

**University of North Dakota Facilities Department
Respiratory Protection Program**

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1.0 Introduction

The Facilities Department has developed procedures which follow the Respiratory Protection Program established by the Office of Safety and the Facilities Management department. The procedures outlined in this manual are specific to the work completed by the Facilities Department personnel and are determined by the job description and/or program administrator.

2.0 Purpose

Provide designated employees with procedures and guidelines to protect against inhalation of respirable dusts, toxins, vapors, fumes, and mists.

Provide employees with procedures to clean, store, and maintain respirator equipment.

Establish and identify personnel responsibilities.

3.0 Scope

This program applies to all employees who are required to wear respirators during work operations and during some non-routine or emergency operations. All employees working in these areas and engaged in certain processes or tasks must be enrolled in the Facilities Management respirator program.

4.0 Responsibilities

4.1 Office of Safety

- Overseer of the Respirator Program
- Coordinates medical examinations with the Designated Medical Provider and the Facilities Management Human Resources office.
- Coordinates yearly respirator fit tests.
- Maintaining records required by the program.

4.2 Program Administrator

The program administrator is responsible for administering the Respiratory Protection Program. Duties of the program administrator include:

- Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards.
- Selection of respiratory protection options.
- Determines appropriate respirator filters for specific job environment.
- Monitoring respirator use to ensure that respirators are used in accordance with their certifications.
- Arranging for and/or conducting training.
- Ensuring proper storage and maintenance of respiratory protection equipment.
- Ensuring qualitative and quantitative fit testing being conducted.

- Evaluating the program.
- Updating written program as needed.
- Being aware of tasks requiring the use of respiratory protection.
- Enforcing respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
- Continually monitoring work areas and operations to identify respiratory hazards.
- Ensuring the availability of appropriate respirators and accessories.

The Program Administrator for the Facilities Department is Larry Zitzow, Director of Services. Mark Johnson, Director of Operations, is Program Administrator backup.

4.3 Supervisors

Supervisors 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 employee's protection, supervisors must also ensure that the program is understood and followed by the employees under their charge. Duties of the supervisor include:

- Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing and annual medical evaluation.
- Being aware of tasks requiring the use of respiratory protection.
- Enforcing respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
- Coordinating with the Program Administrator on how to address respiratory hazards or other concerns regarding the program.

4.4 Employees

Each employee has the responsibility to wear his or her respirator when and where required and in the manner in which they were trained. Employees must also:

- Only wear the respirator for the conditions specified in the "Fit Testing" Form.
- Being aware of tasks requiring the use of respiratory protection.
- Care for and maintain their respirators as instructed, and store them in a clean sanitary location according to the respiratory protection plan.
- Ensuring that defective equipment is returned to the Tool Room for service.
- Inform their supervisor if the respirator no longer fits well and request a new one that fits properly.
- Inform their supervisor or the Program Administrator of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program.
- For any malfunction of Powered Air Purifying Respirator (PAPR) (e.g., such as breakthrough, facepiece leakage, or improperly working valve), the respirator wearer should inform his or her supervisor that the respirator no longer functions as intended and obtain a replacement.

5.0 Respirator Selection

5.1 The Program Administrator will identify the respirators to be used on site, based on the hazards to which workers are exposed and in accordance with all Occupational Safety and Health Administration (OSHA) standards. The Program Administrator will conduct an initial 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:

5.1.a. Identification and development of a list of hazardous substances used in the workplace, by department, or work process.

5.1.b. Review of work processes to determine where potential exposures to these hazardous substances may occur. This review shall be conducted by surveying the workplace, reviewing process records, and talking with employees and supervisors.

The hazard evaluation may include exposure monitoring to quantify potential hazardous exposures.

5.2 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.

5.3 The program administrator will contact the manufacturer to determine filter type for each individual. The program administrator will inform the Supply department to stock the filter.

6.0 Medical Evaluation (Initial)

Employees who are required to wear respirators, as described in the job description, must pass a medical exam before being permitted to work. Employees are not permitted to wear respirators until a physician has determined they are medically able to do so. Any employee refusing the medical evaluation will not be allowed to work in an area requiring respirator use.

The Office of Safety will provide the scheduling of the medical evaluations for every employee in the respirator program. This medical evaluation may include the following:

- Medical questionnaire
- Medical exam
- Pulmonary function test
- Chest X-ray
- Electrocardiogram
- Other tests needed for proper evaluation by a physician

Once the employee has received clearance from the Program Administrator, they may proceed with the work.

Medical Questionnaire (Yearly)

The Office of Safety will provide a yearly questionnaire to respirator wearers in the 2-5 year physical criteria. After review, a follow-up fit test will be scheduled. The Office of Safety will schedule the appointment.

Medical Evaluation (Periodic)

The Office of Safety will schedule a medical examination for any employee in the respirator program. The same procedures in the initial medical evaluation will be followed.

Medical Evaluation (Exit)

An exit medical examination will be given to any employee who has been a participant in the respirator program. An exit medical examination will not be required if the employee has been in for a routine medical examination within the last six months. Upon termination of employment, the Facilities Human Resources personnel will inform the Office of Safety and ensure respirator program files are updated.

7.0 Fit Testing

Annual fit testing is required for employees who wear respirators. Employees wearing half-face piece or PAPRs may also be fit tested upon request.

Employees who are required to wear half-facepiece or PAPRs will be fit tested by the university's designated medical provider.

- Prior to being allowed to wear any respirator with a tight fitting facepiece
- Annually
- All others, when there are changes in the employee's physical condition that could affect respiratory fit (e.g. obvious change in body weight, facial scarring, etc.) and review of the questionnaire indicates the need.

Employees will be fit tested with the make, model, and size of respirator that they will actually wear. Employees will be provided with 3M and MSA models and sizes of respirators so that they may find an optimal fit. Fit testing of PAPRs shall be conducted in the negative pressure mode if worn with a tight fitting facepiece.

8.0 Training

Employees will be provided training on the use, care, and maintenance of respiratory protection equipment prior to requiring an employee to use a respirator. Employees who voluntarily use a filtering face piece must be provided with the information contained in **Appendix A**. Training provided will include but is not limited to:

- Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
- What the limitations and capabilities of the respirator are.

- How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions.
 - How to inspect, don and remove, use, and check the seals of the respirator.
 - What the procedures are for maintenance and storage of the respirator.
 - How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
 - The general requirements of the University's Respiratory Protection Manual.
- 8.1 Refresher training is provided at the annual fit testing or when one of the following situations occurs:
- 8.1.a Changes in the workplace or the type of respirator may render previous training obsolete.
 - 8.1.b Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the level of understanding or skill required.
 - 8.1.c Any other situation arises in which retraining appears necessary to ensure safe respirator use is maintained.

9.0 Maintenance

Respirators are to be properly maintained at all times in order to ensure that they function properly and adequately protect the employee. Respirator wearers will inspect and ensure the respirator is working correctly and inform the Tool Room personnel if not all parts are in good working condition. Maintenance involves a thorough visual inspection for cleanliness and defects. Worn or deteriorated parts will be replaced prior to use. No components will be replaced or repairs made beyond those recommended by the manufacturer.

10.0 Cleaning and Storage

The Facilities Management employees are responsible for cleaning, repairing, and storing the respirators. Respirators must be bagged and stored in a clean, dry area, and in accordance with the manufacturer's recommendations. Facilities Management Supervisors oversee the following maintenance procedure.

The respirators shall be cleaned and disinfected at the following intervals:

- Preventive maintenance inspections should be conducted every six (6) months.
- Respirators issued for the exclusive use of an employee shall be cleaned and disinfected after each use.
- Respirators used during an abatement project or such projects lasting over a period of time shall be disinfected as often as necessary to be maintained in a sanitary condition.
- Respirators maintained for emergency use shall be cleaned and disinfected after each use.

All respirators are to be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. The Tool Room is

available for storage and inspection. It is recommended that a minimum of 24 hours be allowed to properly service the equipment.

The Steam Plant will follow the same procedures as above; however, an employee of the Steam Plant will be trained for cleaning, repairing, and storing the respirators on site.

11.0 Record Keeping

The Office of Safety oversees the respirator program and is the Office of Record for employee training and qualified respirator users. All medical reports are protected by the HIPPA law and maintained by the Designated Medical Provider. Records are kept for 30 years after employee termination.

Facilities Management administers the program. Facilities Management receives the list of qualified employees from the Office of Safety. Facilities Management is the Office of Record for work completed by respirator users.

12.0 Program Evaluation

The Program Administrator will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluations will include regular consultations with employees who use respirators and their supervisors, site inspections, air monitoring and a review of records.

INFORMATION FOR EMPLOYEES USING RESPIRATORS WHEN NOT REQUIRED

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by regulatory or other agencies. Before voluntarily using a respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator's limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapor, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.