

## **P-28**

# **Respiratory Protection**



## **Policy**

The purpose of this Respiratory Protection Program is to coordinate the proper use and maintenance of respiratory protective equipment. These devices may be necessary to reduce employee exposure to airborne contaminants, allowing employees to work safely in potentially hazardous work environments. This respiratory protection procedure complies with OSHA 29 CFR 1910.134, Respiratory Protection. This procedure applies to all DGS employees that wear respiratory protection.

## I. Definitions

<u>Air-purifying respirator (APR)</u>: A respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.

<u>Atmosphere-supplying respirator</u>: A respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

<u>Canister or cartridge</u>: A container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container.

<u>Ceiling</u>: The exposure level that must not be exceeded during any part of the workday. If instantaneous monitoring is not feasible, the ceiling must be assessed as a 15-minute time-weighted average (TWA) exposure (unless otherwise specified).

**<u>Dust mask:</u>** See filtering face-piece.

<u>Emergency situation</u>: Any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of an airborne contaminant.

**Employee exposure**: Exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

<u>Filter or air purifying element</u>: A component used in respirators to remove solid or liquid aerosols from the inspired air.

<u>Filtering face-piece (dust mask)</u>: A negative pressure particulate respirator with a filter as an integral part of the face-piece or with the entire face-piece composed of the filtering medium (with no exhalation valves present).

**<u>Fit test</u>**: The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on



an individual. (See also Qualitative fit test (QLFT) and Quantitative fit test (QNFT).)

<u>High efficiency particulate air (HEPA) filter</u>: A filter that is at least 99.97% efficient in removing monodisperse particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100, and P100 filters.

**<u>Hood</u>**: A respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso.

<u>Immediately dangerous to life or health (IDLH)</u>: An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

<u>Negative pressure respirator (tight fitting</u>): A respirator in which the air pressure inside the face-piece is negative during inhalation with respect to the ambient air pressure outside the respirator.

<u>Oxygen deficient atmosphere</u>: An atmosphere with an oxygen content below 19.5%, by volume.

<u>Permissible exposure limit (PEL)</u>: The exposure limit set for exposure to a hazardous substance based on time-weighted average concentrations for a normal 8-hour workday and 40-hour work week.

<u>Peak (PEAK)</u>: The maximum concentration of a contaminant a worker may be exposed to. A "peak level" is defined as one "that can be applied to certain substances for brief designated periods and for a strictly limited number of times during the work shift, with a designated time interval between peaks." The 'peak' concept places a limit on the intermittent higher exposures.

<u>Physician or other licensed health care professional (PLHCP)</u>: An individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows them to independently provide, or be delegated the responsibility to provide, some or all of the health care services required by this protocol.

<u>Positive pressure respirator</u>: A respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

**Powered air-purifying respirator (PAPR)**: An air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

<u>Pressure demand respirator</u>: A positive pressure atmosphere-supplying respirator that admits breathing air to the face-piece when the positive pressure is reduced inside the face-piece by inhalation.

Qualitative fit test (QLFT): A pass/fail fit test to assess the adequacy of respirator fit that relies



on the individual's response to the test agent.

<u>Quantitative fit test (QNFT)</u>: An assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

**Recommended exposure limit (REL):** The recommended airborne concentration of a substance and the conditions under which it is believed to be protective of worker health over a working lifetime. This value constitutes a time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek.

**Respiratory inlet covering**: That portion of a respirator that forms the protective barrier between the user's respiratory tract and an air-purifying device or breathing air source, or both. It may be a face-piece, helmet, hood, suit, or a mouthpiece respirator with nose clamp.

<u>Self-contained breathing apparatus (SCBA)</u>: An atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

<u>Service life</u>: The period of time that a respirator, filter or sorbent, or other respiratory equipment provides adequate protection to the wearer.

**Short term exposure limit (STEL)**: Usually a 15-minute time-weighted average (TWA) exposure that should not be exceeded at any time during a workday, even if the 8-hour TWA is within the threshold limit value-TWA, permissible exposure limit-TWA, or recommended exposure limit-TWA.

<u>Supplied-air respirator (SAR) or airline respirator</u>: An atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.

<u>Threshold limit values (TLVs)</u>: The airborne concentration of a substance and the conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse health effects. This value constitutes a time-weighted average concentration for an 8-hour work period.

<u>Tight-fitting face-piece</u>: A respiratory inlet covering that forms a complete seal with the face.

<u>Time-weighted average (TWA)</u>: The exposure concentration for a conventional 8-hour (TLV, PEL) or up to a 10-hour (REL) workday and a 40-hour work week.

<u>User seal check</u>: An action conducted by the respirator user to determine if the respirator is properly seated to the face.

## II. <u>Guidance/Program</u>

#### A. PROGRAM RESPONSIBILITIES



#### 1. DGS Safety Coordinator Responsibility

The DGS Safety Coordinator is responsible for the following:

- Auditing of the Respiratory Protection Program to assure its continued functioning and effectiveness.
- Ensuring all elements of this procedure are implemented completely for the protection of all affected employees.
- Providing technical assistance to the managers and supervisors.
- Maintaining this program.
- Assisting area supervisors with their efforts to implement, maintain and enforce this program.
- Assisting in ensuring Respiratory Standard Operating Procedures are being implemented and enforced.
- Assisting in ensuring employees that are required to wear respirators have obtained medical evaluations, proper fit testing, and required training prior to wearing a respirator.
- Establishing medical screening programs/procedures for employees assigned to wear respiratory protective equipment.

#### 2. Manager/Supervisor Responsibility

Managers/Supervisors have the responsibility for:

- Ensuring all elements of this program are implemented completely for the protection of all affected employees.
- Ensuring employees required to wear respirators have obtained medical evaluations, proper fit testing and required training prior to wearing a respirator.
- Conducting audits at least semiannually to inspect each employee's respirator to assure that respirators are properly used, stored, maintained, and cleaned.
- Ensuring employees are provided with the appropriate respirator.
- Establishing training sessions regarding respiratory protective equipment for employees.
- Establishing a continuing program of cleaning and inspection of equipment.
- Designating proper storage areas for respiratory protective equipment.
- Establishing issuance and accounting procedures for use of respiratory protective equipment.
- Maintaining written information regarding medical respirator clearance, fit testing, and other required recordkeeping.
- Removing from service any damaged respiratory equipment for repair.
- Ensuring that Respirator Standard Operating Procedures are being implemented, maintained and enforced.

#### 3. Employee Responsibility

Employees are responsible for:

• Participating in respiratory protection training.



- Completing the medical evaluation questionnaire and obtaining a written medical evaluation before being fit tested.
- Participating in fit testing of respiratory equipment.
- Cleaning and disinfecting their respirator to keep it in good working condition and to prevent contamination.
- Storing the respirator as instructed, to prolong the life of the equipment and maximize its effectiveness.
- Following the procedures and guidelines outlined in this program, as they pertain to their defined duties.
- Wearing and utilizing respiratory protection as required.
- Using only the provided respiratory protective equipment provided by the commonwealth.
- Contacting their supervisor if there are any questions or concerns regarding procedures defined in the program.
- Notifying their Manager/Supervisor of any damaged respiratory equipment.
- Being clean shaven in all the necessary respirator seal points to ensure a proper fit and protection factor.

#### B. EVALUATION OF HAZARDS

The safety data sheets (SDS) and the Safety Coordinator can be consulted to determine if the use of a respirator is required. Additional exposure monitoring of employee groups and/or processes pertinent to DGS operations must be conducted at the direction of the Safety Coordinator for contaminant(s) as applicable.

The Safety Coordinator will follow the following steps to determine if respiratory protection is necessary:

- Review the chemical/hazardous material documentation to include the SDS.
- Review the federal/state guidelines for exposure levels associated with the anticipated activity.
- Determine if characterization air samples have been recorded for the specific activity.
- Recommend respirator type to the supervisors for the employee(s).

When chemical concentrations exceed the most conservative exposure values (PELs, RELs, or TLVs), administration or engineering controls will be used to reduce the exposure potential, whenever feasible. When such measures are not feasible or are in the process of being implemented, personal protective equipment, including respirators, will be used to protect employees.

#### C. RESPIRATOR SELECTION

Respiratory protective equipment is quite effective at preventing the inhalation of airborne contaminants, but only when properly selected and used. Proper selection is dependent on several factors that are included in an assessment of the work environment. Any number



of variables can impact the choice of respiratory protection and must be evaluated.

#### D. RESPIRATORY REQUIREMENTS FOR EMPLOYEES WITH FACIAL HAIR

If an employee who is required to wear a respirator cannot shave because of a medically documented reason or for religious reasons to be properly protected, the following must occur:

- The employee may shave only the area of the face where the face to face-piece seal must occur.
- Or a powered air-purifying respirator (PAPR) respirator can be used.

#### E. JOB-SPECIFIC RESPIRATOR USE

#### **Job Tasks Requiring Respiratory Protection and Impacted Personnel**

Only DGS Fire, Safety, Environmental personnel are authorized respiratory protection users.

DGS employees will only use respirators that were purchased by the Commonwealth of Pennsylvania.

#### Respiratory Protection Used By Employees When Not Required\*

\*It is NOT standard practice to provide voluntary respiratory protection; except for dust masks, without written direction from the employee's physician and evaluation by the Safety Coordinator.

Managers/Supervisors will provide dust masks at the request of employees even when they are not required, as long as such dust mask does not create a hazard itself. Managers/Supervisors will provide the information contained in 29 CFR 1910.134 Appendix D to employees requesting and using respirators on a voluntary basis.

#### **Identification of Filters, Cartridges and Canisters**

All filters, cartridges and canisters used must be labeled and color coded with the National Institute of Occupational Safety and Health (NIOSH) approval label. This label must not be removed and must remain legible.

#### **Cartridge Change Schedule**

There are many factors that can reduce cartridge and/or filter service life which include, but are not limited to:



- Duration of exposure:
  - Longer durations spent in the work area will require cartridges/filters to be changed more frequently.
- Ambient contamination concentration:
  - Employee exposure to greater contaminant concentrations in the work area will decrease cartridge/filter service life.
- Humidity in the air:
  - Most, but not all cartridges, have shorter life with increased humidity.
- Temperature:
  - Warmer air decreases absorptive capacity.
- Cartridge variability:
  - Some cartridges do last longer than others.
- Worker exertion level:
  - Work activity will alter cartridge service life.
- Presence of oil mist:
  - Respirator filter effectiveness varies with the presence of oil mist components.
- Multiple contaminants:
  - Other exposures can alter service life and cause release.
- Storage:
  - Partially used cartridges/filters have a different service life compared to new ones.

#### 1. Procedures for IDLH Atmospheres

An atmosphere is immediately dangerous to life and health (IDLH) when it poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere. An atmosphere considered IDLH may be any one or a combination of the following:

- Oxygen deficient or oxygen rich: Atmosphere with less than 19.5 % or greater than 23.5 % oxygen, by volume.
- **Explosive:** Atmosphere in excess of the Lower Explosive Limit (LEL).
- Toxic Atmosphere: Varies based on contaminant. However, any atmosphere with an airborne contaminant concentration above established exposure values, if the concentration or contaminant is unknown, or if the concentration (at a minimum)



is that of the NIOSH IDLH exposure values.

• If atmospheric concentrations consistently equal or exceed <u>NIOSH IDLH exposure values</u>.

The procedure for respirator use in IDLH atmospheres that are not confined spaces, is as follows:

- The Manager/Supervisor via guidelines established in this program must select the proper respirator.
  - A full-face piece pressure demand self-contained breathing apparatus (SCBA) certified by NIOSH for a minimum service life of 30 minutes or
  - A combination full face piece pressure demand supplied-air respirator (SAR) with auxiliary self-contained escape air supply.
- At least one trained individual must serve as a standby person and remain outside
  of the hazardous atmosphere. The standby person must be equipped with the same
  personal protective equipment. The entrant, for rescue purposes and to avoid entry
  rescue, should wear a harness and lanyard.
- Communication must be always maintained (voice, visual, or signal line) between all individuals present.
- Proper rescue equipment must be in place in case of an emergency; therefore, nonentry rescue must be attempted prior to entry rescue. However, if entry is necessary, the standby person must notify the Manager/Supervisor prior to entering the space. In turn, the informed individual will arrange to have emergency assistance sent to the site. The standby person will then wait for back up personnel before any entry rescue is attempted.

Please refer to the Confined Space Program within the DGS Accident and Illness Prevention Program for more information.

#### F. FIT TESTING PROCEDURES

Fit testing is required under the following circumstances:

- Prior to initial use of a negative or positive pressure tight-fitting respirator and annually thereafter.
- Whenever a different respirator face-piece is used.
- Whenever the employee reports, Safety coordinator or the PLHCP makes a visual observation of, changes in the employee's physical condition that could affect fit, e.g. facial scarring, dental changes, cosmetic surgery, or an obvious change in



body weight, etc.

DGS employees will be fit tested with the same make, model, style, and size negative or positive pressure tight fitting face-piece prior to any use in the workplace. Fit tests must be administered using Occupational Safety and Health Administration (OSHA) accepted qualitative fit-test (QLFT) or quantitative fit-test (QNFT) protocols and procedures, as contained in OSHA's Respiratory Protection Standard, 29 CFR 1910.134 Appendix A. Quantitative fit testing must be used if exposure monitoring results are 5 times the OSHA PEL for any contaminant.

Fit testing protocols that are acceptable are:

- QLFT Protocols:
  - Bitrex
  - Irritant smoke
  - Saccharin
- QNFT Protocols:
  - Condensation nuclei counter

The following procedures must be followed by DGS employees when performing a fit test with bitrex or saccharin:

- An N95 rated particulate filter must be used.
- These filters can be attached to the face-piece during the fit test, and removed immediately following the fit test and replaced with the cartridge type that will be used when in the workplace, if different (i.e. organic vapor acid gas cartridge).
- N95 rated particulate filters may then be re-used during subsequent fit tests.
  Therefore, each facility must buy N95 rated particulate filters for fit testing
  purposes only (if bitrex or saccharin is used), which may be re-used for
  numerous fit tests.

The following procedures must be followed by DGS employees when performing a fit test with irritant smoke (stannic chloride):

- Whenever irritant smoke (stannic) is used to perform a qualitative fit test, a HEPA or P100 series filter must be used.
- These filters can be attached to the facepiece during the fit test and removed immediately following the fit test and replaced with the cartridge type that will be used when in the workplace, if different (i.e. organic vapor acid gas cartridge).
- HEPA or P100 series filters may then be reused during subsequent fit tests. Therefore, each facility must buy HEPA or P100 rated particulate



filters for fit testing purposes only (if irritant smoke is used), which may be re-used for numerous fit tests.

• A hood may not be used when performing a fit test using irritant smoke.

All other components of 1910.134 Appendix A. must be adhered to when performing any specific fit test (i.e. bitrex, saccharin or irritant smoke).

Employees must perform a user seal check (negative and positive pressure test) each time they don the respirator using the procedures in the Donning and Use section of this program or those procedures described in 1910.134 Appendix A.

Facial hair that lies along the sealing area of a respirator, such as beards, sideburns, moustaches, or more than 24 hours of stubble, are not permitted on employees who are required to wear respirators that rely on a tight-fitting face-piece to face seal to achieve maximum protection.

#### G. RESPIRATOR USE

#### **Dust Masks**

When performing tasks such as grinding and buffing, which may result in the generation of particles or shavings that are within the most conservative exposure values for total dust and respirable dust, a dust mask may be used if requested by an employee. Dust masks must not be used for protection against concentrations that exceed the most conservative exposure guidelines, unless so directed by the Safety Coordinator.

#### **Half-Face Respirators**

Only those employees that have undergone medical assessment, fit testing, training and have been authorized to wear a half-face respirator can wear one.

#### **Full-Face Respirators** (APRs and PAPRs)

Only those employees that have undergone medical assessment, fit testing, training and have been authorized to wear a full-face respirator can wear one.

#### **Self-Contained Breathing Apparatus** (SCBA)

Only those employees that have undergone medical assessment, fit testing, training and have been authorized to wear a SCBA respirator can wear one.

#### Limitations for Dust Mask, Half-Face and Full-Face APRs and PAPRs



The following list explains the limitations of dust mask, half-face and full-face respirators:

- They are not designed for use in atmospheres containing less than 19.5% oxygen, by volume.
- They do not supply oxygen. They should only be used in adequately ventilated areas containing sufficient oxygen to support life. Employees should immediately leave the area they are working in if:
  - Breathing becomes difficult.
  - Dizziness or other distress occurs.
- They are not designed for atmospheres where concentrations of contaminants IDLH. They should only be used in accordance with instructions and with regard to the limitations pertaining to that type of respirator.
- They should never be altered or modified.

Half-face and full-face APR or PAPR must be equipped with cartridges carefully selected for the specific contaminant(s) that will be encountered. Consult the Safety Coordinator for the correct cartridge to use.

#### H. RESPIRATOR MAINTENANCE

#### 1. Cleaning

Individually assigned respirators must be thoroughly cleaned and disinfected as often as necessary to remain sanitary based on duration of use and task specific conditions. Respirators may not be shared. The cleaning and disinfecting procedure that DGS will use is as follows:

- Remove filters, cartridges, or canisters (do not expose to moisture).
   Disassemble face-piece by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer.
- Wash components in warm (about 110 degrees F) clean water with a mild detergent sanitizing solution a cleaner recommended by the manufacturer or a Hypochlorite solution (one milliliter of laundry bleach to one liter of water). A stiff brush (not wire) may be used to remove dirt.
- Rinse in warm (about 110 degrees F) clean water. This clean water rinse is particularly important because traces of sanitizer left on the mask can cause skin irritation and/or dermatitis.
- Dry on a rack (inside of a locker) or hang from a clothesline. In either case, position the respirator so that the face-piece is in a non-distorted position. Components may be hand-dried with a clean lint-free cloth.
- When not in use, respiratory equipment must be placed in sealable (zip lock or otherwise closeable) plastic bags and stored in a single layer in a non-



distorted position. The respirator must be dry before being placed into the plastic bag.

The sanitizer must only be used in the recommended dilution because a more concentrated dilution could cause corrosion. Cleaning and sanitizing at the recommended 110 degrees F temperature will avoid overheating and distortion of parts and thus prevent unnecessary replacement.

#### **Storage**

Employees will store their respirators in a secure location (i.e. personal locker) in a clean respirator storage bag. Employees must ensure their respirator is protected from:

- Damage and contamination.
- Dust, sunlight and extreme temperatures and moisture.
- Damaging chemicals.
- Deformation of the face-piece and exhalation valve.

#### **Inspection**

Respirators must be inspected before each use and during cleaning.

#### **Dust Masks**

Dust masks must be inspected before each use. Any dust mask that shows excessive wear or appears defective in any way must be disposed of properly and replaced. Dust masks must be disposed of at the end of the work shift or any time breathing becomes difficult.

#### Air-purifying respirators (APR) (half-face and full-face)

Half-face and full-face respirators must be inspected before each use. Defective respiratory equipment must not be used until it is properly repaired or replaced.

#### Self-Contained Breathing Apparatus (SCBAs)

SCBAs will be inspected prior to each use. Air and oxygen cylinders must be maintained in a fully charged state and must be recharged when pressure falls to 90 % of the manufacturer's recommended pressure level.

#### 2. Repair

Only the manufacturer or individual trained by the manufacturer may repair defective respirators. *Respirator parts from different manufacturers are not interchangeable*. The NIOSH approval will be invalid if an air hose, gasket



or any other part has been replaced from a different brand of respirator.

#### I. PROGRAM EVALUATION

Annually the Safety Coordinator will consult their employees required to use respirators to assess the employees' view on the program effectiveness, to identify any problems and to ensure respirators are being used properly. If there are any problems identified during this assessment, they will be corrected in a timely manner.

The Safety Coordinator will annually evaluate this written program to identify and correct deficiencies. The annual evaluation will include, but not be limited to, the following:

- Compliance with any new OSHA changes to the respirator standard.
- Adequacy of the written respirator program.
- An assessment of the respirator selection criteria, e.g., are the respirators being used for the appropriate hazards?
- Are the respirators being used, stored, and maintained properly?
- Adequacy of training program.
- Adequacy of recordkeeping.

#### J. PROGRAM REVIEW AND UPDATE

The Respiratory Protection Program will be reviewed and/or updated under these circumstances:

- Annually.
- Following a drill/exercise or actual event where it has been determined that established procedures were not effective or were inaccurate.
- Whenever new inhalation hazards are introduced into the work area that may affect the types of respiratory protection used.
- Whenever the Commonwealth of Pennsylvania require additional provisions to remain in compliance with new or revised standards.

## III. Training

#### A. Initial

As part of the Respiratory Protection Program, employees who wear respiratory protective equipment will be given initial training based on the procedures outlined in this written procedure. Each employee who is required to use an airpurifying respirator (APR), powered air-purifying respirator (PAPR), supplied air respirator (SAR) or self-contained breathing apparatus (SCBA) will receive the following information and training relating to the Respiratory Protection Procedure:



#### Information

Employees must be informed of:

- Their individual roles and responsibilities under this program.
- The specific nature of the hazards for which respiratory protection is needed.
- The function of the respiratory protection equipment to be used, including the limitations.
- The identification of medical signs and symptoms that may impact the employee's ability to safely use a respirator.
- The procedures for maintenance and storage of the respirator.
- The health implications of not wearing respiratory protective equipment in the proper manner.
- How improper fit, usage, and/or maintenance can compromise the protective effect of the respirator.

Employee training must include the following at a minimum:

- The correct way to put on, remove and wear a respirator, and the conditions which impact the respirator to face seal including: temple bars of eyeglasses, dentures, facial hair, facial characteristics, and safety equipment, e.g., chemical goggles, hard hats, etc.
- The proper way to seal check the respirator (positive pressure and negative pressure seal checks).
- How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions.
- The proper way to inspect, clean, and maintain the equipment.

Each employee that requests a dust mask when performing tasks such as grinding, buffing or working in the folder of a press, which may result in the generation of particles or shavings that do not exceed OSHA PEL, will receive the following information and training:

#### Information

Employees must be informed of:

- The function of the dust mask to be used, including the limitations.
- How improper fit, usage and/or maintenance can compromise the protective effect of the dust mask.
- Proper disposal.

#### Training



Employee training must include the following at a minimum:

- The correct way to put on, remove and wear a respirator, and the conditions which impact the respirator to face seal including: temple bars of eyeglasses, dentures, facial hair, facial characteristics, and safety equipment (chemical goggles and hard hats).
- The proper way to inspect and maintain the respirator.

#### B. Refresher

As part of the Respiratory Protection Program, refresher training will be conducted under the following circumstances:

- Annually after initial assignment.
- Whenever changes in the workplace render previous training obsolete.
- When inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill; or when any other situations arise in which retraining appears necessary to ensure safe respirator use.
- When the type(s) of respiratory protection used by employee changes.
- Whenever this program changes.

Note: Refresher training should incorporate all the topics discussed during the initial training.

## IV. <u>Testing/Monitoring</u>

#### A. Health and Safety

Employee Medical

Medical assessments will be conducted by a physician or licensed health care professional (PLHCP) 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. The Safety Coordinator shall be informed if any employee is not medically fit to wear a respirator. Such employees shall be restricted from working on DGS Environmental work.

#### **Initial Medical Assessment**

An initial medical assessment will be conducted by a PLHCP at no cost to the employee. This assessment will be performed using a medical questionnaire <u>and</u> an initial medical examination that obtains the same information as the medical questionnaire. Only those individuals medically capable of wearing respiratory protective equipment, as determined by a PLHCP, can use respirators. Such an assessment may include any combination of the following, based on the



determination of the acting PLHCP:

- Medical questionnaire, including complete medical history.
- Physical dimensions.
- Blood pressure and pulse measurement.
- Pulmonary Function Test.
- Chest X-ray, conducted at the discretion of the physician.
- Sputum cytology, conducted at the discretion of the physician.

The medical assessment and questionnaire will be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. Records of medical assessments will be maintained and made available in accordance with 29 CFR 1910.1020 – Access to Employee Exposure and Medical Records.

#### **Supplemental Information for the PLHCP**

The Safety Coordinator or Manager/Supervisor will provide the PLHCP with the necessary information to assist in assessing an employee's ability to wear a respirator.

#### **Follow-up Medical Assessments**

Employees must obtain a follow-up medical assessment if the PLHCP deems necessary.

#### **Additional Medical Assessments**

Additional medical assessments are required when:

- An employee reports medical signs or symptoms that are related to their inability to use a respirator.
- A PLHCP, Manager/Supervisor, or Safety Coordinator informs an employee that they need to be re-evaluated.
- An abnormal observation is made during fit testing, e.g. difficulty breathing.
- Changes occur in the workplace conditions, e.g. physical work effort, protective clothing, and temperature, that may result in a substantial increase in the physiological burden placed on an employee.
- Noticeable change(s), (e.g., weight gain) in the physical condition of the employee required to wear a respirator.

## V. <u>Contractors</u>



Contractors will be permitted to wear respiratory protection only if:

 The contractor has their own respiratory protection program which is at least as stringent as the DGS Respiratory Protection Program (as determined by DGS Safety Coordinator); Their employees have been trained to the provisions of the respiratory standard, medically evaluated and fit-tested.

## VI. <u>Recordkeeping/Documentation</u>

The following records will be maintained:

- Records of medical evaluations (must be made available per <u>29 CFR</u> <u>1910.1020 Access to Employee Exposure and Medical Records</u>) will be maintained for the employee's duration of employment, plus an additional 30 years after employment.
- Records of most current fit tests for a minimum of one year from the date the fit test was completed.
- Documented air sampling results for those tasks which require the use of a respirator must be retained indefinitely.
- Documented air sampling results for any tasks sampled which do not require a respirator must be retained indefinitely.
- Documentation of low volume pump and rotameter calibrations must be maintained indefinitely.
- Employee training records and certifications must be retained in the employee's training file for the duration of employment in any position requiring such training.
- The most recent copy of this written program.

## VII. Reporting

All employees must be notified, if requested, of any results from air sampling that was conducted.