 - 3.5.2.7. Requirements for fit testing.
 - 3.5.2.8. Care, Cleaning and disinfecting.
 - 3.5.2.9. Inspection and maintenance.
 - 3.5.2.10. Manufacturer's recommendations.
- 3.5.3. Participants must be able to demonstrate an adequate level of competency prior to utilizing RP.
- 3.5.4. The fit tester must receive adequate training and or certification (where required) prior to administering a fit test.

3.6. Care, Use, Maintenance, Storage

- 3.6.1. Wear only the appropriate respirator for the hazard. If there are any questions about which respirator is appropriate, ask the Supervisor.
- 3.6.2 Each worker issued a respirator shall properly maintain their respirator, which shall include: inspection, cleaning, proper storage, and cartridge/ filter replacement as needed. All RP shall be used, maintained and repaired as per manufacturer's instructions.
- 3.6.3. Workers shall use tight-fitting respirators in a manner that does not compromise or impede upon the seal (e.g. eyeglasses, hair). Workers shall be clean shaven while utilizing tight-fitting respirators.
- 3.6.4 Prior to use, workers shall complete a pre-use inspection of all RP including filters and cartridges (follow manufacturer instructions), being sure to
 - · check for cracks, tears, dirt and fatiguing
 - examine inhalation and exhalation valves

Page 6 of 10 AP-823

- examine head straps for elasticity
- ensure filter gaskets are properly seated and in good condition (where applicable)
- note when filters and cartridges were last changed (where applicable); and
- complete a seal check for all tight-fitting respirators (see 3.7)
- 3.6.5. Where defect or damage is found, the worker will remove the affected equipment from service, identify the defect or damage with a tag or similar device and report the findings to their immediate supervisor.
- 3.6.6. Clean respiratory protection after each daily use, using approved products and methods as per manufacturer's instructions. Be sure to
 - disassemble the face-piece and remove filters and cartridges. Discard and replace parts when necessary.
 - wash the face-piece and any other dirty parts in warm soapy water or with respirator cleaning wipes.
 - where respirators are shared, they should be disinfected using a sterilizing solution or by wiping with respirator cleaning wipes.
 - rinse the respirator in clean warm water and dry thoroughly.
 - reassemble properly, ensuring all parts are the proper ones.
- 3.6.7. RP will be stored in a suitable location as per manufacturer's instructions, protected from dust, ozone, sunlight, heat, extreme cold, excessive moisture, vermin, damaging chemicals and oil/grease.

3.7. Worker Seal Checks

- 3.7.1. A worker using a tight-fitting respirator shall conduct a seal check prior to each usage, as per manufacturer instructions.
 - 3.7.1.1. Negative pressure seal checks are to be completed by adequately blocking/covering the air inlets (e.g. inhalation valves). The worker will inhale gently and hold a breath for at least 5 seconds. The face-piece should collapse and remain collapsed while the breath is held.
 - 3.7.1.2. Positive pressure seal checks are to be completed by adequately blocking/covering the air outlets (e.g. exhalation valves). The worker will exhale gently for approximately 5 seconds. A slight positive pressure should be maintained in the face-piece without the detection of outward air leakage.
- 3.7.2. If either seal check is unsuccessful, the worker will verify that no obstructions exist, reposition/adjust the face-piece and repeat the seal check.
- 3.7.3. A worker shall not use any tight fitting respirator for which a seal check cannot be successfully completed.

Responsibilities:

The Board of Trustees is responsible to:

Page 7 of 10 AP-823

- ensure alignment with the Healthy Schools and Workplaces Directional Policy.
- review the Respiratory Protection Program Administrative Procedure as part of its regular policy and procedures review cycle.

The Director of Education is responsible to:

 designate resources to ensure the implementation of and compliance with this Administrative Procedure.

Superintendents of Schools and System Portfolios are responsible to:

- ensure principals/vice-principals, supervisors and managers are consistent with the application of this Administrative Procedure.
- ensure that all employees for whom they have supervisory responsibility, and to whom this AP would apply, are aware of the requirements under this Administrative Procedure.

Principals and Vice-Principals, Supervisors and Managers are responsible to:

- communicate procedures to staff whom they supervise.
- identify situations where respirators are required by completing the Respiratory Hazard Assessment (Appendix A) prior to the completion of any work in a hazardous atmosphere (consult with Health and Safety Officer).
- maintain respirator selection for specified activities. Update work procedures/ staff manuals as necessary to reflect the respirator requirement.
- inform workers of the associated respiratory hazards and the RP required for the activity.
- ensure that appropriate worker screening, training and fit testing has been completed prior to assigning a worker any activity or to any environment that requires RP.
- supervisors shall themselves complete training in respiratory protection.
- provide workers with the appropriate RP (type determined in conjunction with the Health and Safety Officer) and ensure these are maintained in good condition and replaced as needed.
- ensure that the workers can demonstrate competency in the use, care, and maintenance of their RP.
- in the case of tight-fitting respirators, ensure that (during use) workers are clean shaven and maintain their seal free from objects and materials that would interfere with the seal or operation of the respirator.
- ensure workers wear the required RP at all times in areas where hazardous atmosphere, or respiratory hazards exist or are likely to exist.
- notify the Health and Safety Officer of any related worker concerns.

Page 8 of 10 AP-823

 do not allow work in IDLH or oxygen deficient atmospheres to be completed by PVNCCDSB Staff.

 ensure compliance with the Respiratory Protection Program Administrative Procedure by taking disciplinary actions as necessary.

Staff are responsible to:

- wear respiratory protection at all times when performing tasks where respiratory hazards exist.
- workers shall complete a pre-use inspection of all RP to ensure that it is clean and in good operating condition prior to each use and at reasonable intervals to ensure that it continues to operate effectively. Workers shall change out filter, cartridge, or combination filter-cartridge as per manufacturer's recommendations, where applicable.
- perform user seal checks upon each donning.
- use respirator in accordance with training received and understand its limitations.
- report to their supervisor when their ability to safely use RP may be impaired (e.g. medical or other conditions).
- dispose of or clean, maintain and store respirator in accordance with the training received and manufacturers instructions. Request replacements as needed.
- only use respirators for which training and fit testing has been received.
- provide to the Health and Safety Officer a completed Respiratory Protection Worker Screening Form prior to fit testing.
- verify that their fit test record is current and valid for the make/model/size of tight-fitting respirator to be used.
- in the case of tight-fitting respirator use, be clean shaven, and maintain their respirator seal free from objects and materials that would interfere with the seal or operation of the respirator (including jewelry, hair, etc.).
- remove defective or damaged respiratory protection from service and report the occurrence to their supervisor.
- maintain a copy of the respirator user manual and the current fit testing card provided by the fit tester.

The Health and Safety Officer is responsible to:

- maintain and revise the Respiratory Protection Program, as required.
- review and evaluate the program on an annual basis.
- assist supervisors in determining the type of respiratory protection required for the specific task.

Page 9 of 10 AP-823

 provide technical advice regarding the selection, use, care, and maintenance of respiratory protection.

- facilitate provision of training and education to respirator users.
- review submitted respiratory protection worker screening forms and maintain such for 2 years following their completion. Communicate authorization for worker to proceed with fit testing to the fit tester.
- schedule fit testing as required and maintain training and fit testing records.
- vet potential fit testers prior to approval. The fit tester shall:
 - be qualified through training and experience to conduct fit tests.
 - adhere to all applicable program standards and manufacturers recommendations as required.
 - not proceed with fit testing until verifying with the Health and Safety Officer that the worker has completed the required Respiratory Protection Worker Screening Form (Appendix B) and is authorized to be fit tested.
 - verify that the worker has received training for the required RP and is competent in the inspection, donning, and doffing; and is able to successfully complete the required worker seal checks.
 - conduct fit tests using qualitative or quantitative methods and protocols in compliance with CSA Z94.4-18 or greater.
 - document the individual worker's competency and corresponding fit test results.
 Send a copy of the fit test results to the Health and Safety Officer and provide the worker with a fit test record (may be electronic), including expiry date.
 - ensure that respirators and equipment used for fit testing are adequately cleaned and disinfected/sanitized.
 - maintain, calibrate and repair all fit test equipment in accordance with manufacturer's recommendations. All fit test equipment records and documents shall be maintained by the fit tester.
 - o notify the Health and Safety Officer of any related worker concerns.

Progress Indicators:

- Staff using RP will hold current fit testing for the specific RP to be used/ in use
- Safe Operating Procedures, work procedures and/or staff manuals will cite the requirement for and type of RP where required
- Training records will identify current fit tested staff and approved respirators

Definitions:

Assigned Protection Factor: The anticipated level of respiratory protection that would be provided by a properly functioning respirator or class of respirators to properly fitted and trained workers.

Bio-aerosol: a liquid aerosol or a solid aerosol suspended in the air and that is living or originates from living organisms.

Page 10 of 10 AP-823

Clean Shaven: The acceptable management of facial hair that does not interfere with the respirator sealing surface, valve(s) or respirator function. (See NIOSH – Facial Hairstyles and Filtering Face-piece Respirators in reference section)

Competent Person: means a person who,

- (a) is qualified because of knowledge, training and experience to organize the work and its performance,
- (b) is familiar with the Occupational Health and Safety Act and the regulations that apply to the work, and
- (c) has knowledge of any potential or actual danger to health or safety in the workplace

Fit Test: The use of a qualitative or quantitative method to evaluate the fit of a specific make, model, and size of respirator on an individual.

Hazardous Atmosphere: Any atmosphere that is oxygen deficient (i.e. below 19.5% by volume), exceeds occupational exposure limits, presents a fire or explosion hazard, or contains an airborne toxic or disease-producing contaminant in concentrations deemed to be hazardous.

Immediately Dangerous to Life or Health (IDLH) Atmosphere: an atmosphere that poses an immediate threat to life or that will cause irreversible adverse health effects or impair an individual's ability to escape.

NIOSH: is the National Institute for Occupational Health and Safety, forming part of the United States Centres for Disease Control and Prevention (CDC).

Particulate: Any liquid or solid airborne contaminant, other than a gas or vapour, but including dusts, fumes, mists, fibres, fog, pollen, smoke, and spores.

Respirator: A device that is tested and certified and is designed to protect the worker from inhaling hazardous atmospheric contaminants.

Respiratory Protection (RP): is personal protective equipment (PPE), used to protect the individual wearer against the inhalation of hazardous substances in the workplace air.

User Seal Check: An action conducted by the respirator user to determine if the respirator is properly sealed to the face.

References:

- O. Reg. 833- Control of Exposure to Biological or Chemical Agents
- O. Reg. 490- Designated Substances
- O. Reg. 278/05- Asbestos in Construction Projects and in Building and Repair Operations
- CSA Z94.4- Selection, Use and Care of Respirators
- NIOSH Facial Hairstyles and Filtering Face-piece Respirators

Appendices:

- Appendix A- Respiratory Hazard Assessment Form
- Appendix B- Respirator User Screening Form