

**Polk County Wisconsin
RESPIRATORY PROTECTION PROGRAM**

Policy 501.I

Effective Date: 5/21/02

Current Revision Date: 3-11-08

The 29 Code of Federal Regulation 1910.134 mandates the respiratory protection program for those individuals exposed to hazards which require respiratory protection. Common hazardous atmospheres include: toxic vapors, mists, dusts, or fumes which are present during work procedures.

Scope

The scope of this program as defined by the Code of Federal Regulations includes those individuals employed at Polk County and governs the selection and use of respirators in the course of work.

Objective

The objective of this program is to minimize breathable hazards and insure safe working conditions for Polk County employees. Thus, the proper implementation of this program will follow adherence to the laws and regulations set forth by the Occupational Safety and Health Act adopted in 1999 for County Governments.

Program Elements

This program will include the following elements:

- Selection of a Program Coordinator for Polk County.
- Identification of those tasks / areas which require respirator use.
- Identification and selection of proper respiratory protection related to the respirable hazard present.
- Identification of individuals that will be included in this program.
- Coordination of medical management and those related documents.
- Allow for the training of respirator use, which includes: fit test, cleaning, storage, inspection, etc.
- Evaluation of this program as often as necessary to ensure that Polk County employees are being adequately protected.

Expectations and Accountability

All management staff at Polk County will support the Program Coordinator in all efforts to implement the Respiratory Protection Program. Management will attend mandated training sessions and provide training opportunities to employees as required by this policy. Management will require employees to attend training when scheduled. Management will also report in writing any non-compliance with the program in a timely fashion to the Program Coordinator or the Department of Employee Relations.

Program Coordinator

The Polk County Highway Commissioner has been designated the Program Coordinator for the Polk County Respiratory Protection Program. The Program Coordinator is responsible for the implementation of the program elements, program review, and changes to this program when required. Identification of areas or tasks in which a respirator will be worn rests with the collaborative efforts of the Employee Relations Manager and the Program Coordinator. The Program Coordinator and Employee Relations Manager will provide documentation of the physical requirements of those jobs requiring the usage of a respirator to the physician who completes medical evaluations of employees. Material Safety Data Sheets of chemicals and / or hazardous materials information will also be provided to the physician for his review. All records related to this program will be maintained by the Department of Employee Relations, with copies forwarded to the affected department designees. Records generated will be kept for a minimum of 3 years and will be considered confidential.

Employee

Any employee, who must enter designated areas requiring respirator donage, will attend training and pass the respirator fit test. No employee will be allowed to wear a respirator, which does not properly fit. Employees that have a properly fitted respirator and have attended training are required to wear the respirator in the designated areas and while performing those tasks that require respirator use. Any employee, who does not wear the respirator during those specified times, will be disciplined. This program requires medical management and employees will complete the required medical evaluation questionnaire.

Respirator use and selection

A respirator is a device worn over the mouth and nose for protecting the respiratory tract of the employee from foreign substances in the air. Personal respiratory protection equipment will be provided and used when:

1. It is impossible to enclose or isolate a hazardous process or piece of equipment.
2. Necessary ventilation cannot be provided or is not yet installed
3. Other control measures are not feasible.
4. It is recommended for possible emergency situations.

Respiratory protection is considered the last resort. It must not be substituted for engineering controls where such controls are feasible. There are six basic types of respiratory protection devices, some of which may be needed at Polk County in the course of work and are described below:

1. Mechanical Filters offer protection against airborne particulate matter including dusts, mists, metal fumes, and smokes. Masks are of a soft resilient material full or half mask face piece to which one of several types of mechanical filters are attached. The filters are made of fibrous materials, which physically trap particles as air is inhaled through the materials. Respirators are certified by NIOSH for one or any combination of particulate hazard. Those hazards can be nuisance, fibrosis-producing and /or toxic dusts, mists, and fumes.
2. Chemical Cartridge Respirators afford protection against high concentrations of

certain acid gases and organic vapors by utilizing various chemical filters to purify the inhaled air. These respirators are “Non-Emergency” respirator protective devices and should never be used in dangerous atmospheres. Oxygen must be present at all times to support life.

3. Combination Respirators are dust, mist or fume mechanical filters plus a chemical cartridge for dual or multiple exposure. Spray painting is a common job where combination respirators are used frequently.
4. Gas Masks consist of a full face piece connected by a flexible breathing tube to a canister under the chin, carried in a harness on the chest, under the arm, or on the back. Inside the canisters are materials that remove contaminants and purify the air. The materials in the canister depend upon the type of contaminant. One must be extremely careful in selecting the proper canister fill.
5. Self-Contained Breathing Apparatus feature a unique aspect in that the wearer need not be connected to a stationary air source. The wearer carries enough oxygen or air supply for up to four hours. This type of respirator provides protection against all types of atmosphere contaminants in any concentration that can be endured by the skin. There are two basic classifications of self-contained breathing apparatuses – ‘closed circuit’ and ‘open circuit’. In the close circuit type the air is re-breathed after the exhaled carbon dioxide has been removed and the oxygen content restored. The closed circuit type offers a longer continuous period than does the open circuit devices, which exhaust the exhaled air into the atmosphere rather than re-circulate it. Closed circuit self-contained breathing apparatuses operate under negative pressure, thus they have limited usage.
6. Air supplied Respirators feature air that is supplied from a stationary, remote source to the wearer though a hose. Air supplying respirators are divided into three types: hose–masks; air-line respirators; and abrasive blasting hoods.
 - Hose masks supply air from an uncontaminated source through a strong, large diameter hose.
 - Airline respirators all use a stationary source of compressed air delivered though a high-pressure hose. Respirators are available in demand, pressure-demand, and continuous flow configurations. The respiratory-inlet covering may be a face piece, helmet, hood or complete suit.
 - Abrasive blasting respirators are essentially air supplied respirators which have been modified by the additions of a suitable covering to protect the head and shoulders against impact and abrasion by rebounding materials.

Selection of Employees and Respirators

Normally, a respirator places a physiological stress upon the wearer. It is an air-purifying

device, which makes it difficult for the employee wearing one to breath. This is due to the fact that a fiber or cartridge impedes the airflow. One must adjust the normal breathing pattern to compensate for this fact. Wearers must not have a history of any lung disease at the present or past such as asthma, emphysema or bronchial spasms. Nor may they have a history of heart disease, high blood pressure, or artery disease. All employees who are required to wear a respirator will be medically evaluated to determine that the employee is physically able to perform work and wear the respirator.

Medical Evaluation

The physician will be provided with the “*job description, respiratory selection documentation and the medical questionnaire*”. 1910.1001 App. D Part I when certifying an individual for respirator use. “1910.1001 App. D part II will be used as dictated by the code as the “Periodic Medical Questionnaire” Medical evaluation will include but is not limited to:

- Health history with particular emphasis on any previous respiratory or heart disease.
- Chest X-ray if required by physician.
- Pulmonary function tests (FVC and FEV).
- Hands on physical evaluation.
- Any other test the physician deems necessary.

The physician will submit in writing the completed Professional Recommendation on Respirator use certification of findings to the Department of Employee Relations. Medical management will be provided should an employee need medical attention related to any respiratory illness contracted in the course of work.

Training

The Program Coordinator is responsible for the implementation of an annual training program related to respirators. It shall include the following:

- Definition of a respirator (s), selection and use.
- Proper storage, maintenance, cleaning and pre-use inspection.
- Semi-annual fit tests and point of use fit check as specified by 1910.134 Code of Federal Regulations and /or the manufactures’ protocol.
- Factors and signs of respirator failure.

Department managers, supervisors, and employees using respirators will receive a training session on usage of respirators on at least an annual basis. All documents related to training records, fit tests and /or fit checks will be maintained by the Department of Employee Relations.

Program Evaluation

The Respiratory Protection Program shall be evaluated annually by the Program Coordinator and updated as necessary. The Checklist for Respiratory Protection Programs will be used as an evaluation tool. If new regulations are imposed, the Program will be evaluated and updated at that time.