	Health and Safety Policy		Section No:	12
			Initial Issue Date	1992
Respiratory Protection Policy			Revision Date:	Jan 1, 2017
			Revision No.	1
Prepared by: MSC Safety Solutions	OSHA Standard	1910.134	Page:	Page 1 of 6

Purpose

SESAC has developed a Respiratory Protection Program to safeguard employees that risk exposure to airborne contaminants toxic, or oxygen deficient atmospheres. Employees that must work in these types of situations must be familiar with respirators, including selection, proper fit, and maintenance.

SESAC will provide all practical engineering controls to preclude the use of respirators. This may include, but is not limited to, forced ventilation, product substitution, or modified product application.

Application

All employees engaged in spray painting, confined space operations, or other duties requiring the use of respirators are required to receive training on respirator use as well as those as those employees using respirators for general use over extended periods of time.

Selection Guide

When selecting the proper respirator, several elements must be considered. First, respirators shall only be used in emergencies or when engineering controls such as ventilation fail to prevent harmful exposure to employees.

All respirators selected for use must be NIOSH approved.

The nature and extent of the hazard, work requirements and conditions, as well as the limitations and characteristics of the respirators shall be considered when making proper selection of respirators to be used.

If employees wish to use respiratory protection on a voluntary basis when they are not being overexposed to airborne contaminants, they may use filtering facepiece style respirators that will be supplied to them by the company. All employees who wish to voluntarily use these respirators must first read the contents of Appendix D in the OSHA Respiratory Protection Standard (1910.145).

Special Note: The following is only a guide. Refer to ANSI Z88.2-1969 for additional information.

Hazard


Oxygen Deficiency*

Respirator

Self contained breathing apparatus.

Hose mask with blower.

Combination air line respirator with auxiliary self contained air supply or an air storage receiver with alarm.

	Health and Safety Policy		Section No:	12
			Initial Issue Date	1992
Respiratory Protection Policy			Revision Date:	Jan 1, 2017
			Revision No.	1
Prepared by: MSC Safety Solutions	OSHA Standard	1910.134	Page:	Page 2 of 6

Gas and Vapor Contaminates immediately dangerous to life or health (IDLH). *

Self contained breathing apparatus.

Hose mask with blower.

Air purifying, full facepiece respirator with chemical canister (gas mask).

Self rescue mouthpiece respirator (for escape only)

Combination air line respirator with auxiliary self contained air supply or an air storage receiver with alarm.

Not immediately dangerous to life or health

Air line respirator

Hose mask without blower


*Air purifying, half mask respirator with chemical cartridge and appropriate filter.

Note: For the purpose of this part "immediately dangerous to life or health" is defined as a condition that either poses an immediate threat to life and health or an immediate threat of severe exposure to contaminants which are likely to have adverse delayed effect on health.

Other factors to consider when selecting respirators include:

1. Estimated concentrations at point of use
2. The PEL (Permissible Exposure Limit) of the contaminant (Information available on SDS sheets)
3. Is the contaminant gas, vapour, mist, dust, or fume?
4. Is the contaminant flammable? If so, does the concentration of the chemical reach the LEL?
5. Will it irritate the eyes at the exposed concentrations?
6. Can the contaminant be absorbed through the skin?

Answers to these questions must be obtained from SDS sheets for the corresponding chemicals present, and by air monitoring of work areas prior to and during the actual work operation.

	Health and Safety Policy		Section No:	12
			Initial Issue Date	1992
			Revision Date:	Jan 1, 2017
			Revision No.	1
Respiratory Protection Policy				
Prepared by: MSC Safety Solutions	OSHA Standard	1910.134	Page:	Page 3 of 6

The location of the contaminated air in relation to the nearest exit and number of exits from the work area must be taken into consideration.

*** Note:** For the types of exposures most commonly experienced by SESAC' personnel, an air-purifying, half mask respirator with chemical cartridge and appropriate filter will be issued. This type of respirator is approved for most gases, vapours, and particulate contaminants that SESAC is associated with in their normal course of work.

Should any special situations arise that may require the use of other respirators, such as those for oxygen deficient atmospheres, the Competent Person in charge at the site will requisition them before any operations requiring their use shall begin. Employees will receive additional training on these other types of respirators as needed. Before work in an oxygen deficient or IDLH area, written authorization from a company officer must be obtained for the project and a daily permit must be issued by the corporate Safety Director or his designee.

Training

Training will be carried out at direction of a designated Competent Person prior to use of any respirator.

Those individuals designated to select and issue respiratory equipment shall be adequately trained in the selection process.

All employees will be trained in the use and care of respiratory equipment prior to first use and annually thereafter.

Whenever possible, each respirator issued will be permanently assigned to one individual and will be permanently marked indicating the person's name to whom it was assigned. These permanent markings shall be applied in such a way as to not affect the performance of the equipment. The date of issuance will be recorded and kept on file at the main office.


All affected SESAC personnel shall be familiar with the safety procedures described herein.

A designated competent person shall make frequent, random inspections to assure that proper selection of respirators, their use, cleanliness, and maintenance is adequate.

For training purposes, supervisors and employees alike, will be instructed by competent persons. Training will provide the employees with an opportunity to handle the respirator, have it fitted properly, test its face-piece-to-face-seal, and wear it in normal air for a reasonable familiarity period.

Every respirator wearer shall receive fitting instructions including demonstrations and practice in how the respirator should be worn, how to adjust it, and how to determine if it fits properly.

Respirators shall not be worn when conditions prevent a good face seal. Such conditions may be a growth of beard, sideburns, a skull cap that projects under the face piece, or temple pieces on glasses.

	Health and Safety Policy		Section No:	12
			Initial Issue Date	1992
Respiratory Protection Policy			Revision Date:	Jan 1, 2017
			Revision No.	1
Prepared by: MSC Safety Solutions	OSHA Standard	1910.134	Page:	Page 4 of 6

The absence of one or both dentures can seriously affect the fit of the facepiece.

Employees will be checked on a regular basis to ensure that they are following proper guidelines for fit testing before each use. Following the specific manufacturer's instructions for facepiece fitting will ensure proper fit.

Maintenance, Cleaning, and Storage

Respiratory equipment shall be inspected regularly and maintained in good condition. Gas mask canisters and chemical cartridges shall be replaced as necessary so as to provide complete protection. Mechanical filters shall be cleaned or replaced as necessary to avoid undue resistance to breathing. A change out schedule is required for special filter cartridges that have no definite end-of-life indication (example: vapour cartridges that do not change color, etc. after they are no longer working). Relying on an employee's sense of smell, taste, etc. to determine if a cartridge has lost its effectiveness is unacceptable. Manufacturer information may be needed to determine the life-span of a given cartridge. In any event, no cartridge will be used for more than one week.

Emergency rescue equipment shall be cleaned and disinfected immediately after each use.

Respiratory protective equipment that has been previously used shall be cleaned and disinfected before it is issued to another employee.

The wearer of any respirator shall inspect it daily whenever it is in use.


Respirators not discarded after one shift use, will be cleaned on a daily basis, according to the manufacturer's instructions, by the assigned employee or other person designated by a Competent Person.

Respirators not discarded after one shift use, will be stored in a suitable container away from areas of contamination.

Emergency Respirator Equipment

Self-contained breathing apparatus (SCBA) may be required in specific areas for emergency use. This equipment will be used only by trained personnel when it is necessary to enter hazardous atmospheres. The following points must be considered:

1. All potential users will be fully trained in the use of this equipment.
2. When the equipment is used, it will be tested in an uncontaminated atmosphere prior to entering the hazardous area if, possible.
3. An employee must 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.

	Health and Safety Policy		Section No:	12
			Initial Issue Date	1992
			Revision Date:	Jan 1, 2017
			Revision No.	1
Respiratory Protection Policy				
Prepared by: MSC Safety Solutions	OSHA Standard	1910.134	Page:	Page 5 of 6

4. This equipment will be inspected monthly by trained personnel. Inspection and maintenance information will be recorded in a log book.

Medical

SESAC' employees who are required to wear respiratory equipment must fill out a medical questionnaire. This questionnaire must be examined by a licensed health care provider who will determine whether or not the individual is physically fit to wear respirators in their course of work. If the licensed health care provider needs more information about the medical condition of the applicant, they may need to undergo an in-person interview and/or a full respiratory examination. All employees must receive medical clearance from the licensed health care provider before they can be fit tested or required to wear a respirator. Being able to wear a respirator is a condition of employment. Being unable to wear a respirator when required by management, for any reason, is grounds for termination. Employees will be given a leave of absence and may return when their work no longer requires the use of a respirator. Reasonable accommodation may be made, including transfer, if your requested work is available.

Fit Testing

Employees must be fit tested with the specific make, model, brand, size, and style of tight-fitting (seals against the face) respirator that they are required to use. Fit testing determines if any excessive leaks are present in a respirator that could compromise its effectiveness. Fit testing must be completed prior to initial use, whenever a different respirator facepiece (size, style, model, or make) is used, and at least annually thereafter.


There are several types of fit tests that can be carried out to determine proper fit or the respiratory equipment:

Qualitative

Qualitative testing is a common type of testing. It consists of subjecting a respirator wearer to an irritant or odor to see if the respirator has a effective facial seal. A special non-toxic smoke is often used as irritant, while saccharine is often used as an odor agent. This testing can be easily performed in field situations. Qualitative fit testing protocols for each testing agent are outlined in the OSHA standards for respiratory protection (1910.145). SESAC will have a competent person conduct fit testing.

Quantitative

Quantitative testing involves placing a respirator wearer into a safe controlled area and taking actual measurements of contaminate exposure to the individual. This is a more accurate determination of fit, but is less often used in the field because of the equipment requirements. As a general rule, SESAC will not undertake quantitative fit testing unless the OSHA standards specifically require it, or work is long term (over one year) and full time respirator use is required for that period.

	Health and Safety Policy		Section No:	12
			Initial Issue Date	1992
			Revision Date:	Jan 1, 2017
			Revision No.	1
Respiratory Protection Policy				
Prepared by: MSC Safety Solutions	OSHA Standard	1910.134	Page:	Page 6 of 6

Fit Checks

All employees who are required to wear respirators must check the seal of its face piece each time it is donned. This fit check procedure ensures that the sealing mechanisms of the respirator are still in proper working condition. Fit checks are not a substitute for the fit testing procedures (either qualitative or quantitative). Employees who have a change in fit, such that they can no longer get a seal as they were trained to do, shall report to their supervisor before any further work in a respirator required area.

Negative Pressure Fit Check

To conduct a negative pressure fit check, place the palms over the openings of the fit check/filter covers (if so equipped) or unscrew the air-purifying elements from the respirator and place the palms over the inhalation connectors, inhale and hold your breath for about five seconds. If the facepiece collapses slightly and no air leaks between the facepiece and the face are detected, a good fit has been obtained. If air leaks are detected, reposition the facepiece on the face and/or readjust the tension of the elastic straps and repeat the pressure check until a tight seal has been obtained. If the cartridges have been removed once a tight facepiece-to-face-seal is obtained, a co-worker must assist the wearer by screwing the air-purifying elements onto the inhalation connectors mounted on the facepiece. This must be done without removing the facepiece from the face. Check to be sure that each air-purifying element is tightly sealed against the facepiece.

Positive Pressure Fit Check

A positive pressure fit test is carried out by covering the opening in the exhalation valve guard with the palm of your hand, and simultaneously exhaling. If the facepiece bulges slightly and no air leaks between the facepiece and the face are detected, a tight fit has been obtained. If air is detected to be leaking out between the facepiece and the face, re-position the facepiece on the face and/or read adjust the tension of the elastic straps to eliminate the leakage. This check must be repeated until a tight seal of the facepiece to the face is obtained.

The positive or negative fit test is to be performed prior to a qualitative or quantitative fit test to indicate a good seal. It is good practice for employees to use this type of test each time they don a respirator. If you cannot obtain a tight seal with your facepiece, try another size until a tight seal is obtained or notify your supervisor.

Program Administrator

SESAC will designate a program administrator to implement and manage this respiratory protection program and evaluate its effectiveness. The program evaluations will be performed on a periodic basis and whenever there is a change in workplace conditions that could render the program inadequate.