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# **Respiratory Protection Program**

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## **1. Purpose**

Gerber Construction (“Company”) has determined that employees in all company departments have the potential to be exposed to respiratory hazards during routine operations. These hazards include particulates, gases, and vapors. In some cases, these exposures represent Immediately Dangerous to Life or Health (IDLH) conditions. The purpose of this program is to ensure that all Company employees are protected from exposure to these respiratory hazards.

Elimination, substitution, and engineering, and administrative control methods are the first lines of defense at the Company; however, these methods have not always been feasible for some of our operations, or have not always completely controlled the identified hazards. In these situations, respirators and other protective equipment must be used. Respirators are also needed to protect employees' health during emergencies. The work processes requiring respirator use at the Company are outlined in Table 1 in the Scope and Application section of this program. In addition, some employees have expressed a desire to wear respirators during certain operations that do not require respiratory protection. As a general policy the Company Health & Safety Department will review each of these requests on a case-by-case basis. If the voluntary use of respiratory protection in a specific case will not jeopardize the health or safety of the employee(s), the Company will provide respirators for voluntary use. As outlined in the Scope and Application section of this program, voluntary respirator use is subject to certain requirements of this program.

## **2. Scope and Application**

This program applies to all employees who are required to wear respirators during normal work operations, and during some non-routine or emergency operations such as a spill of a hazardous substance. This includes workers in the New Construction, Restoration, and Project Support Departments. All employees working in these areas and engaged in certain processes or tasks (as outlined in the table below) must be enrolled in the company's respiratory protection program.

In addition, any employee who voluntarily wears a respirator when one is not required may be subject to all or part of the medical evaluation, cleaning, maintenance, and storage elements of this program, and must be provided with certain information specified in this section of the program.

## **3. Responsibilities**

### **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.
- Ensuring adequate air quantity, quality, and flow of breathing air for atmosphere-supplying respirators. (See (c)(1) of the standard.)
- Selection of respiratory protection options.
- Monitoring respirator use to ensure that respirators are used in accord with their certifications.
- Arranging for and/or conducting training.

- Ensuring proper storage, cleaning, inspections, and maintenance of respiratory protection equipment.
- Conducting qualitative fit testing (Irritant smoke, banana oil, Bitrex, etc.)
- Administering the medical surveillance program.
- Maintaining records required by the program.
- Evaluating the program.
- Updating written program, as needed.

The Program Administrator for the Company is Matt Kerr, Health & Safety Manager.

**Supervisors:**

- Supervisors (Superintendents, Foremen, Leadmen, etc.) 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, supervisors must also ensure that the program is understood and followed by the workers under their charge. Note: Workers participating in the respiratory protection program do so at no cost to themselves.

Duties of the supervisor include:

- Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing, and annual medical evaluation.
- Ensuring the availability of appropriate respirators and accessories.
- Being aware of tasks requiring the use of respiratory protection.
- Enforcing the proper use of respiratory protection when necessary.
- Ensuring that respirators are properly cleaned, maintained, inspected, and stored according to the respiratory protection plan.
- Ensuring that respirators fit well and do not cause discomfort.
- Continually monitoring work areas and operations to identify respiratory hazards.
- Coordinating with the Program Administrator on how to address respiratory hazards or other concerns regarding the program.
- Ensuring adequate air quantity, quality, and flow of breathing air for atmosphere-supplying respirators.

**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.
- Care for and maintain their respirators as instructed, and store them in a clean, sanitary location.
- 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.
- Inform their supervisor of need for a medical reevaluation.

## 4. Program Elements

### Selection Procedures

The Program Administrator:

- Will select respirators to be used on site, based on the hazards to which workers are exposed and in accord with all applicable OSHA standards.
- 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.
- Monitoring can be contracted out.
- The hazard evaluation will include:
  - Identification and development of a list of hazardous substances used in the workplace, by department or work process.
  - Review of work processes to determine where potential exposures to these hazardous substances may occur. This review is to be conducted by surveying the workplace, reviewing process records, and talking with employees and supervisors.
  - Exposure monitoring to quantify potential hazardous exposures.
  - If worker exposures have not been, or cannot be, evaluated they must be considered IDLH.
  - Respirators are selected based on the workplace hazards evaluated, and workplace and user factors affecting respirator performance and reliability.
- Respirators are selected based on the Assigned Protection Factors (APFs) and calculated Maximum Use Concentrations (MUCs).
- A sufficient number of respirator sizes and models must be provided to the employee during fit testing to identify the acceptable respirator that correctly fits the users.
- For IDLH atmospheres:
  - Full facepiece pressure demand SARs with auxiliary SCBA unit or full facepiece pressure demand SCBAs, with a minimum service life of 30 minutes, must be provided.
  - Respirators used for escape only are NIOSH-certified for the atmosphere in which they will be used.
  - Oxygen deficient atmospheres are considered IDLH.
- For Non-IDLH atmospheres, respirators are:
  - Selected as appropriate for the APFs and MUCs.
  - Selected as appropriate for the chemical nature and physical form of the contaminant.
  - Equipped with end-of-service-life indicators (ESLIs) if the respirators (APRs) are used for protection against gases and vapors. If there is no ESLI, then a change schedule must be implemented.

- Equipped with NIOSH-certified HEPA filters (or other filters certified by NIOSH for particulates under 42 CFR part 84) if the respirators (APRs) are to be used for protection against particulates.

### **Updating the Hazard Assessment**

The Program Administrator:

- Must revise and update the hazard assessment as needed (i.e., anytime work process changes may potentially affect exposure). If an employee feels that respiratory protection is needed during a particular activity, he/she is to contact his or her supervisor or the Program Administrator. The Program Administrator then:
  - Will evaluate the potential hazard, arranging for outside assistance as necessary.
  - Will then communicate the results of that assessment back to the employees. If it is determined that respiratory protection is necessary, all other elements of this program will be in effect for those tasks, and this program will be updated accordingly.
- Will ensure that all respirators are certified by the National Institute for Occupational Safety and Health (NIOSH) and are used in accord with the terms of that certification.
- Will also ensure that all filters, cartridges, and canisters are labeled with the appropriate NIOSH certification label. The label must not be removed or defaced while it is in use.
- Will provide all employees who voluntarily choose to wear a respirator with a copy of Appendix D of the Respiratory Protection Standard (29 CFR 1910.134). Appendix D details the requirements for voluntary use of respirators by workers. Workers choosing to wear any respirator other than an N95 Filtering Facepiece/Dust Mask must comply with the procedures for medical evaluation, respirator use, cleaning, maintenance and storage.

### **Medical Evaluation**

Employees who are either required to wear respirators, or who choose to wear a respirator voluntarily (except N95 Filtering Facepieces/dust masks), must pass a medical evaluation 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 (PLHCP) has determined that 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. A PLHCP at Intermountain WorkMed, where all company medical services are provided, will provide the medical evaluations.

Medical evaluation procedures are as follows:

- The medical evaluation will be conducted using the questionnaire provided in Appendix C of the Respiratory Protection Standard.
- The Program Administrator will provide a copy of this questionnaire to all employees requiring medical evaluations.

- To the extent feasible, the company will assist employees who are unable to read the questionnaire (by providing help in reading the questionnaire). When this is not possible, the employee will be sent directly to the physician for medical evaluation.
- All affected employees will be given a copy of the medical questionnaire to complete, whereby the employee (or representative of the Health & Safety or Human Resource Departments) will deliver the questionnaire to the PLHCP.

Employees will:

- Be permitted to fill out the questionnaire on company time.
- Be administered follow-up medical exams as required by the Respiratory Protection Standard, and/or as deemed necessary by the PLHCP.
- Be granted the opportunity to speak with the physician about their medical evaluation, if they so request. The Program Administrator has provided the PLHCP with:
  - a copy of this program, and a copy of the Respiratory Protection Standard.
  - A list of hazardous substances by work area and for each employee requiring evaluation, his or her work area or job.
  - The employee's 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.
- Any employee required for medical reasons to wear a positive pressure air purifying respirator will be provided with a powered air purifying respirator.
- After an employee has received clearance and begun to wear his or her respirator, additional medical evaluations will be provided if:
  - 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.
  - The PLHCP or supervisor informs the Program Administrator that the employee needs to be reevaluated.
  - Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation.

(An example of the PLHCP's or the supervisor's observations that additional medical evaluation is needed could be that there has been a change in workplace conditions that may result in an increased physiological burden on the employee.)

- A list of Company employees currently included in medical surveillance is provided in Table 3 of this program.
- All examinations and questionnaires are to remain confidential between the employee and the physician.

### **Fit Testing**

- Generally, fit testing is required for all employees wearing tight-fitting respirators.
- Employees voluntarily wearing a respirator where no hazard exists are not required to be fit-tested.
- Fit-testing is required:

- Prior to being allowed to wear any respirator with a tight fitting facepiece.
- Annually.
- When there are changes in the employee's physical condition that could affect respirator fit (e.g., obvious change in body weight, facial scarring, etc.).
- Employees will be fit tested using the same make, model, and size of respirator that they will actually wear.
- Employees will be provided with several models and sizes of respirators so that they may find an optimal fit.
- Fit testing of a Powered Air-Purifying Respirator (PAPR), Supplied Air Respirators (SARs), or Self-Contained Breathing Apparatus (SCBA) is to be conducted in the negative pressure mode. The Program Administrator will conduct fit tests following the Irritant Smoke Qualitative Fit Test (QLFT) Protocol in Appendix A of the Respiratory Protection Standard. The Program Administrator has determined that Quantitative Fit Test (QNFT) is not required for the respirators used under current conditions at the Company. If conditions affecting respirator use change, the Program Administrator will evaluate on a case-by-case basis whether QNFT is required.

### **Respirator Use**

#### **Employees:**

- Will use their respirators under conditions specified by this program, and in accord with the training they receive on the use of each particular model. In addition, the respirator must not be used in a manner for which it is not certified by NIOSH or by its manufacturer.
- Must conduct user seal checks (positive, negative, or both) each time that they wear their respirator.
- Must leave the work area and go to a "clean" area to maintain their respirator for the following reasons:
  - to clean their respirator if the respirator is impeding their ability to work;
  - to change filters or cartridges, or replace parts; or
  - to inspect the respirator if it stops functioning as intended.
- Shall notify their supervisor before leaving the area.
- Shall not wear tight-fitting respirators if they have any condition, such as facial scars, facial hair, or missing dentures, that prevents them from achieving a good seal.
- Shall not wear headphones, jewelry, or other articles that may interfere with the facepiece-to-face seal.

### **Cleaning, Maintenance, Change Schedules, and Storage**

#### **Cleaning**

- Respirators are to be regularly cleaned and disinfected.
- Respirators issued for the exclusive use of an employee are to be cleaned as often as necessary, but at least once a day.

- Atmosphere-supplying and emergency use respirators are to be cleaned and disinfected after each use.
- The following procedure is to be used when cleaning and disinfecting respirators:
  - Disassemble respirator, removing any filters, canisters, or cartridges.
  - Wash the facepiece and associated parts in a mild detergent with warm water. Do not use organic solvents.
  - Rinse completely in clean warm water.
  - Wipe the respirator with disinfectant wipes.
  - Air dry in a clean area.
  - Reassemble the respirator and replace any defective parts.
  - Place in a clean, dry plastic bag or other airtight container.

Note: The Program Administrator will ensure an adequate supply of appropriate cleaning and disinfection supplies. If supplies are low, employees should contact their supervisor, who will inform the Program Administrator.

### **Maintenance**

- Respirators are to be properly maintained at all times to ensure that they function properly and adequately protect the employee.
- 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.
- Repairs to regulators or alarms of atmosphere-supplying respirators will be conducted by the manufacturer or an authorized service technician.
- The following checklist will be used when inspecting respirators:
  - Facepiece:
    - ✓ cracks, tears, or holes
    - ✓ facemask distortion
    - ✓ cracked or loose lenses/faceshield
  - Valves:
    - ✓ residue or dirt
    - ✓ cracks or tears in valve material
  - Headstraps:
    - ✓ breaks or tears
    - ✓ broken buckles
  - Filters/Cartridges:
    - ✓ approval designation
    - ✓ gaskets
    - ✓ cracks or dents in housing
    - ✓ proper cartridge for hazard
  - Air Supply Systems:
    - ✓ breathing air quality/grade
    - ✓ condition of supply hoses

- ✓ hose connections
- ✓ settings on regulators and valves
- Employees are permitted to leave their work area and go to a designated area that is free of respiratory hazards when they need to wash their face and respirator facepiece to prevent any eye or skin irritation, or to replace the filter, cartridge or canister, or when they detect vapor or gas breakthrough or leakage in the facepiece or detect any other damage to the respirator or its components.

### **Change Schedules**

If any chemical cartridge/canister air purifying respirator (APR) is not equipped with an End-Of-Service-Life Indicator on the cartridge or canister, a “change-out schedule” for that cartridge/canister will be developed utilizing resources (software, etc.) provided by the cartridge/canister manufacturer. Employees wearing filtering facepieces/dust masks (such as N95s) or APRs with particulate filters (such as P100s) for protection against respirable silica and other particulates need to change their filtering facepieces/dust masks or the particulate filters on their respirators when they first begin to experience difficulty breathing (i.e., resistance) while wearing their masks.

### **Storage**

- Respirators must be stored in a clean, dry area, and in accord with the manufacturer's recommendations.
- Each employee will clean and inspect their own respirator in accord with the provisions of this program, and will store their respirator in a plastic bag.
- Each employee will have his/her name on the bag, and that bag will only be used to store that employee's respirator.
- The Program Administrator will store a supply of respirators and respirator components in their original manufacturer's packaging in the Health & Safety Department's equipment storage room.

### **Defective Respirators**

- Respirators that are defective or have defective parts must be taken out of service immediately.
- If, during an inspection, an employee discovers a defect in a respirator, he/she is to bring the defect to the attention of his or her supervisor.
- Supervisors will give all defective respirators to the Program Administrator.
- The Program Administrator will decide whether to:
  - Temporarily take the respirator out of service until it can be repaired.
  - Perform a simple fix on the spot such as replacing a head strap.
  - Dispose of the respirator due to an irreparable problem or defect.
- When a respirator is taken out of service, the respirator will be tagged out of service, and the employee will be given a replacement of the same make, model and size.
- If the employee is not given a replacement of the same make, model and size, then the employee must be fit tested.
- All tagged out-of-service respirators will be kept in the storage room adjacent to the Program Administrator's office.

## **Training**

- The Program Administrator will provide training to respirator users and their supervisors on the contents of the Company's 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.
- The training must be comprehensive, understandable and recur annually, and more often if necessary.
- As with any employee, supervisors must be trained prior to using a respirator in the workplace; they also should be trained prior to supervising workers who must wear respirators if the supervisors themselves do not use a respirator.
- Supervisors will provide the basic information on respirators in Appendix D of the Respiratory Protection Standard to employees who voluntarily wear respirators when not required by the employer to do so.
- Supervisors will ensure that each employee can demonstrate knowledge of at least the following:
  - 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, put on 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; and,
  - The general requirements of the Respiratory Protection Standard.
- Supervisors will ensure that employees will be retrained annually or as needed (e.g., if they change departments and need to use a different respirator). An employer who is able to demonstrate that a new employee has received training within the last 12 months that addresses the elements specified in paragraph (k)(1)(i) through (vii) of the Standard is not required to repeat such training provided that, as required by paragraph (k)(1), the employee can demonstrate knowledge of those element(s). Previous training not repeated initially by the employer must be provided no later than 12 months from the date of the previous training. Retraining shall be administered annually, and when the following situations occur:
  - Changes in the workplace or the type of respirator render previous training obsolete;
  - Inadequacies in the employee's knowledge or use of the respirator indicate that the worker has not retained the requisite understanding or skill; or,
  - Any other situation arises in which retraining appears necessary to ensure safe respirator use.
- The basic advisory information on respirators, as presented in Appendix D of the Respiratory Protection Standard, shall be provided by the employer in any written or oral format to employees who voluntarily wear respirators when such use is not required by this section or by the employer.

## **5. 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.
- Problems identified will be noted in an inspection log and corrected by the Program Administrator.
- These findings will be reported to Company management, and the report will list plans to correct deficiencies in the respirator program and target dates for implementing those corrections.

## **6. Documentation and Recordkeeping**

- A written copy of this program and the OSHA Standard is kept in the Program Administrator's office and is available to all employees who wish to review it.
- Also maintained in the Program Administrator's office are copies of training materials.
- Copies of fit test records will be maintained in the Program Administrator's office. These records will be updated as new fit tests are conducted.
- These records will be updated as new employees are trained and as existing employees receive refresher training.
- The Program Administrator will also maintain copies of the records for all employees covered under the respirator program (except medical records).
- The completed medical questionnaire and the PLHCP's documented findings are confidential and will remain secured with the Health & Safety Manager and/or Human Resources Manager. These managers will also retain the physician's written recommendation regarding each employee's ability to wear a respirator.