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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 29CFR1910-134, Respiratory Protection. This procedure affects all DGS employees that wear respiratory protection.

I. References

- **A.** OSHA 29 CFR Subpart I 1910.134 – Respiratory Protection, and Appendices
- **B.** 3M Respirator Service Life Program
- **C.** American National Standard Practice for Respiratory Protection Z88.2-1980
- **D.** 1990 NIOSH Pocket Guide
- **E.** 1998 ACGIH Guide to Occupational Exposure Values
- **F.** OSHA IDLH Memorandum – May 21, 1996

II. Definitions

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

Assigned protection factor (APF): The overall protection afforded by a certain type of respirator as defined by the ratio of the concentration of contaminant outside a face mask or hood to that inside the mask while in a contaminated atmosphere.

Atmosphere-supplying respirator: 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.

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

Ceiling: 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 TWA exposure (unless otherwise specified).

Dust Mask: See filtering face-piece

Emergency situation: 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.

End-of-service-life indicator (ESLI): A system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective.

Escape-only respirator: A respirator intended to be used only for emergency escape from the contaminated environment.

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

Filtering face-piece (dust mask): 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).

Fit factor: A quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator.

Fit test: 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.)

Helmet: A rigid respiratory inlet covering that also provides head protection against impact and penetration.

High efficiency particulate air (HEPA) filter: 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.

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

Immediately dangerous to life or health (IDLH): 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.

Maximum use concentration (MUC): The highest concentration of a contaminant that a specified respirator and filter cartridge can provide adequate protection against.

Negative pressure respirator (tight fitting): 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.

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

Permissible Exposure Limit (PEL): The exposure limit set for exposure to a hazardous substance and enforced by OSHA as a legal standard. Based on time-weighted average concentrations for a normal 8 hour workday and 40 hour work week.

Peak (PEAK): The OSHA standard that sets 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

Physician or other licensed health care professional (PLHCP): An individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required by 1910.134.

Positive pressure respirator: 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.

Pressure demand respirator: 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.

Quantitative fit test (QNFT): 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 is not enforceable by OSHA and 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.

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

Service life: means 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 TLV-TWA, PEL-TWA, or REL-TWA.

Supplied-air respirator (SAR) or airline respirator: Means an atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.

Threshold Limit Values (TLVs): 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 and can be enforceable by OSHA.

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

Time-Weighted Average (TWA): The exposure concentration for a conventional 8-hour (TLV, PEL) or up to a 10-hour (REL) workday and a 40-hour work week.

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

III. Guidance/Program

A. PROGRAM RESPONSIBILITIES

1. Departmental Safety Coordinator Responsibility

The Departmental Safety Coordinator is responsible for the following:

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

2. Manager/Supervisor Responsibility

Managers/Supervisors have the responsibility to:

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

3. Employee Responsibility

Employees have the responsibility to:

- Participate in respiratory protection training;
- Complete the medical evaluation questionnaire and obtain a written medical evaluation before being fit tested;
- Participate in fit testing of respiratory equipment;
- Clean and disinfect their respirator to keep it in good working condition and to prevent contamination;
- Store the respirator as instructed, to prolong the life of the equipment and maximize its effectiveness;
- Follow the procedures and guidelines outlined in this program, as they pertain to their defined duties;
- Properly wear and use the respiratory protection as required
- Use only the provided respiratory protective equipment that is provided by the commonwealth
- Contact their Supervisor if there are any questions or concerns in regards to procedures defined in the program.
- Notify Manager/Supervisor of any damaged respiratory equipment.
- When required to wear a respirator, the employee must shave (within 24 hours) all of the necessary respirator seal points to ensure a proper fit and protection factor.

B. EVALUATION OF HAZARDS

The Material Safety Data Sheets (MSDS) 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:

1. Review the Chemical/hazardous material documentation to include the MSDS,
2. Review the federal/state guidelines for exposure levels associated with the anticipated activity
3. Determine if characterization air samples have been recorded for the specific activity
4. Recommend respirator type to the supervisors for the employee(s).

Note: 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

a number of factors that are included in an assessment of the work environment. Any number of variables can affect the choice of respiratory protection and must be evaluated in writing for each identified hazard using **Attachment A – Respirator Selection Form.** Each Respirator Selection Form must be retained with the Safety Coordinator and updated as outlined in this procedure.

General Services' Employees will only use respiratory equipment that was purchased by the Commonwealth of Pennsylvania.

D. RESPIRATORY REQUIREMENTS FOR EMPLOYEES WITH FACIAL HAIR

If an employee who is required to wear a respirator can not 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. OTHER DEPARTMENTS

1. Job Tasks Requiring Respiratory Protection and Affected Personnel

Personal air sampling may identify additional tasks that require respiratory protection. The table located in **Attachment C** lists those job tasks requiring respiratory protection, affected personnel, chemical(s) of concern, respirator and respirator cartridge type.

2. Respiratory Protection for Exposure to Dust

Past results of personal air sampling have identified areas where total particulate levels are well within OSHA PELs, e.g., 15 mg/m3 total dust over an 8-hour TWA. However, employees may request a dust mask for general nuisance dust. **Attachment D** indicates job tasks, the personnel likely to perform those job tasks, and the type of disposable dust mask that can be used.

3. Respiratory Protection Used By Employees When Not Required*

It is NOT standard practice to provide voluntary respiratory protection with the exception of dust mask respirators without written direction from the employee's physician and evaluation by the Safety Coordinator.
Supervisors/Managers will provide dust mask respirators at the request of employees even when they are not required, as long as such respirator does not create a hazard itself. Supervisors/Managers will provide the information contained in 29 CFR 1910.134 to employees requesting and using respirators on a voluntary basis.

4. <u>Identification of Filters, Cartridges and Canisters</u>

All filters, cartridges and canisters used must be labeled and color coded with the NIOSH approval label. This label must not be removed and must remain legible.

5. <u>Cartridge Change Schedule</u>

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.

Based on the identified hazards and typical environmental conditions, a filter cartridge change-out schedule has been developed and attached to this program in **Attachment E**. Methods for creating additional filter change-out schedules are also outlined in this

attachment. Based on the type of the respirator and filter cartridges used, the manufacturer must be contacted in order to complete an accurate filter cartridge change-out schedule. A list of filter cartridge and respirator manufacturers is attached as **Attachment F**. The plant specific filter cartridge change-out schedules that are created will be placed into **Attachment F**.

6. 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 establish exposure values, if the concentration or contaminant is unknown, or if the concentration (at a minimum) is that of the 1990 NIOSH IDLH exposure value.
- If atmospheric concentrations consistently equal or exceed 1990 NIOSH IDLH exposure values.

The procedure for respirator use in Immediately Dangerous to Life and Health (IDLH) atmospheres that are not confined spaces, is as follows:

- The Supervisor/Manager 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 as the entrant, including a supplied-air respirator with a 5-minute emergency escape cylinder (unless a SCBA is used). The entrant, for rescue purposes and to avoid entry rescue, should wear a harness and lanyard.
  - Communication must be maintained at all times (voice, visual, or signal line) between all individuals present.
  - Proper rescue equipment must be in place in case of an emergency; therefore, non-entry rescue must be attempted prior to entry rescue. However, if entry is necessary, the standby person must notify the Supervisor/Manager 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 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, or 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 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. ***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

- QNFT Protocols:
  ⇒ Condensation Nuclei Counter (PortaCount)

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

- Whenever Bitrex is used to perform a qualitative fit test, 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 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 Chloride) 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 must be adhered to when performing any specific fit test (i.e. Bitrex 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. Procedures recommended by respirator manufacturers will only be used if the Safety coordinator can determine that they are as effective as those in 1910.134.

All fit tests administered to employees will be documented on **Attachment G - Qualitative/Quantitative Fit Testing Form.** The form will include the following information:

- The name or identification of the employee tested
- The type of fit test performed
- Specific make, model, style, and size of respirator tested
- Date of test
- The pass/fail results for QLFTs

Note: **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

Donning and doffing instructions for each respirator type identified below are located in **Attachment H** of this program.

1. 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 Committee. Any employee who wants to wear a dust mask must first read and understand 1910.134 prior to use in the workplace.

2. 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.

3. 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.

4. 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.

5. 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 are immediately dangerous to life and health (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.

Note: 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 supervisor/manager or Safety consultant 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.

***Sanitizing solution is harmful or fatal if swallowed and may cause burns or damage if contact is made with the eyes. Prolonged skin contact should also be avoided. Wear appropriate PPE, i.e. chemical gloves. Refer to the Commonwealth of Pennsylvania PPE Program HS 270 for more information.**

Respirator cleaning and sanitizing procedures described in 1910.134 will be acceptable. Procedures recommended by respirator manufacturers will only be used if the Safety coordinator can determine that they are as effective as those of 1910.134.

2. 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.

Emergency respirators will be kept accessible and stored in compartments that are clearly marked as containing emergency respirators.

3. Inspection

Respirators must be inspected before each use and during cleaning.

Note: Inspection procedures for each respirator type identified below are located in **Attachment I** of this program.

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.

Emergency Respirators
- Emergency respirators will be inspected monthly in accordance with manufacturer recommendations. Supervisors/Managers will document the monthly inspection on **Attachment J - Respirator Inspection Form.**

Self-Contained Breathing Apparatus (SCBAs)
Self-Contained Breathing Apparatuses will be inspected weekly. 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. The Supervisors/Managers will document the weekly inspection on **Attachment K - Self-Contained Breathing Apparatuses and Cylinder Inspection Form.**

4. 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

Every six months the Supervisors/Managers 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. **Attachment M - Employee Program Evaluation Questionnaire** will be used to document the evaluation. Factors to be assessed include, but are not limited to:

- The employee's view on the program effectiveness.
- The fit of their personal respirator (problems, concerns, questions).
- The employee's knowledge of respirator selection for the hazard(s) to which they are exposed.
- The employee's knowledge of the proper respirator use under the workplace conditions that they may encounter.
- The employee's knowledge of proper respirator maintenance.

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 record-keeping.

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 Federal OSHA, State OSHA, and/or Commonwealth of Pennsylvania require additional provisions to remain in compliance with new or revised standards.

IV. 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 air-purifying 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 affect 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.

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 affect the mask 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 Permissible Exposure Limits, will receive the following information and training:

Information
Employees must be informed of:

- The function of the respiratory protection equipment to be used, including the limitations.
- The procedures for maintenance and storage of the respirator.
- How improper fit, usage and/or maintenance can compromise the protective effect of the respirator.
- 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 affect the mask 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.
- Whenever **Employee Program Evaluation Questionnaires** (Attachment M) identify inadequacies in an affected employee's knowledge of their responsibilities defined in this program.
- When the type(s) of respiratory protection used by employee changes.
- Whenever this program changes.

Note: Refresher training should incorporate all of the topics discussed during the initial training. Emphasis should be made on any inadequacies/concerns which are noted on the Employee Program Evaluation Questionnaire.

V. Testing/Monitoring

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.

1. Initial Medical Assessment

An initial medical assessment will be conducted by a physician or licensed health care professional (PLHCP) at no cost to the employee. This assessment will be performed using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire (***the acting PLHCP will make the determination as to which method will be used***). **(Attachment N)** 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.

2. Supplemental Information for the PLHCP

The Safety Coordinator or Supervisor/Manager will provide the PLHCP with **Attachment N - Respirator Use Information for PLHCP** to assist in assessing an employee's ability to wear a respirator (to be provided by the Safety Committee):

- 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.
- Personal protective clothing and equipment to be worn.
- Temperature and humidity extremes that may be encountered.

The Commonwealth of Pennsylvania will provide existing and replaced PLHCPs with a copy of this written respiratory procedure and a copy of section CFR 1910.134(e).

3. Follow-up Medical Assessments

Employees must obtain a follow-up medical assessment if:

- A positive response to any question among questions 1 through 8 in Section 2, Part A of Attachment N of 1910.134 medical questionnaire.
- The initial medical assessment demonstrates the need for a follow-up medical assessment.

4. 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, supervisor, or Safety Coordinator informs an employee that they need to be re-evaluated.
- Comments on **Attachment L – Employee Program Evaluation Questionnaire** indicate a need for re-evaluation.
- 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.

VI. Contractors

Temporary (contingent) employees and contractors will be permitted to wear respiratory protection only if :

- The temporary agency or contractor has their own respiratory protection program which is at least as stringent as the DGS Respiratory Protection Program (as determined by on-site EHS); their employees have been trained to the provisions of the respiratory standard,

medically evaluated and fit-tested (all appropriate documentation must be provided to DGS prior to any respiratory use).

Temporary (contingent) employees will be permitted to wear a dust mask, which will be provided by the agency. Any employee who wants to wear a dust mask must read and understand 1910.134.

VII. Recordkeeping/Documentation

The following records will be maintained:

- Records of medical evaluations (must be made available per 29 CFR 1910.1020 – Access to Employee Exposure and Medical Records) 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.

VIII. Reporting

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

Attachment A

Respirator Selection Form

(Note: If more than one employee performs this task, list all employees on a separate sheet for record-keeping purposes)

Employee Name(s): _____
Department: _____
Employee #(s): _____
Supervisor: _____
Date: _____

Hazard Evaluation

1. Chemical Contaminant(s):_____
2. What are the occupational exposure values for the contaminant:

OSHA PELs			NIOSH RELs		ACGIH TLVs	
CONTAM-INANT	**TWA**	**STEL/CEIL**	**TWA**	**STEL/CEIL**	**TWA**	**STEL/CEIL**

3. Is air sampling necessary ☐ YES ☐ NO
   If no, proceed to Nature of Task.

4. What where the sampling results:

Note: Air sampling may not be necessary because of handling procedures, nature of the task and many other variables. The Program Administer will use professional judgment when determining if air sampling is necessary.

OSHA PELs			NIOSH RELS		ACGIH TLV'S	
CONTAM-INANT	**TWA**	**STEL/CEIL**	**TWA**	**STEL/CEIL**	**TWA**	**STEL/CEIL**

5. Did sampling results exceed the most conservative level? ☐ Yes ☐ No

6. Is an IDLH level defined for this contaminant? ☐ Yes ☐ No

7. Did any peak levels exceed this IDLH level (if applicable)? ☐ Yes ☐ No

Nature of the Task

1. How long will the worker be exposed to each hazard: _____

2. Please describe work task: _____

_____

_____

Characteristics of the Work Area

1. Please describe ventilation: _____

2. Is it a confined space? ☐ Yes ☐ No

3. What will be the air temperature: _____

4. Could a mixture of hazards occur (describe): _____

_____

5. Describe the work process: _____

_____

6. Are chemicals being combined, heated, treated or applied? ☐ Yes ☐ No
7. What is the physical nature of the contaminant?

☐ Vapor ☐ Dust ☐ Liquid ☐ Gas

8. Are there any eye hazards associated with the contaminant (describe)?_____

_____

Recommended Respirator and Cartridge

Respirator Type	Filter Cartridge Type

Reviewed and Approved by: _____

Supervisor

Attachment B

Job Tasks Requiring Respiratory Protection and Affected Personnel

Activities Requiring Mandatory Respiratory Protection

Bureau	Affected Personnel	Job Task Description	Contaminant	Respirator and Respirator Cartridge Type
BFM	Special projects crew	Removal of ACM	Asbestos Particulates	MSA half face-HEPA
BFM	Special Projects Crew	Abatement of Mold	Mold particulates	MSA half face-HEPA
BFM	Special Projects crew	Removal of Lead paint	Lead dust	MSA half face-
BFM	Grounds Crew	Spraying of pesticides	Pesticide	
BFM	Painters	Spray painting	Organic vapors	Organic vapor cartridge
BPW	inspectors	inspections	Asbestos	

N**ote:**

*Under no circumstances shall the maximum use concentration listed on the respirator be exceeded.

*All respirators must be NIOSH approved.

*Additional PPE (hooded Nomex, harness, and safety lanyard) retrieval equipment, standby personnel and adherence to procedures pertaining to IDLH atmospheres may be necessary.

*For confine space entry, the Company's Confined Space Entry Procedure must be strictly followed.

*APR - Air-purifying respirator.

*PAPR - Powered air-purifying respirator.

*SCBA - Self-contained breathing apparatus.

*SAR - Supplied-air respirator.

As a guide, the following table provides information pertaining to the required respiratory protection based on toluene (Rescol) concentration levels:

Toluene Concentration Level	Respirator Type	Cartridge/Filter
> 1000 ppm but < 1999	Half-mask or full-face-piece air-purifying respirator (APR).	Organic vapor cartridge. (color assigned is black)
>1000 ppm but < 5000 ppm for potential exposure periods less than 2 **minutes (applies to polishing or other similar press activities only)**	Full-face-piece air-purifying respirator (APR).	Organic vapor cartridge. (color assigned is black)
> 1999 ppm for periods of potential exposure exceeding 2 minutes **(applies to polishing or other similar press activities only)**	Self-contained breathing apparatus (SCBA in pressure-demand mode or a combination full-face-piece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.	N/A

Attachment D

Anticipated Voluntary Dust Mask Activities

Department	Affected Personnel	Job Task Description	Type of Disposable Respirator
Maintenance Operations	Machinists, Hoist pool, Electricians, Vibration Mechanics, Safety Technicians and Electronic Technicians	Grinding and buffing. (general nuisance dust, below PELs)	Disposable Respirator (N, R, or P 95, 99 or 100)
Maintenance Operations	Carpenters	Sanding, cutting	Disposable Respirator (N, R, or P 95, 99 or 100)
Building Operations	Building maintenance (A)	Lawn mowing and Sweeping. (general nuisance dust, below PELs)	Disposable Respirator (N, R, or P 95, 99 or 100)
Building Operation	Building Maintenance (A)	Grinding and buffing. (general nuisance dust, below PELs)	Disposable Respirator (N, R, or P 95, 99 or 100)

Attachment D (Continued)

Hand out

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 OSHA standards. If your employer provides respirators for your voluntary use 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 respirators 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, vapors, 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.

Attachment E

Example Filter Cartridge Change-Out Schedule
and
Methods for Creating a Filter Change-Out Schedule

Organic Vapor Cartridges

The Commonwealth of Pennsylvania primarily uses 3M No. 7251 organic vapor cartridges for their APRs and PAPRs to protect against Toluene. These organic vapor cartridges must be changed in accordance with the following table:

Respirator Type	Maximum Recsol Concentration for Respirator type (ppm)	Cartridge	Estimated Temperature (approx. degrees F + or -)	Environment	Estimated Service Time (min)
Half-face (APR)	1000	3 M No. 7251 (OV)	86	Medium	206
Half-face (APR)	1000	3 M No. 7251 (OV)	86	Heavy	138
Half-face (APR)	1000	3 M No. 7251 (OV)	104	Medium	198
Half-face (APR)	1000	3 M No. 7251 (OV)	104	Heavy	132
Full-Face (APR)	1999	3 M No. 7251 (OV)	86	Medium	106
Half-face (APR)	1999	3 M No. 7251 (OV)	86	Heavy	71
Half-face (APR)	1999	3 M No. 7251 (OV)	104	Medium	103
Full-Face (APR)	1999	3 M No. 7251 (OV)	104	Heavy	69
Half-face & Full-Face (PAPR)	1999	3 M No. 7251 (OV)	86	Medium	Insufficient information (Need flow rate?)
Half-face & Full-Face (PAPR)	1999	3 M No. 7251 (OV)	86	Heavy	Insufficient information (Need flow rate?)
Half-face & Full-Face (PAPR)	1999	3 M No. 7251 (OV)	104	Medium	Insufficient information (Need flow rate?)
Half-face & Full-Face (PAPR)	1999	3 M No. 7251 (OV)	104	Heavy	Insufficient information (Need flow rate?)

*This table was derived from the 3M Respirator Service Life program found at www.3M.com/occsafety . The results of this table are estimates only and must be used with caution. These values are based on 100% toluene. Based on the constituents of Recsol (90-98 % toluene) these estimated service times are most likely accurate service times for protection against Recsol, but must be used with caution.

*Atmospheric Pressure (ATM): 1

*Estimated Humidity: <65%

*Breakthrough Level: ½ Threshold Limit Valve (TLV).

*Note estimated service times for PAPR organic vapor cartridges have not been estimated because PAPR flow rates are not available at this time.

3M No. 7251 organic vapor cartridges must be changed in accordance with the table above **or after each shift that the cartridges are used**, whichever is more stringent. Temperatures fluctuate though out the year and the work environment (work activity) fluctuates from person to person and task to task. On average:

- Half-face APR organic vapor cartridge should be changed after 168 minutes of use.
- Full-face APR organic vapor cartridge should be changed after 87 minutes of use.

The amount of cartridge sorbent, exposure duration, airborne contaminant concentration, humidity, and chemical characteristics will affect the useful life of the cartridge.

Note: If the estimated humidity level is greater than 65%, please refer to the 3M Respirator Service Life Program or contact the respirator manufacturer on how to assign a "correction factor" when determining the filter change-out schedule, as **humidity levels greater than 65% can have a dramatic effect on the service life of organic vapor chemical cartridges.**

If a chemical odor can be detected during use (breakthrough), immediately go to an area free of airborne contaminants and change the cartridges. Cartridges removed from the manufacturer's packaging must not be used if stored for longer than one year. As a result, cartridges must be dated when first taken out of the package and used. Cartridges must not be used past the expiration date specified by the manufacturer.

Creating a Filter Change-out Schedule for Brands Other Than 3M

The above referenced 3M Respirator Service Life Program and associated cartridge change out table can be applied to 3M brand cartridges and respirators only. If a different brand of respirator and cartridge is used, then the following steps must be taken:

1. Obtain the following information:
   - Names of the airborne contaminant(s).
   - Concentrations of those contaminants (in parts per million or ppm).
   - Humidity level in the work area.
   - Work Rate.

2. Contact the manufacturer of the respirators you plan to use. A list of filter cartridge and respirator manufacturers with associated contact names and phone numbers can be located in **Attachment F - List of Filter Cartridge and Respirator Manufacturers**. If your filter cartridge and respirator supplier is not present on this list, then this information can be obtained through the company from which the equipment was purchased.

3. Provide the manufacturer with the following information:
   - Name of the respirator model.
   - Information from step 1.

4. Request the cartridge service life as well as the exact objective information they relied upon to project that service life.

5. Create a written schedule for the cartridges. This schedule must be added to **Attachment G – Filter Cartridge Change-Out Schedule(s)**.

Attachment F

List of Filter Cartridge and Respirator Manufacturers

3M COMPANY OCCUPATIONAL HEALTH & ENVIRONMENTAL SAFETY AGENCY Building 275-6W-01 3M Center St. Paul MN 55133-3275 Contact: Phil Hage Communications Manager 651-733-7297 651-736-6677 "Fax" occsafety@mmm.comwww.mmm.com/occsafety	**AEARO COMPANY** 5457 79th Street Indianapolis IN 46268 Contact: Dan O'Connor Vice President, Sales 317-692-6980 317-692-6784 "Fax" mailto:www.aearo.com
AFASSCO, INC. P.O. Box 1767 Carson City NV 89702 Contact: Jim Grant Sales & Marketing 800-441-6774 800-232-7726 "Fax"	**DALLOZ SAFETY** P.O. Box 622 Reading PA 19603-0622 Contact: Christine Ciabattoni Marketing Services Manager 800-345-4112 610-371-7725 "Fax" lantry@talon.net www.cdalloz.com
DRAEGER SAFETY, INC. 101 Technology Drive Pittsburgh PA 15275 Contact: Shelli Cosmides Manager of Communications 412-787-8383 412-787-2207 "Fax" mailto:www.draeger.net	**ENCON SAFETY PRODUCTS, INC.** 6825 W. Sam Houston Parkway N. Houston TX 77041 Contact: Kim Mumby Marketing Manager 713-466-1449 713-466-1819 "Fax"
FIBRE METAL PRODUCTS COMPANY Route 1 & Brinton Lake Road P.O. Box 248 Concordville PA 19331 Contact: Lisa MacFadyen Marketing Service Manager 800-523-7048 610-459-9446 "Fax" sales2@fibre-metal.com www.fibre-metal.com	**GENTEX CORPORATION** P.O. Box 315 Carbondale PA 18407 Contact: Charles Rudolf Director of Marketing 570-282-8212 570-282-8555 "Fax"
GERSON COMPANY 15 Sproat Street Middleboro MA 02346 Contact: Bill Petres Director of Sales and Marketing 800-225-8623 800-4-GERSON "Fax	**INTERNATIONAL SAFETY INSTRUMENTS, INC.** 922 Hurricane Shoals Road Lawrenceville GA 30043 Contact: Customer Service 888-ISI-SAFE 770-963-2797 "Fax" info@intsafety.com www.intsafety.com
JACKSON PRODUCTS, INC. 2997 Clarkson Road Chesterfield MO 63017 Contact: Steve Kickham Director of Marketing 636-207-2700 636-207-2810 "Fax" mailto:www.jacksonproducts.com	**KIMBERLY-CLARK CORPORATION** 1400 Holcomb Bridge Road Roswell GA 30076 Contact: Ginger Cloud Customer Service Department 800-255-6401 770-587-7762 "Fax"
MICRONEL SAFETY, INC.	**MOLDEX-METRIC, INC.**

5703 Industry Lane Frederick MD 21704 Contact: Michael Hoague 888/744-6462 888/624-5600 "Fax" mailto:www.micronelsafety.com	10111 West Jefferson Boulevard Culver City CA 90232 Contact: Fred Ryan Vice President, Sales 800-421-0668 310-837-9563 "Fax" sales@moldex.com www.moldex.com
MSA P.O. Box 426 Pittsburgh PA 15230 Contact: Customer Service Department 800-MSA-2222 800-967-0398 "Fax" Info@MSAnet.com www.MSAnet.com	**NORTH SAFETY PRODUCTS** 2000 Plainfield Pike Cranston RI 02921 Contact: Customer Service 800-430-4110 800-572-6346 "Fax" mailto:www.northsafety.com
PRO-TECH RESPIRATORS, INC. 3001 South Susan Street Santa Ana CA 92704 Contact: Lisa Mork APR Product Manager 888-APR-SCBA 714-850-0299 "Fax" mailto:www.survivair.com	**SCOTT HEALTH & SAFETY** 309 West Crowell Street Monroe NC 28110 Contact: Robert Lodi Director of Marketing 704-282-8420 704-282-8424 "Fax" rlodi@scottaviation.com www.scottaviation.com
SELLSTROM MANUFACTURING CO. One Sellstrom Drive Palatine IL 60067 Contact: Customer Service Manager 800-323-7402 847-358-8564 "Fax" sellstrom@sellstrom.com www.sellstrom.com/www.fallprotection.com	**SHALON CHEMICAL INDUSTRIES, LTD.** 25 Nachmani Street Tel Aviv 65794 Contact: Kenneth Samet Quality Assurance Manager 972-76-81-1095 972-76-81-1115 "Fax"
SURVIVAIR A Agency of Bacou USA Safety, Inc. 3001 South Susan Street Santa Ana CA 92704 Contact: Lisa Mork APR Product Manager 800-APR-SCBA 714-850-0299 "Fax" techcomm@deltanet.com www.survivair.com	**U.S. SAFETY** P.O. Box 15965 Lenexa KS 66285-5965 Contact: Douglas Brahl Marketing Manager 800-821-5218 800-252-5002 "Fax" info@ussafety.com www.ussafety.com
ZEE MEDICAL, INC. 22 Corporate Park Irvine CA 92714 Contact: Ellie Dimarucut Manager, Marketing/Communications 949-252-9500 949-252-9649 "Fax" mailto:www.zeeservice.com	

Attachment G

Filter Cartridge Change-Out Schedule(s)

Chemical Exposure:_____

Respirator Type	Environment	Maximum Use Concentration for Respirator type (ppm)	Cartridge	Estimated Temperature (approx. degrees F + or -)	Estimated Service Time (min)

Reviewed and Approved by: _____

Supervisor/manager

Attachment H

Qualitative/Quantitative Fit Testing Form

Employee Name: _____ Date: _____
Employee #: _____
Department: _____
Supervisor: _____
NIOSH Approval #: _____

❑ Type of Fit Test: Δ Qualitative (QLFT) Δ Quantitative (QNFT) Δ Irritant Smoke Δ Bitrex

Note: A quantitative fit test is required if the environment to be entered is likely to contain contaminant levels greater than 10 times the PEL.

Specific make, model, style, and size of respirator tested: _____

Assessment of Comfort Visual inspection

Position of mask on the nose:	⌋ Pass	⌋ Fail (Check One)
Room for eye protection:	⌋ Pass	⌋ Fail (Check One)
Room to talk:	⌋ Pass	⌋ Fail (Check One)
Position of mask on face and cheeks:	⌋ Pass	⌋ Fail (Check One)

Visual Observation

Positive Pressure Leak Test:	⌋ Pass	⌋ Fail (Check One)
Negative Pressure Leak Test:	⌋ Pass	⌋ Fail (Check One)
Facial Hair:	⌋ Pass	⌋ Fail (Check One)

QLFT and QNFT Fit Test Exercises (minimum one minute) Attach PortaCount Printout if Applicable

Breath Normally:	⌋ Pass	⌋ Fail (Check One)
Breathe Deeply:	⌋ Pass	⌋ Fail (Check One)
Remain Still:	⌋ Pass	⌋ Fail (Check One)
Move Head From Side-to-Side:	⌋ Pass	⌋ Fail (Check One)
Move Head Up-and-Down:	⌋ Pass	⌋ Fail (Check One)
Talk:	⌋ Pass	⌋ Fail (Check One)
Jog Lightly in Place:	⌋ Pass	⌋ Fail (Check One)
Recite Passage:	⌋ Pass	⌋ Fail (Check One)

Additional QNFT Exercises (minimum 15 minutes)

Grimace: Smile or Frowning:	Δ Pass	Δ Fail (Check One)

Rainbow Passage:

When the sunlight strikes raindrops in the air, they act like prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its' two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

Quantitative Fit Factor: _____ (if applicable)

Signatures

Employee: _____ Date: _____

Fit Tested By: _____ Date: _____

Employees must perform a user seal check (negative and positive pressure test) each time they put on the respirator using the procedures recommended by the respirator manufacture that have been demonstrated as effective.

Attachment I

Respirator Donning and Doffing Instructions

Dust Masks

- Cup the respirator in your hand, allowing the head bands to hang freely below the hand.
- Cup the respirator under your chin with the nosepiece up and pull the top band with your other hand. Position it at the back of your head.
- With one hand, hold the bottom of the dust mask. Take your free hand and pull the bottom headband over your head. Position the headband around the neck below the ears.
- Using both hands, mold the metal nosepiece to the shape of your nose by pushing inward while moving your finger tips down both sides of the nosepiece. Pinching the nosepiece using one hand may cause a bad fit and result in less effective filtering performance.
- Perform a negative pressure seal check by:
  ⇒ Cupping both hands over the face-piece without pushing it against your face. Inhale gently. Minimal air should come in through the filter and the respirator should have formed a good seal around the perimeter of the respirator.
- Perform a positive pressure seal check by;
  ⇒ Placing the palms of your hands over the exhaust valve and exhale. When using a dust mask without an exhalation valve, cup both hands over the face-piece and gently exhale. There should be a positive pressure inside the respirator that caused it to swell, but only allowed minimal air out.

Half-Face Respirators

- Cup the nosepiece in your hand, allowing the headbands to hang freely below your hand.
- Grasp the bottom straps of the respirator and connect them behind your neck.
- While holding the respirator to your face with one hand, take the harness and pull it on the crown of your head.
- Adjust the respirator so it is comfortable on the face.
- Pull the straps to tighten the face-piece so the fit is snug. Do not over tighten.
- Perform a negative pressure seal check by:
  ⇒ Placing the palms of your hands over the filter cartridges without pushing it against your face. Inhale gently for 10 seconds. No air should come in through the filter and the respirator should have formed a good seal around the perimeter of the respirator.
- Perform a positive user seal check by;

⇒ Place the palms of your hands over the exhaust valve and exhale. There should be a positive pressure inside the respirator that caused the face piece to swell, but didn't let any air out.

Full-Face Respirators (APRs and PAPRs)

- Cup the face shield in your hand and position the head harness so the inside face-piece is exposed.
- Gently place the inside face-piece to your face.
- While holding the respirator to your face with one hand, take the harness and pull it over the crown of your head.
- Adjust the respirator so it is comfortable on your face.
- Pull the straps to tighten the face-piece so the fit is snug. Do not over tighten.
- Perform a negative pressure seal check by:
  ⇒ Place the palms of your hands over the filter cartridges without pushing it against your face. Inhale gently for 10 seconds. No air should come in through the filter and the respirator should have formed a good seal around the perimeter of the respirator.
- Perform a positive pressure seal check by:
  ⇒ Place the palms of your hands over the exhaust valve and exhale. There should be a positive pressure inside the respirator that caused it to swell, but didn't let any air out.

Self-Contained Breathing Apparatus (SCBA)

- Put on backpack harness and open the cylinder valve fully.
- Cup the face shield in your hand and position the head harness so the inside face-piece is exposed.
- Gently place the inside face-piece to your face.
- While holding the respirator to your face with one hand, take the harness and pull it over the crown of your head.
- Adjust the respirator so it is comfortable on your face.
- Pull the straps to tighten the face-piece so the fit is snug. Do not over tighten.

Attachment J

Respirator Inspection Procedures

Dust Masks

Dust masks must be inspected before each use. General inspection items should include:

- Integrity of the filter (for tears, holes, broken straps, cleanliness).
- Straps (for elasticity and deterioration).
- Metal nose clip for deterioration (if applicable).

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. A new dust mask will be issued upon employee request at the discretion of the departmental supervisor present.

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

Half-face and full-face respirators must be inspected before each use. General inspection items should include:

- Rubber face-piece, check for:
  - ⇒ Excessive dirt, cracks, tears or holes.
  - ⇒ Distortion from improper storage.
  - ⇒ Cracked, scratched or loose fitting lens (full face-piece).
  - ⇒ Broken or missing mounting clips.

- Head straps, check for:
  - ⇒ Breaks.
  - ⇒ Loss of elasticity.
  - ⇒ Broken or malfunctioning buckles and attachments.
  - ⇒ Excessively worn serrations of the harness that might allow the face piece to slip off (full face-piece only).

- Inhalation valve, exhalation valve, check for:
  - ⇒ Detergent residues, dust particles, or dirt on valve or valve seat.
  - ⇒ Cracks, tears, or distortion in the valve material or valve seat.
  - ⇒ Missing or defective valve cover.

- Filter element(s), check for:
  - ⇒ Proper filter for the hazard.
  - ⇒ Approval designation (NIOSH).
  - ⇒ Ensure the filter cartridge matches the brand of mask for which it is constructed .
  - ⇒ Missing or worn gaskets.
  - ⇒ Worn threads - both filter threads and face-piece threads.
  - ⇒ Cracks or dents in filter housing.
  - ⇒ Deterioration of harness.

If you notice any irregularities, report them immediately to your supervisor. ***Do not proceed into a contaminated zone*** until your respiratory equipment is properly repaired or replaced.

Attachment K

Respirator Inspection Form

Inspector Name: _____
Inspector Signature: _____
Inspection Date: _____
Respirator Location: _____
Serial or ID # of Respirator: _____

Tightness of Connections:	☐ **Pass**	☐ **Fail (Check One)**
Rubber Face Piece:	☐ **Pass**	☐ **Fail (Check One)**
Excessive dirt, cracks, tears, or holes	☐ Yes	☐ No (Check One)
Distortion from improper storage	☐ Yes	☐ No (Check One)
Cracked, scratched or loose fitting lens (full-face piece)	☐ Yes	☐ No (Check One)
Broken or missing mounting clips	☐ Yes	☐ No (Check One)
Head Straps:	☐ **Pass**	☐ **Fail (Check One)**
Breaks	☐ Yes	☐ No (Check One)
Loss of elasticity	☐ Yes	☐ No (Check One)
Broken or malfunctioning buckles of attachments	☐ Yes	☐ No (Check One)
Excessively worn serrations of the harness which might allow the face piece to slip off (full-facepiece only)	☐ Yes	☐ No (Check One)
Inhalation Valve:	☐ **Pass**	☐ **Fail (Check One)**
Detergent residue, dust particles, or dirt on valve or valve set	☐ Yes	☐ No (Check One)
Cracks, tears, or distortion in the valve material, or valve set	☐ Yes	☐ No (Check One)
Missing or defective valve cover	☐ Yes	☐ No (Check One)
Exhalation Valve:	☐ **Pass**	☐ **Fail (Check One)**
Detergent residue, dust particles, or dirt on valve or valve set	☐ Yes	☐ No (Check One)
Cracks, tears, or distortion in the valve material, or valve set	☐ Yes	☐ No (Check One)
Missing or defective valve cover	☐ Yes	☐ No (Check One)
Filter Element(s):	☐ **Pass**	☐ **Fail (Check One)**
Proper filter for the hazard	☐ Yes	☐ No (Check One)
Approval designation (NIOSH)	☐ Yes	☐ No (Check One)
Missing or worn gaskets	☐ Yes	☐ No (Check One)
Worn threads - both filter threads and face piece threads	☐ Yes	☐ No (Check One)
Cracks or dents in filter housing	☐ Yes	☐ No (Check One)
Deterioration of harness	☐ Yes	☐ No (Check One)

COMMENT: _____

_____

REMEDIAL ACTIONS: _____

_____

Date Respirator Removed From Service: _____ (if problem noted)

Date Respirator Repaired: _____

Repaired By: _____

Attachment L

Self-Contained Breathing Apparatus (SCBA) and Cylinder Inspection Form

Inspector Name: _____
Inspector Signature: _____
Inspection Date: _____
SCBA Location: _____
Serial or ID # of SCBA: _____
Cylinder Location: _____
Serial or ID # of Cylinder: _____

Tightness of Connections:	☐ **Pass**	☐ **Fail (Check One)**
Rubber Face Piece:	☐ **Pass**	☐ **Fail (Check One)**
Excessive dirt, cracks, tears, or holes	☐ Yes	☐ No (Check One)
Distortion from improper storage	☐ Yes	☐ No (Check One)
Cracked, scratched or loose fitting lens (full-face piece)	☐ Yes	☐ No (Check One)
Broken or missing mounting clips	☐ Yes	☐ No (Check One)
Head Straps:	☐ **Pass**	☐ **Fail (Check One)**
Breaks	☐ Yes	☐ No (Check One)
Loss of elasticity	☐ Yes	☐ No (Check One)
Broken or malfunctioning buckles of attachments	☐ Yes	☐ No (Check One)
Excessively worn serrations of the harness which might allow the face piece to slip off (full-facepiece only)	☐ Yes	☐ No (Check One)
Inhalation Valve:	☐ **Pass**	☐ **Fail (Check One)**
Detergent residue, dust particles, or dirt on valve or valve set	☐ Yes	☐ No (Check One)
Cracks, tears, or distortion in the valve material, or valve set	☐ Yes	☐ No (Check One)
Missing or defective valve cover	☐ Yes	☐ No (Check One)
Exhalation Valve:	☐ **Pass**	☐ **Fail (Check One)**
Detergent residue, dust particles, or dirt on valve or valve set	☐ Yes	☐ No (Check One)
Cracks, tears, or distortion in the valve material, or valve set	☐ Yes	☐ No (Check One)
Missing or defective valve cover	☐ Yes	☐ No (Check One)
Filter Element(s):	☐ **Pass**	☐ **Fail (Check One)**
Proper filter for the hazard	☐ Yes	☐ No (Check One)
Approval designation (NIOSH)	☐ Yes	☐ No (Check One)
Missing or worn gaskets	☐ Yes	☐ No (Check One)
Worn threads - both filter threads and face piece threads	☐ Yes	☐ No (Check One)
Cracks or dents in filter housing	☐ Yes	☐ No (Check One)
Deterioration of harness	☐ Yes	☐ No (Check One)
Corrugated Breathing Tube (gas masks):	☐ **Pass**	☐ **Fail (Check One)**

Cracks	☐ Yes	☐ No	(Check One)
Missing or loose hose clamps	☐ Yes	☐ No	(Check One)
Broken or missing connectors	☐ Yes	☐ No	(Check One)
Worn threads (cylinder or face piece threads)	☐ Yes	☐ No	(Check One)

Cylinder

Meets US Pharmacopoeia requirements	☐ Yes	☐ No	(Check One)
Meets Grade D breathing air (ANSI/Compressed Gas Association	☐ Yes	☐ No	(Check One)
Commodity Specification for Air, G-7.1-1998.)	☐ Yes	☐ No	(Check One)
Fully charged (not < 90 % of manufactures recommended pressure)	☐ Yes	☐ No	(Check One)
Hydrostatic Testing Performed Within Last 5 Years	☐ Yes	☐ No	(Check One)

(Check with manufacturer for cylinder specific requirements

NOTE: When pressure falls to 90 % of the manufacturer's recommended pressure level the cylinder must be recharged.

COMMENT: _____

_____

_____

REMEDIAL ACTIONS: _____

_____

_____

Date Respirator Removed From Service: _____ (if problem noted)

Date Respirator Repaired: _____

Repaired By: _____

Attachment M

Employee Program Evaluation Questionnaire

Employee Name: _____
Employee #: _____
Department: _____
Supervisor: _____
Date: _____

1. Has the Respiratory Protection Procedure HS350 been effective in:

☐ Yes ☐ No Reducing your exposure to airborne contaminants

☐ Yes ☐ No Explaining the proper use and selection of respirators

☐ Yes ☐ No Explaining why respiratory protection is necessary

☐ Yes ☐ No Explaining how improper fit, usage, or maintenance can compromise the protective effect of the respirator.

☐ Yes ☐ No Explaining how to inspect, put on and remove, use and check the seals of a respirator.

☐ Yes ☐ No Explaining the Medical evaluation procedure

☐ Yes ☐ No Explaining respirator maintenance

☐ Yes ☐ No Explaining medical signs and symptoms that may limit or prevent the effective use of respirators

Comments:_____

_____

2. Are there any problems, concerns or questions in regards to the fit of your personnel respirator:

Comments:_____

Attachment N

MEDICAL QUESTIONNAIRE

Part A. Section 1. The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date:_____
2. Name:_____
3. Age:_____
4. Sex (circle one): Male Female
5. Height:_____ft. _____in.
6. Weight:_____lbs.
7. Job title:_____
8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code):_____
9. The best time to phone you at this number:_____
10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes No
11. Check the type of respirator you will use (you can check more than one category):

    a) _____ N,R, or P disposable respirator (filter-mask, non-cartridge type only).
    b) _____ Half or full-facepiece type
    c) _____Powered-air purifying
    d) _____Supplied-air, self-contained breathing apparatus

12. Have you worn a respirator (circle one): Yes No

If "yes" what type(s):_____

Part A. Section 2 Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1. Do you **currently** smoke tobacco, or have you smoked tobacco in the last month: Yes No
2. Have you **ever had** any of the following conditions?

a)	Seizures (fits)	Yes	No
b)	Diabetes (sugar disease)	Yes	No
c)	Allergic reactions that interfere with your breathing	Yes	No
d)	Claustrophobia (fear of closed-in places)	Yes	No
e)	Trouble smelling odors	Yes	No

3. Have you **ever had** any of the following pulmonary or lung problems?

a)	Asbestosis	Yes	No
b)	Asthma	Yes	No
c)	Chronic bronchitis	Yes	No
d)	Emphysema:	Yes	No
e)	Pneumonia	Yes	No
f)	Tuberculosis	Yes	No
g)	Silicosis	Yes	No
h)	Pneumothorax (collapsed lung)	Yes	No
i)	Lung cancer	Yes	No
j)	Broken ribs	Yes	No
k)	Any chest injuries or surgeries	Yes	No
l)	Any other lung problem that you've been told about	Yes	No

4. Do you **currently** have any of the following symptoms of pulmonary or lung disease?

a)	Shortness of breath	Yes	No
b)	Shortness of breath when walking fast on level ground or walking up a light hill or incline	Yes	No
c)	Shortness of breath when walking with other people at an ordinary pace on level ground	Yes	No
d)	Have to stop for breath when walking at your own pace on level ground	Yes	No
e)	Shortness of breath when washing/dressing yourself	Yes	No
f)	Shortness of breath that interferes with your job	Yes	No
g)	Coughing that produces phlegm (thick sputum)	Yes	No
h)	Coughing that wakes you early in the morning	Yes	No
i)	Coughing that occurs mostly when you are lying down	Yes	No
j)	Coughing up blood in the last month	Yes	No
k)	Wheezing	Yes	No
l)	Wheezing that interferes with your job	Yes	No
m)	Chest pain when you breathe deeply	Yes	No
n)	Any other symptoms that you think may be related to lung problems	Yes	No

5. Have you **ever had** any of the following cardiovascular or heart problems?

a)	Heart attack	Yes	No
b)	Stroke	Yes	No
c)	Angina	Yes	No
d)	Heart failure	Yes	No
e)	Swelling in your legs or feet (not caused by walking)	Yes	No
f)	Heart arrhythmia (heart beating irregularly)	Yes	No
g)	High blood pressure	Yes	No
h)	Any other heart problem that you've been told about	Yes	No

6. Have you **ever had** any of the following cardiovascular or heart symptoms?

a)	Frequent pain or tightness in your chest	Yes	No
b)	Pain or tightness in your chest during physical activity	Yes	No
c)	Pain or tightness in your chest that interferes with your job	Yes	No
d)	In the past 2 years, have you noticed your heart skipping or missing a beat	Yes	No
e)	Heartburn or indigestion that is not related to eating	Yes	No
f)	Any other symptoms that you think may be related to		

heart or circulation problems Yes No

7. Do you **currently** take medication for any of the following problems:

a) Breathing or lung problems Yes No
b) Heart trouble Yes No
c) Blood Pressure Yes No
d) Seizures (fits) Yes No

8. If you've used a respirator, have you **ever had** any of the following problems?
(If you've never used a respirator, check the following space and go to question 9)

a) Eye irritation Yes No
b) Skin allergies or rashes Yes No
c) Anxiety Yes No
d) General weakness or fatigue Yes No
e) Any other problem that interferes with your use of a respirator Yes No

9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes No

Questions 10 – 15 below must be answered by every employee who has been selected to use either a full-face piece respirator or a self-contained breathing apparatus (SCBA). For employees who have been selected to use other types of respirators, answering these questions is voluntary.

10. Have you **ever lost** vision in either eye (temporarily or permanently): Yes No

11. Do you **currently** have any of the following vision problems:

a) Wear contact lenses Yes No
b) Wear glasses Yes No
c) Color blindness Yes No
d) Any other eye or vision problem Yes No

12. Have you ever had an injury to your ears, including a broken ear drum Yes No

13. Do you **currently** have any of the following hearing problems

a) Difficulty hearing Yes No
b) Wear a hearing aid Yes No
c) Any other hearing or ear problems Yes No

14. Have you **ever had** a back injury Yes No

15. Do you **currently** have any of the following musculoskeletal problems:

a) Weakness in any of your arms, hands, legs, or feet Yes No
b) Back pain Yes No
c) Difficulty fully moving your arms and legs Yes No
d) Pain or stiffness when you lean forward or backward at the waist Yes No
e) Difficulty moving your head up or down Yes No
f) Difficulty moving your head side to side Yes No
g) Difficulty bending at your knees Yes No
h) Difficulty squatting to the ground Yes No

i) Climbing a flight of stairs or a ladder carrying more than 25 lbs. Yes No
j) Any other muscle or skeletal problem that interferes with using a respirator Yes No

Part B. Any of the following questions, and other questions not listed, may be asked at the discretion of the health care professional who will review the questionnaire.

1. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust, or have you come into skin contact with hazardous chemicals:) Yes No

   If yes, name the chemical is you know them:_____

2. Have you ever worked with any of the following materials, or under any of the conditions listed below:

   a) Asbestos Yes No
   b) Silica (e.g., in sandblasting) Yes No
   c) Tungsten/cobalt (e.g., grinding or welding this material) Yes No
   d) Beryllium Yes No
   e) Aluminum Yes No
   f) Coal (for example, mining) Yes No
   g) Iron Yes No
   h) Tin Yes No
   i) Dusty environment Yes No
   j) Any other hazardous exposures Yes No

If "yes", describe these exposures:_____

3. List any second jobs or side businesses you have:_____

4. List your previous occupations:_____

5. List your current and previous hobbies:_____

6. Have you been in the military services: Yes No

If "yes", were you exposed to biological or chemical agents (either in training or combat): Yes No

7. Have you ever worked on a HAZMAT team: Yes No

8. Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): Yes No

If "yes" name the medications if you know them:_____

9. Will you be using any of the following items with your respirator(s)?

   a) HEPA Filters Yes No
   b) Canisters (for example, gas masks) Yes No
   c) Cartridges Yes No

10. How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you?

a)	Escape only (no rescue)	Yes	No
b)	Emergency rescue only	Yes	No
c)	Less than 5 hours **per week**	Yes	No
d)	Less than 2 hours **per day**	Yes	No
e)	2 to 4 hours per day	Yes	No
f)	Over 4 hours per day	Yes	No

11. During the period you are using the respirator(s), is your work effort:

a. **Light** (less than 200 kcal per hour) Yes No

If "yes" how long does this period last during the average shift:
_____ hrs _____mins.

Examples of a light work effort are **sitting** while writing, typing, drafting, or performing light assembly work; or **standing** while operating a drill press (1-3 lbs.) or controlling machines.

b. **Moderate** (200 to 350 kcal per hour) Yes No

If "yes" how long does this period last during the average shift:
_____ hrs. _____mins.

Examples of moderate work effort are **sitting** while nailing or filing; **driving** a truck or bus in urban traffic; **standing** while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; **walking** on a level surface about 2 mph or down a 5-degree grade about 3 mph; or **pushing** a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.

c. **Heavy** (about 350 kcal per hour) Yes No

If "yes" how long does this period last during the average shift:
_____hrs. _____mins.

Examples of heavy work are **lifting** a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; **shoveling; standing** while bricklaying or chipping castings; **walking** up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.)

12. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator Yes No

If "yes" describe this protective clothing and/or equipment:_____
_____

13. Will you be working under hot conditions (temperature exceeding 77 deg F) Yes No

14. Will you be working under humid conditions: Yes No

15. Describe the work you'll be doing while you're using your respirator(s):_____

16. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):

    _____

17. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):

    Name of the first toxic substance:_____
    Estimated maximum exposure level per shift:_____
    Duration of exposure per shift:_____
    Name of the second toxic substance:_____
    Estimated maximum exposure level per shift:_____
    Duration of exposure per shift:_____
    Name of the third toxic substance:_____
    Estimated maximum exposure level per shift:_____
    Duration of exposure per shift:_____
    The name of any other toxic substances that you'll e exposed to while using your respirator(s):_____

18. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security):

    _____

Attachment O

Respirator Use Information for PLHCP

(To be completed by the Supervisor/Manager)

Employee Name: _____
Employee #: _____
Department: _____
Supervisor: _____
Date: _____

1. The employee named above is using the following type(s) of respirator(s):

- ☐ Half-Mask Respirator, Weight_____lb.
- ☐ Full-Face Respirator, Weight_____lb.
- ☐ Self Contained Breathing Apparatus (SCBA), Weight_____lb.
- ☐ Other, Please indicate: _____

2. The duration and frequency of respirator use (including use, rescue and escape):

- ☐ < 5 minutes
- ☐ >5 minutes, but < 30 minutes
- ☐ >30 minutes, but < 1 hour
- ☐ > 1 hour, but < 2 hours
- ☐ Other, Please indicate: _____

3. The expected physical work effort:

- ☐ Light
- ☐ Light to Moderate
- ☐ Moderate
- ☐ Moderate to Heavy
- ☐ Heavy
- ☐ Extreme

Briefly describe activity:

_____

4. Personal protective clothing and equipment that will be worn:

☐ Li
☐ ght
☐ we
☐ igh
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or
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(fu
ll
bo
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)
Haz-Mat response suit (full body and hood)
Other, Please indicate: _____

5. The temperature and humidity extremes that may be encountered are:

_____

Supervisor/Manager Signature:_____