# **RESPIRATORY PROTECTION PROGRAM (29 CFR 1910.134)**

- 1. INTRODUCTION The purpose of this respirator program is to establish standard operating procedures to ensure the protection of all employees from respiratory hazards through proper selection and use of respirators. This program applies to all employees who are required to wear respirators during normal operations or non-routine tasks. Management commitment to the Respiratory Protection Program is imperative to reduce the potential for employee exposure to respiratory hazards. If the procedures within this policy are not followed there is the potentiality for injury to the respiratory tract. Keeping the employees safe around respiratory irritants or hazards as they work must be a priority. <u>Covid-19 Temp Guidance</u>
- 2. SCOPE This policy applies to all faculty and staff.

#### 3. **RESPONSIBILITIES** -

- **a. Program Administrator** St. Norbert College has designated the Human Resources (HR) Environmental Health and Safety Specialist as the program administrator(s) to oversee the respiratory protection program. Duties of the program administrator(s) include:
  - i. Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards.
  - ii. Selecting respiratory protection options.
  - iii. Monitoring respirator use to ensure that respirators are used in accordance with their certifications.
  - iv. Arranging for and/or conducting training.
  - v. Ensuring proper storage and maintenance of respiratory protection equipment.
  - vi. Conducting or arranging for fit testing.
  - vii. Administering the medical surveillance program.
  - viii. Maintaining records required by the program.
  - ix. Evaluating the program.
  - x. Updating written program as needed.
- **b. Supervisors** Managers are responsible for ensuring that the respiratory protection program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, managers must also ensure

that the program is understood and followed by the employees under their charge. Duties of the manager include:

- i. Ensuring that their employees have received appropriate training, fit testing, and medical evaluation.
- ii. Ensuring the availability of appropriate respirators and accessories.
- iii. Being aware of tasks requiring the use of respiratory protection.
- iv. Enforcing the proper use of respiratory protection when necessary.
- v. Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
- vi. Ensuring that respirators fit well and do not cause discomfort.
- vii. Continually monitoring work areas and operations to identify respiratory hazards.
- viii. Coordinating with the program administrator on how to address respiratory hazards or other concerns regarding the program.
- **c. Employees** Each employee has the responsibility to wear their respirator when and where required and in the manner in which they were trained. Employees must also:
  - i. Care for and maintain their respirators as instructed and store them in a clean sanitary location.
  - ii. Inform their manager if the respirator is damaged, destroyed, lost, stolen or no longer fits well.
  - iii. Inform their manager or the Program administrator of any respiratory hazards that they feel may not be adequately addressed in the workplace and of any other concerns that they have regarding the program.

#### 4. PROGRAM ELEMENTS

- **a. Respirator Selection -** Respirators are selected on the basis of the hazards to which the employees are exposed and in accordance with OSHA requirements. Only NIOSH certified respirators will be selected and used. The HR Environmental Health and Safety Specialist will conduct a hazard evaluation for each operation process, or work area where airborne contaminants may be present in routine operations or during an emergency. The hazard evaluation will include:
  - i. Identification of the hazardous substances used in the workplace, department or work process.
  - ii. Review of work processes to determine where potential exposures to these hazardous substances may occur.
  - iii. Exposure monitoring to quantify potential hazardous exposures.

The results of the hazard evaluation will be located at the affected department as well as in the HR department.

The HR Environmental Health and Safety Specialist will revise and update the hazard assessment as needed (i.e., any time work process changes which may potentially affect exposure).

### b. General requirements

- i. The employer shall select and provide an appropriate respirator from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits the user.
- ii. The selected respirator is based on the respiratory hazard(s) to which the worker is exposed, the work environment, and user factors that affect respirator performance and reliability.
- iii. If a NIOSH-certified respirator is selected it shall be used in compliance with the conditions of its certification.
- iv. The employer shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminants chemical state and physical form. Where the employer cannot identify or reasonably estimate the employee exposure, the employer shall consider the atmosphere to be IDLH.
- c. Respirators for Immediately Dangerous to Life and Health (IDLH) atmospheres-The employer shall provide the following respirators for employee use in IDLH atmospheres:
  - i. A full facepiece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes, or
  - ii. A combination full facepiece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.
  - iii. Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.
  - iv. All oxygen-deficient atmospheres shall be considered IDLH. Exception:

If the employer demonstrates that, under all foreseeable conditions, the oxygen concentration can be maintained within the ranges specified in <u>Table II of 29 CFR</u> <u>1910.134(d)</u>, then any atmosphere-supplying respirator may be used.

- **d. Respirators for atmospheres that are not IDLH -** The employer shall provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations.
- 5. NIOSH CERTIFICATION All respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and shall be used in accordance with the terms of that

certification. Also, all filters, cartridges, and canisters must be labeled with the appropriate NIOSH approval label. The label must not be removed or defaced while it is in use.

6. RESPIRATOR USE - MANDATORY or VOLUNTARY - There are areas that are considered "mandatory Respirator Areas". Examples of areas that are mandatory include any work to abate ACM by trained and authorized personnel, any cleaning or repair work inside of main Campus boilers, or any spray painting that might occur in an area without adequate ventilation. Respirators may also be mandatory when determined by managers that they are needed in an area/location. If other areas are deemed mandatory and approved by the HR Environmental Health and Safety Specialist they will be identified above.

Respirators may be used on a voluntary basis in areas that are not "Mandatory Respirator Areas;" so long as it is determined that wearing the respirator will not create a hazard itself.

The impacted department manager along with the HR Environmental Health and Safety Specialist shall authorize voluntary use of respiratory protective equipment as requested by all other workers on a case-by-case basis, depending on specific workplace conditions and the results of the medical evaluations.

- 7. RESPIRATOR FILTER & CANISTER REPLACEMENT/CHANGE SCHEDULE An important part of the Respiratory Protection Program includes identifying the useful life of canisters and filters used on air purifying respirators. Each filter and canister shall be equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant; or If there are no ESLI appropriate for conditions, a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life. Cartridges/Filters shall be changed based on the most limiting factor below:
  - **a.** Prior to expiration date
  - **b.** Manufacturer's recommendations for use and environment
  - **c.** After each use
  - **d.** When requested by employee
  - e. When restriction to air flow has occurred as evidenced by increased effort by user to breathe normally
- 8. MEDICAL EVALUATION Employees who are required to wear respirators must be medically evaluated before being permitted to wear a respirator on the job. Employees are not permitted to wear respirators until a physician or licensed health care professional has determined that they are medically able to do so. A licensed health care professional will provide the medical evaluation to employees. Medical evaluation procedures are as follows:
  - **a.** The medical evaluation will be conducted using a <u>medical questionnaire</u> provided in the Respiratory Protection Standard. The HR Environmental Health and Safety Specialist will provide a copy of this questionnaire to all employees requiring medical evaluation.

- **b.** To the extent feasible, St. Norbert College will assist employees who are unable to read the questionnaire. If necessary, the employee will be sent directly to the health care professional for assistance and medical evaluation.
- **c.** All affected employees will be given a copy of the medical questionnaire to fill out, along with a stamped and addressed envelope for mailing the questionnaire to the health care professional. Employees will be permitted to fill out the questionnaire during the course of their normal duty day.
- **d.** Follow up medical exams will be provided to employees as required by the OSHA standard, and/or as deemed necessary by the health care professional.
- e. All employees will be allowed the opportunity to speak with the health care professional about their medical evaluation if they so request.
- **f.** The HR Environmental Health and Safety Specialist will provide the health care professional with a copy of this program and a copy of OSHA's respiratory protection standard. For each employee requiring evaluation, the health care professional will be provided with information regarding the employee's work area or job title, proposed respirator type and weight, length of time required to wear the respirator, expected physical work load (light, moderate, or heavy), potential temperature and humidity extremes, and any additional protective clothing required.
- **g.** After an employee has received clearance to wear a respirator, additional medical evaluations will be provided under any of the following circumstances:
  - i. The employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pains, or wheezing;
  - ii. The health care professional or manager informs the HR Environmental Health and Safety Specialist that the employees needs to be reevaluated;
  - iii. Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation; and
  - iv. A change occurs in workplace conditions that may result in an increased physiological burden on the employee.

**Note:** All examinations and questionnaires are to remain confidential between the employee and the physician.

- **9. FIT TESTING PROCEDURES** The HR Environmental Health and Safety Specialist will ensure that fit-test will be administered using an <u>OSHA-accepted qualitative fit test (QLFT) or quantitative fit test (QNFT)</u> protocol. St. Norbert College requires employees to be fit tested at the following times and with the same make, model, style, and size of respirator that they will be using:
  - **a.** Before being allowed to wear any respirator with a tight-fitting face piece and at least annually thereafter;
  - **b.** Whenever a different respirator face piece (size, style, model, or make) is used;

- **c.** Whenever visual observations of changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to,
  - i. facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight; and
  - ii. Upon employee notification that the fit of the respirator is unacceptable.
- **d.** St. Norbert College has established a record of the fit tests administered to employees including:
  - i. The name or identification of the employee tested;
  - ii. Type of fit test performed;
  - iii. Specific make, model, style, and size of respirator tested;
  - iv. Date of test; and
  - v. The pass/fail results.

#### **10. USE OF RESPIRATORS**

- **a. General Use Procedures -** Employees will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of each particular model. In addition, the respirator shall not be used in a manner for which it is not certified by NIOSH or its manufacturer.
  - i. All employees shall conduct <u>user seal checks</u> each time that they wear their respirator. Employees shall use either the positive or negative pressure check (depending on which test works best for them).
  - ii. All employees shall be permitted to leave the work area to maintain their respirator for the following reasons: to clean their respirator if the respirator is impeding their ability to work, change filters or cartridges, replace parts, or to inspect respirator if it stops functioning as intended. Employees shall notify their supervisor before leaving the area.
  - iii. Employees are not permitted to wear tight fitting respirators if they have any condition, such as facial hair, facial scars, or missing dentures that prevents them from achieving a good seal. Employees are not permitted to wear headphones, jewelry, or other articles that may interfere with the facepiece to face seal.
- **b. Respirator Malfunction** For any malfunction of a respirator (e.g., such a breakthrough, face piece leakage, or improperly working valve), the respirator wearer should inform their supervisor that the respirator no longer functions as intended, and to egress to a safe area to perform maintenance on the respirator, as needed. The supervisor is required to ensure that the employee receives the needed parts to repair/service the respirator, or provide a new respirator, as necessary.
- c. Maintenance and Care Procedures In order to ensure continuing protection from the respirators being use, it is necessary to establish and implement proper maintenance and care procedures and schedules. A lax attitude toward maintenance and care will negate

successful selection and fit because the devices will not deliver the assumed protection unless they are kept in good working order.

- d. Cleaning & Disinfecting The department manager provides each user with a respirator that is clean, sanitary, and in good working order and will ensure that respirators are cleaned and disinfected weekly or as often as necessary to be maintained in a sanitary condition. Respirators are cleaned and disinfected using the procedures specified in <u>Appendix B-2</u> of the standard or the manufacturer's recommendations. Respirators are cleaned and disinfected:
  - i. As often as necessary when issued for the exclusive use of one employee;
  - ii. Before being worn by different individuals;
  - iii. After each use for emergency use respirators; and
  - iv. After each use for respirators used for fit testing and training.
- e. Storage Storage of respirators must be done properly to ensure that the equipment is protected and not subject to environmental conditions that may cause deterioration. Ensure that respirators are stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals as well as in accordance with any applicable manufacturer's instructions.
- **f. Respirator Inspection -** Employees are required to inspect respirators after each use and at least monthly. Should any defects be noted, the respirators will be taken to the department manager or the HR Environmental Health and Safety Specialist.
  - i. Damaged respirators will be either repaired or replaced. Respirators shall be inspected by employees as follows:
  - ii. All respirators used in routine situations shall be inspected before each use and during cleaning;
  - iii. All respirators maintained for use in emergency situations shall be inspected at least monthly and in accordance with manufacturer's recommendations, and shall be checked for proper function before and after each use. Respirator inspections shall include the following:
  - iv. A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the face piece, head straps, valves, connecting tube, and cartridges, canisters or filters; and
  - v. Check of elastomeric parts for pliability and signs of deterioration.
  - vi. The following checklist will be used when inspecting respirators:
    - 1. Face piece:
      - a. cracks, tears, or holes
      - b. facemask distortion
      - c. cracked or loose lenses/face shield

- 2. Head straps:
  - a. breaks or tears
  - b. broken buckles
- 3. Valves:
  - a. residue or dirt
  - b. cracks or tears in valve material
- 4. Filters/Cartridges:
  - a. approval designation
  - b. gaskets
  - c. cracks or dents in housing
  - d. proper cartridge for hazard
- 5. Air Supply Systems:
  - a. breathing air quality/grade
  - b. condition of supply hoses
  - c. hose connections
  - d. settings on regulators and valves
- 11. TRAINING The HR Environmental Health and Safety Specialist will be responsible to provide training to respirator users or their managers on the contents of the Respiratory Protection Program and their responsibilities under it, and on the OSHA Respiratory Protection Standard. Workers will be trained prior to using a respirator in the workplace. Managers will also be trained prior to using a respirator in the workplace or prior to supervision of employees that must wear respirators. The training will cover the following topics:
  - a. The St. Norbert College Respiratory Protection Program
  - b. The OSHA Respiratory Protection Standard
  - c. Respiratory hazards encountered and their health effects
  - d. Proper selection and use of respirators
  - e. Limitations of respirators
  - f. Respirator donning and user seal (fit) checks
  - **g.** Fit testing
  - **h.** Emergency use procedures
  - i. Maintenance and storage

j. Medical signs and symptoms limiting the effective use of respirators

Employees will be retrained annually or as needed (e.g., if they need to use a different respirator). Employees must demonstrate their understanding of the topics covered in the training utilizing a hands-on exercise and a written test. Respirator training will be documented by the HR Environmental Health and Safety Specialist and the documentation will include the type, model, and size of respirator for which each employee has been trained and fit tested.

- 12. PROGRAM EVALUATION The HR Environmental Health and Safety Specialist will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluation will include regular consultations with employees who use respirators and their managers, site inspections, air monitoring and review of records. Identified problems will be noted and addressed by the HR Environmental Health and Safety Specialist. These findings will be reported to the respective department manager, and the report will list plans to correct deficiencies in the respirator program and target dates for the implementations of those corrections.
- **13. DOCUMENTATION AND RECORDKEEPING -** Maintained in the employee's confidential medical file are copies of training and fit test records. These records will be updated as new employees are trained, as existing employees receive refresher training, and as new fit tests are conducted. Training records shall be maintained at the affected department's manager by the HR Environmental Health and Safety Specialist.
- 14. PROGRAM REVIEW AND UPDATE This policy shall be reviewed and updated on an annual basis or sooner if necessary.

| Date       | Update or Revision  | By Whom               |
|------------|---|-----------------------|
| 02/08/2018 | Respiratory Protection<br>Program-Written and<br>Reviewed | C. Woller and M. Eddy |
| 6/22/18    | Applied E. Jahnke's recommendations                       | M. Eddy               |
| 10/30/18   | Update paragraph 6  | S. Brinkman           |

## Appendix 1

## HAZARD ASSESSMENT

Date: \_\_\_\_\_

| Department | Contaminants | Exposure Level<br>(8 hrs TWA) | PEL | Controls |
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