**RESPIRATORY PROTECTION**

Piedmont Service Group (PSG) requires that exposure to hazards in the workplace be maintained below acceptable limits. Where practical, engineering controls such as ventilation, confinement of the process or the substitution of a toxic substance, will be used to prevent occupational exposure to air contaminated with harmful dusts, mists, fumes, vapors or radioactive or toxic particles. NIOSH certified respirators will be required when the Safety Director has determined that the Permissible Exposure Limit (PEL) is exceeded, or it is anticipated that the limit will be exceeded. Respiratory protection, medical examinations and fit testing shall be provided to PSG employees at no cost. The Safety Director is the program administrator. They are responsible for the program to follow.

Regardless of respirator use, it is PSG’s policy not to allow employees to work in areas that have conditions Immediate Danger to Life and Health (IDLH).

**Respirator Selection**The selection of the respiratory equipment is based on the hazards the employee is exposed to, conditions of the exposure and the workers physical limitations.

PSG shall:

• Perform hazard identification,

• Select and provide respirators based on those hazards and factors affecting performance,

• Establish brands and models to be used, and

• Estimate exposures and contaminant information.

**Hazard Identification**

The most common respiratory hazards that will be encountered include:

• Dust

• Fumes

• Gases

• Chemical particles

• Oxygen deficiency

**Types of Respirators**

A respirator is any device worn by an individual to supply air or to reduce the concentration of a hazardous material in the air. There are generally two types of respirators:

**Air Purifying** respirators are divided into two types.

1) Particulate Filtering, which remove particles such as dust, mists, aerosols and fumes.

2) Vapor and Gas filtering, which remove vapors and gases you inhale.

Air purifying respirators can be worn when the oxygen is at least 19.5% and when the contaminant identity

and concentration is known. Each cartridge is designed for use against specific contaminants; therefore,

it is extremely important to know the contaminant present in the environment to make the appropriate

cartridge selection.



**Supplied Air** respirators provide a clean source of breathable air. They are used when work environments contain contaminants in concentrations such that air-purifying respirators cannot filter them out and in oxygen-deficient atmospheres. Supplied air respirators are also divided into two types:

1) The Self-Contained Breathing Apparatus (SCBA) where the air tank is carried by the user.

2) The supplied air respirator where the air supply is some distance from the user and is supplied to the face piece by an air-line hose.

**Medical Requirements**

Using a respirator may place a physiological burden on employees that varies with the type of respirator

worn, the job and workplace conditions in which the respirator is used, and the medical status of the

employee. PSG shall provide a medical evaluation to determine the employee's ability to use a respirator

*before* the employee is fit tested or required to use the respirator in the workplace. PSG may discontinue an

employee's medical evaluations when the employee is no longer required to use a respirator.

**Medical Evaluation Procedures**

PSG shall identify a Physician or other Licensed Health Care Professional (PLHCP) to perform medical evaluations using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire. The medical evaluation prior to fit-testing will be confidential, conducted during normal working hours, be at a convenient time and location, be understandable and the employee will be given a chance to discuss the results with the PLHCP.

**Supplemental Information for the PLHCP**

The following information must be provided to the PLHCP before the PLHCP makes a recommendation concerning an employee's ability to use a respirator:

• The type and weight of the respirator to be used by the employee.

• The duration and frequency of respirator use (including use for rescue and escape).

• The expected physical work effort.

• Additional protective clothing and equipment to be worn.

• Temperature and humidity extremes that may be encountered.

• A copy of PSG's Respiratory Protection Program.

**Medical Determination**

In determining the employee's ability to use a respirator, PSG shall obtain a written recommendation regarding the employee's ability to use the respirator from the PLHCP. The recommendation shall provide only the following information:

• Any limitations on respirator use related to the medical condition of the employee or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator.

• The need, if any, for follow-up medical evaluations.

• A statement that the PLHCP has provided the employee with a copy of the PLHCP's written

recommendation.

• All recommendations are to be sent to PSG's Safety Director.

**Additional Medical Evaluations**

At a minimum, PSG shall provide additional medical evaluations that comply with the requirements of this program if:

• An employee reports medical signs or symptoms that are related to ability to use a respirator.

• A PLHCP, supervisor or the respirator Program Administrator informs PSG that an employee needs to be re-evaluated.

• Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee re-evaluation.

• A change occurs in workplace conditions that increases the burden on you while using the respirator; for example your job becomes more physically demanding or you must wear additional protective clothing or you must work in extreme temperatures.

**Respirator Fit Testing**

Before an employee is required to use any respirator with a negative or positive pressure tight-fitting face piece, the employee must be fit tested with the same make, model, style and size of respirator that will be used.

PSG shall ensure that an employee using a tight-fitting face piece respirator is fit tested prior to initial use of the respirator, whenever a different respirator face piece (size, style, model or make) is used and at least annually thereafter.

The Safety Director or an approved Occupational Health Provider will provide a qualitative or quantitative fit test for each affected employee.

**Use, Maintenance and Care of Respirators**

This section requires all PSG employees to follow these guidelines for the use, cleaning, disinfecting, storage, inspection and repair of respirators used.

**Use**

• Items that can affect the face to mask seal are prohibited. This includes facial hair, glasses, clothing, etc.

• Each time a respirator is put on, a positive and negative pressure check shall be performed.

**Cleaning and Disinfecting Requirements**

PSG shall provide each respirator user with a respirator that is clean, sanitary and in good working order. PSG shall ensure that respirators are cleaned and disinfected using the procedures in this Respiratory Protection Program, or procedures recommended by the respirator manufacturer, provided that such procedures are of equivalent effectiveness. The respirators shall be cleaned and disinfected at the following intervals:

• Respirators issued for the exclusive use of an employee shall be cleaned and disinfected by the employee as often as necessary to be maintained in a sanitary condition.

• Respirators used in fit testing and training shall be cleaned and disinfected after each use by the Safety Director or designated person.

• Each individual who is assigned a cartridge respirator is responsible for seeing that the respirator is cleaned, inspected and properly stored.

**Cleaning Procedures**

• Remove filters, cartridges or canisters. Disassemble face pieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses or any components recommended by the manufacturer. Discard or repair any defective parts.

• Wash components in warm water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

• Rinse components thoroughly in clean, warm, preferably running water. Drain.

• When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in commercially available cleansers of equivalent disinfectant quality. Another alternative is to use wipes containing alcohol that are intended for use with respirators.

• Rinse components thoroughly in clean, warm, preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on face pieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

• Components should be hand-dried with a clean lint-free cloth or air dried. Reassemble face piece, replacing filters, cartridges, and canisters where necessary. Test the respirator to ensure that all components work properly.

**Storage and Inspection**

• Respiratory equipment shall be stored in a manner to protect it from damage, contamination, temperature extreme, etc.

• Respiratory equipment intended for emergency use shall be stored in an area that is readily accessible and be clearly marked.

PSG shall ensure that respirators are inspected as follows:

• All respirators used in routine situations shall be inspected by the employee before each use and during cleaning.

• A check by the employee 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.

• A check of elastomeric parts for pliability and signs of deterioration.

• Emergency respiratory equipment will be inspected at least monthly and before and after each use.

• Escape only respiratory equipment will be inspected before being carried into workplace.

**Repairs**

PSG shall ensure that respirators that fail an inspection or are otherwise found to be defective are immediately removed from service and are discarded or repaired or adjusted in accordance with the following procedures:

• Repairs or adjustments to respirators are to be made only by people appropriately trained to perform such operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator.

• Repairs shall be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed.

**Voluntary Use (Appendix D - 1910.134)**

If an employee chooses to voluntarily wear a respirator when not required by this Program (contaminants do not meet protection standards, odors, etc.) they will be advised of the following in their training:

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 employees.

If a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the employee. Sometimes, employees may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, of if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

• Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning, care and warnings regarding the respirator’s limitations.

• 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.

• Do not wear your respirator into atmospheres containing contaminants which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors or very small solid particles of fumes or smoke.

• Keep track of your respirator so that you do not mistakenly use someone else's respirator.

**Workplace Monitoring**

A program of monitoring potential employee exposure(s) has been implemented through the corporate health and safety department. Project personnel may also be assigned with the task of conducting air monitoring. Direct reading instruments will also be used in the characterization of potential exposures. All the data collected is used to determine the appropriateness of the respiratory equipment. Any exposure records will be kept indefinitely and be made available to the workers upon their requests in a timely manner.

**Recordkeeping**

PSG will establish and retain written information regarding medical evaluations, fit testing, and the respirator program. Records of medical evaluations required by this section (and all medical records) must be retained and made available in accordance with 29 CFR 1910.1020. PSG shall provide the employee with an opportunity to discuss the questionnaire and examination results with the PLHCP. Records will be treated confidentially and maintained on file in the PSG corporate office by the Safety Director. No sensitive or personal information will be shared with anyone.

Medical records will be kept the length of employment plus 30 years.

Medical records will be made available to the employee withing 15 working days of a request.

**Program Evaluation**

PSG shall conduct evaluations of the workplace as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective. PSG shall regularly consult employees required to use respirators to assess the employees' views on this program’s effectiveness and to identify any problems. Any problems that are identified during this assessment shall be corrected. Factors to be assessed and verified include, but are not limited to:

• Respirator fit (including the ability to use the respirator without interfering with effective workplace performance); appropriate respirator selection for the hazards to which the employee is exposed.

• Proper respirator use under the workplace conditions the employee encounters.

• Proper respirator maintenance.

**Training**

All employees will receive respirator training during their initial health and safety training class and on at least an annual basis, if required for their job classification. Training shall address employee knowledge of respirators, fit, use, limitations, emergency situations, wearing, fit checks, maintenance & storage, medical signs and symptoms of effective use and general requirements of the OSHA standard. The training must be provided before requiring the employee to use the respirator.

**Retraining**

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 employee has not retained the requisite understanding or skill.

• Any other situation arises in which retraining appears necessary to ensure safe respirator use.

**General Respirator Guidelines**

• Check the respirator for a good fit before each use. Positive and negative fit checks should be conducted.

• Remove facial hair that comes between the sealing surface of the face piece and the face or that interferes with valve function.

• If an employee wears corrective glasses or goggles or other personal protective equipment, the employee shall ensure that such equipment is worn in a manner that does not interfere with the seal of the face piece to the face.

• Check the respirator for deterioration before and after use. Do not use a defective respirator.

• Respirators that fail an inspection or are otherwise found to be defective will be removed from service to be discarded, repaired or adjusted in accordance with the manufacturer's specifications.

• Repairs or adjustments to respirators are to be made only by people appropriately trained to perform such operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator.

• Users shall not remove respirators while in a hazardous environment. Users shall remove themselves from the respirator use area to wash their face and respirators in efforts to prevent irritations to eyes/skin, if they detect breakthrough or leakage of gas/vapors or to replace the filter/cartridge/canister.

•Clean the respirator after each use, thoroughly dry it and place the cleaned respirator in a sealable plastic bag.

• All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture and damaging chemicals and they shall be packed or stored to prevent deformation of the face piece and exhalation valve.

• If an employee chooses to provide their own respirator, they should report this use to their supervisor so that he/she may determine that the respirator is adequate for use. Proper maintenance and sanitation of all respirators is the responsibility of the employee to whom it is assigned.