3M™ Administrative Respiratory Protection Program

General Procedures, Policy and Responsibility

General

The Occupational Safety and Health Administration (OSHA) General Industry standard for respiratory protection 29 CFR 1910.134 requires that a written respiratory protection program be established by an employer. The following procedures are based on the requirements established by OSHA.

Policy

It is the policy of this company to provide its employees with a safe and healthful work environment. The guidelines in this program are designed to help reduce employee exposure to occupational air contaminants and oxygen deficiency. The primary objective is to prevent excessive exposure to these contaminants. This is accomplished as far as feasible by accepted engineering and work practice control measures. When effective engineering controls are not feasible, or while they are being implemented or evaluated, respiratory protection may be required to achieve this goal. In these situations, respiratory protection is provided at no cost to the employees.

Responsibilities

1. Management

It is management's responsibility to determine what specific applications require the use of respiratory protective equipment. Management must also provide proper respiratory protective equipment to meet the needs of each specific application. Employees must be provided with adequate training and instructions on all equipment.

2. Management/Supervisory

Superintendents of each area are responsible for ensuring that all personnel under their control are completely knowledgeable of the respiratory protection requirements for the areas in which they work. They are also responsible for ensuring that their subordinates comply with all facets of this respiratory protection program, including respirator inspection and maintenance. They are responsible for implementing disciplinary procedures for employees who do not comply with respiratory program requirements.

3. Employees

It is the responsibility of the employee to have an awareness of the respiratory protection requirements for their work areas (as explained by management). Employees are also responsible for wearing the appropriate respiratory protective equipment according to proper instructions and for maintaining the equipment in a clean and operable condition.

Program Administration

The following individual has total and complete responsibility for the administration of the respiratory protection program:

Name: _____

Title: _____

Department: _____

Signature: _____

This individual has the authority to act on any and all matters relating to the operation and administration of the respiratory protection program. All employees, operating departments, and service departments will cooperate to the fullest extent. This person is referred to as the Respiratory Protection Program Administrator in this program.

This individual is responsible for monitoring or conducting an exposure assessment of the respiratory hazard, developing worksite-specific procedures for this program, maintaining records, and conducting program evaluations.

The following individual is responsible for contaminant identification and measurement, including technical support, air sampling, and laboratory analysis.

Name: _____

Title: _____

Department: _____

Signature: _____

The following individual is responsible for evaluating the health of the company employees via a comprehensive medical and health program.

Name: _____

Title: _____

Department: _____

Signature: _____

The following individual is responsible for directing and coordinating engineering projects which are directly related to respiratory protection.

Name: _____

Title: _____

Department: _____

Signature: _____

The following individual is responsible for selection, issuance, training, and fit testing of all respirators used in this company, including record keeping.

Name: _____

Title: _____

Department: _____

Signature: _____

This program will be effective on _____

Sample Forms

Exposure Assessment Record

Respiratory Protection Program Administrator: _____

Job: _____ Date: ____ / ____ / ____ (Month / Day / Year)

Location: _____ Job Description: ☐ Routine ☐ Emergency

Describe work performed and length of time involved: _____

Contaminants:

Contaminant	Concentration (Measured or Estimated)	Reference: (Report Number Survey, Sample)	OEL*	Hazard Ratio**

* OEL – Occupational Exposure Limit PEL, TLV, REL, WEEL or other company specified occupational exposure limit.

** The Hazard Ratio is the quotient of the measured or estimated concentration divided by the appropriate occupational exposure limit. Respiratory protection is required if this value is greater than one and all feasible engineering and work practice controls have been implemented to reduce the concentration to as low as possible.

Note: For those contaminants for which respiratory protection is desired, the information from above must be transferred to the Respirator Selection Documentation form.

Respirator Selection Documentation

STEP 1: Respiratory Hazard Identification

- Oxygen Concentration: _____
- Contaminant(s): _____
- Physical State(s): _____
- Concentration: _____

STEP 2: Hazard Analysis

- Permissible Exposure Limit: _____
- Protection Factor Needed: _____
- Skin Absorption/Irritation: _____
- Eye Irritation: _____
- Warning Properties
  Odor Threshold: _____
  Nose/Throat Irritation: _____
- IDLH Concentration: _____
- Lower Flammable Limit: _____
- Service Life Information: _____
- Chemical Cartridge Changeout Time: _____

STEP 3: Respirator Type Required

- Minimum Acceptable: _____
- Alternative (optional): _____

STEP 4: Specific Selections

- _____
- _____
- _____
- _____

Qualitative Fit Test Record

Name: _____ Date: ____ / ____ / ____ (Month / Day / Year)

Employee ID/SSN: _____

Respirator: _____ Size: _____

Respiratory Hazards Encountered: _____

Sensitivity Test:	Results:					
• Isoamyl Acetate (Banana Oil):				Pass ☐	Fail ☐	NA ☐
• Saccharin #Squeezes:	10 ☐	20 ☐	30 ☐	Pass ☐	Fail ☐	NA ☐
• Bitter Aerosol #Squeezes:	10 ☐	20 ☐	30 ☐	Pass ☐	Fail ☐	NA ☐
• Irritant Smoke:				Pass ☐	Fail ☐	NA ☐

Fit Test Agent:	Filter/Cartridge:	Filter Results:		
• Isoamyl Acetate	• Organic Vapor Cartridge	Pass ☐	Fail ☐	NA ☐
• Saccharin	• Particulate Filter	Pass ☐	Fail ☐	NA ☐
• Bitter Aerosol	• Particulate Filter	Pass ☐	Fail ☐	NA ☐
• Irritant Smoke	• 100 Level Particulate	Pass ☐	Fail ☐	NA ☐

Comments: _____

Fit Test Repeated Before: _____ Test Conductor: _____ Employee Signature: _____

Recommended Respiratory Protection Program

Medical Evaluation

Every employee who is being considered for inclusion in the Respiratory Protection Program must participate in a medical evaluation. A determination of the employee's ability to wear a respirator while working is made initially before fit testing. Additional evaluations are made when there is a change in workplace conditions or information indicating a need for re-evaluation. The program administrator will obtain from the PLHCP* a written medical determination regarding the employee's ability to use the respirator.

(Describe procedures for medical evaluation and attach to this program. A mandatory medical evaluation questionnaire in 1910.134 must be used and reviewed by the company PLHCP.* If the PLHCP deems it necessary, the employee will receive a follow-up examination. This examination is provided at no cost to the employee. The purpose of the medical evaluation is to assure that the employee is physically and psychologically able to perform the assigned work while wearing respiratory protective equipment. If the PLHCP denies approval, the employee will not be able to participate in the Respiratory Protection Program. A medical evaluation must be completed before respirator training, fit testing of tight-fitting respirators and use in the workplace.)

(Copies of the medical evaluation and questionnaire must be kept as a medical record in accordance with 29 CFR 1910.1020. A copy of the written medical determination must be kept in the employees file.)

Respirator Selection

1. Work Area Monitoring

Exposure assessment will be done to ensure proper respirator selection. In order to determine the exposure level, air samples of the workplace representative of the work period, exposure assessment based on analogous processes, or professional judgment will be used. Personal sampling equipment may be used in accordance with accepted industrial hygiene standards to sample each work area. Results of these samples will pinpoint areas where respiratory protection is required.

The exposure assessment will be performed prior to the task requiring respiratory protection. Periodically thereafter, as required by OSHA substance specific standards or at least every 12 months,** a review of the exposure assessment will be made to determine if respiratory protection is still required. If respiratory protection is still necessary, respirator selections will be reviewed to assure their continued suitability.

(Attach records of all exposure assessments to this program. A sample form is provided.)

*PLHCP- Physician or other licensed healthcare professional.

**The program administrator can establish more frequent evaluations/assessments.

2. Respirator Selection

Respirators are selected and approved for use by management. The selection is based upon the physical and chemical properties of the air contaminants and the concentration level likely to be encountered by the employee. The Respiratory Protection Program Administrator will make a respirator available immediately to each employee who is assigned to a job that requires respiratory protection. Replacement respirators/cartridges and filters will be made available as required. When chemical cartridge respirators are used, the program administrator must establish a cartridge change schedule based on objective information or data (attach a copy of the information relied upon to this program).

The selection of the proper respirator type will be made following the procedures which are attached.

(Attach selection procedures. An example of a selection procedure may be found in the 3M Respirator Selection Guide.)

All respirators will be NIOSH approved. Respirators will be purchased from: _____

_____

Respirators currently approved for use are: _____

_____

(Attach documentation of respirator selection to this program. A sample form is provided.)

Use of Respirators

All tight-fitting respirators (both negative and positive pressure) shall not be used with beards or other facial hair or any other condition that prevents direct contact between the face and the edge of the respirator or interferes with valve function.

Employees will be required to leave the contaminated area:

- Upon malfunction of the respirator
- Upon detection of leakage of contaminant into the respirator
- If increased breathing resistance of the respirator is noted
- If severe discomfort in wearing the respirator is detected
- Upon illness of the respirator wearer, including: sensation of dizziness, nausea, weakness, breathing difficulty, coughing, sneezing, vomiting, fever and chills
- To wash face to prevent skin irritation
- To change filter/cartridge elements or replace respirators whenever they detect the warning properties of the contaminant or increased breathing resistance or in accordance with the cartridge change schedule.

Respirator Training and Fitting

1. Training

Employees assigned to jobs requiring respirators will be instructed by their supervisor relative to their responsibilities in the respiratory protection program. They will also be instructed in the need, use, limitations, and care of their respirator.

Retraining is given at least every 12 months** after initial training.
(Attach training documentation to this program.)

2. Fit Testing

Employees will be properly fitted and tested for a face seal prior to use of the respirator in a contaminated area. Qualitative fit testing will be the preferred method of fit testing.

(Attach fit test procedures to this program.)

Fit testing will be done initially upon employee assignment to an area where tight-fitting respirators are required. Fit testing will be repeated at least every 12 months** thereafter. All tight-fitting respirators (negative and positive pressure) will be fit tested. Positive pressure tight-fitting respirators will be fit tested in the negative pressure mode.

(Attach fit testing records to this program in the Fit Test Appendix.
A sample Qualitative Fit Test Record is provided.)

Fit testing will not be done on employees with facial hair that passes between the respirator seal and the face or interferes with valve function. Such facial hair includes stubble, beards and long sideburns.

Note: If it is determined that an individual cannot obtain an adequate fit with any tight-fitting respirator, a loose fitting powered air purifying or supplied air respirator may be required instead.

Respirator Inspection, Maintenance and Storage

Respirators must be properly maintained to retain their original effectiveness. The maintenance program will consist of periodic inspection, repair, cleaning and proper storage.

Inspection

The wearer of a respirator will inspect it daily whenever it is in use.

(Name) _____

will periodically spot check respirators for fit, usage, and condition. (Attach inspection procedures for the respirators in use to this program.) The use of defective respirators is not permitted. If a defective respirator is found during inspection, it must be returned to the following individual:

_____

Repair

During cleaning and maintenance, respirators that do not pass inspection will be removed from service and will be discarded or repaired. Repair of the respirator must be done with parts designed for the respirator in accordance with the manufacturer's instructions before reuse. No attempt will be made to replace components or make adjustments, modifications or repairs beyond the manufacturer's recommendation.

Cleaning

Respirators not discarded after one shift use, except filtering facepiece type, will be cleaned on a daily basis (or after each use if not used daily), according to the manufacturer's instructions, by the assigned employee or other person designated by the Respiratory Protection Program Administrator. Facilities and supplies for cleaning these respirators will be made available. (Attach detailed cleaning procedures to this program).

**The program administrator can establish more frequent evaluations/assessments.

Storage

Respirators not discarded after one shift use will be stored in a location where they are protected from sunlight, dust, heat, cold, moisture, and damaging chemicals. They shall be stored in a manner to prevent deformation of the facepiece and exhalation valve. Whenever feasible, respirators not discarded after one shift use will be marked and stored in such a manner to assure that they will be worn only by the assigned employee. If use by more than one employee is required, the respirator will be cleaned between uses.

Compressed Air Systems

Special precautions will be taken to assure breathing quality air when an air line respirator or SCBA is to be used. This air will meet the specifications for Grade D Air established by the Compressed Gas Association as stated in Commodity Specification for Air (ANSI/CGA G-7.1), 1989. Cylinders of purchased breathing air must have a certificate of analysis from the supplier that the air meets Grade D requirements. Air supplied from an air compressor will be tested periodically to assure that Grade D breathing air requirements are met. (Attach procedures and records for certifying the breathing air system to this program).

Escape Only Respirators (optional)

Where escape only respirators are provided because of the potential for an emergency, personnel assigned to the area will be trained in their use. Escape only respirators shall be NIOSH certified for escape from the atmosphere in which they will be used. Personnel not assigned to a work area, including visitors, shall be briefed in their use.

Emergency Use Respirators (optional)

Self-contained breathing apparatus may be required for emergency use. This equipment will be used only by trained personnel when it is necessary to enter hazardous atmospheres.

Locations

Self-contained breathing apparatus (SCBA) are found in the following location(s): _____

_____

Special Requirements

All potential users will be fully trained in the use of this equipment. They must also be medically qualified to wear the device. When the equipment is used, it will be tested in an uncontaminated atmosphere prior to entering the hazardous area.

An employee will not work with this apparatus in a hazardous atmosphere on an individual basis. At least one additional employee suitably equipped with a similar breathing apparatus must be in contact with the first employee and must be available to render assistance if necessary.

For interior structured fire fighting, additional requirements apply. (See 29 CFR 1910.134 and 1910.156).

This equipment will be inspected monthly by trained department or group personnel.

Inspection and maintenance information will be recorded. (Specify method, e.g. on inspection tag and/or log book).

(Attach contents of the SCBA training program and inspection procedures to this program.)

Program Evaluation

The workplace will be reviewed and evaluated at least every 12 months** to ensure that the written respiratory protection program is being properly implemented and to consult employees to ensure that they are using the respirators properly. (Attach audit criteria to this program). A written report will be made of each evaluation, summarizing the findings. For each deficiency identified, corrective action taken will be noted. Copies of the summary reports shall be attached to this program.

**The program administrator can establish more frequent evaluations/assessments.

OSHA's Requirements for A Respiratory Protection Program***

In any workplace where respirators are necessary to protect the health of the employee or whenever respirators are required by the employer, the employer shall establish and implement a written respiratory protection program with worksite-specific procedures. The program shall be updated as necessary to reflect those changes in workplace conditions that affect respirator use. The employer shall include in the program the following provisions of 1910.134, as applicable:

- Procedures for selecting respirators for use in the workplace
- Medical evaluations of employees required to use respirators
- Fit testing procedures for tight-fitting respirators
- Procedures for proper use of respirators in routine and reasonably foreseeable emergency situations
- Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators
- Procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators
- Training of employees in the respiratory hazards to which they are potentially exposed during routine and emergency situations
- Training of employees in the proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance
- Procedures for regularly evaluating the effectiveness of the program

The employer shall designate a program administrator who is qualified by appropriate training or experience that is commensurate with the complexity of the program to administer or oversee the respiratory protection program and conduct the required evaluations of program effectiveness.

***29 CFR Part 1910.134 (c)

Important Notice

The information contained within this brochure represents the key elements of a written respiratory protection program as stated in OSHA's general industry standard for Respiratory Protection (29 CFR 1910.134). For more specific information concerning legal requirements in your area, contact your local OSHA office. The information stated is not intended to represent 3M's complete written respiratory protection program.

For More Information

Technical Assistance	1-800-243-4630
Customer Care Center	1-800-328-1667
Material Safety Data Sheets (MSDS)	1-651-737-7222
www.3M.com/PPESafety	

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