Safety Manual

Respiratory Protection Program

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Respiratory Protection Program

1. Purpose and Scope:

1.1 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.

2. Responsibilities:

2.1 Management:

2.1.1 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.

2.2 Management/Supervisory:

2.2.1 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 respirator requirements.

2.3 Employees:

2.3.1 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.

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2.4 Program Administration:

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

Name: Fred Mulgrew
Title: Construction Safety Manager

- 2.4.2. 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.
- 2.4.3. This individual is responsible for monitoring or conducting an exposure assessment of the respiratory hazard, developing standard operating procedures for this program, maintaining records, and conducting program evaluations.
- 2.4.4. This individual is responsible for contaminant identification and measurement, including technical support, air sampling and laboratory analysis.
- 2.4.5. This individual is responsible for evaluating the health of the company employees via a comprehensive medical and health program.
- 2.4.6. This individual is responsible for directing and coordinating engineering projects that are directly related to respiratory protection.
- 2.4.7. This individual is responsible for selection, issuance, training, and fit testing of all respirators used in this company, including record keeping.

3. Policy:

3.1 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

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achieve this goal. In these situations, respiratory protection is provided at no cost to the employees.

3.2 Medical Evaluation:

- 3.2.1 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. Future evaluations are made when there is a change in workplace conditions or information indicating a need for reevaluation.
- 3.2.2 Medical evaluation prior to fit-testing will be confidential, during normal working hours, convenient, understandable, and the employee will be given a chance to discuss the results with the physician or other licensed health care professional (PLHCP).

3.3 Work Area Monitoring:

- 3.3.1. Exposure assessment will be done to ensure proper respirator selection. In order to determine the exposure level, air samples of the work-place 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.
- 3.3.2. Working in IDLH atmospheres is not allowed.
- 3.3.3. 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 twelve (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.

3.4 Respirator Selection:

3.4.1 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

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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.

- 3.4.2 The selection of the proper respirator type will be made following the procedures that are attached.
- 3.4.3 All respirators will be NIOSH approved.
- 3.5 Use of Respirators:
 - 3.5.1 All tight-fitting respirators (both negative and positive pressures) 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.
 - 3.5.2 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.
- 3.6 Respirator Training and Fitting:
 - 3.6.1 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.

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3.7 Fit Testing:

- 3.7.1 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.
- 3.7.2 Fit testing will be done initially upon employee assignment to an area where 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.
- 3.7.3 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.
- 3.7.4 **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.
- 3.8 Respirator Inspection, Maintenance and Storage:
 - 3.8.1 Respirators must be properly maintained to retain their original effectiveness. The maintenance program will consist of periodic inspection, repair, cleaning and proper storage.
 - 3.8.2 Inspection: The wearer of a respirator will inspect it daily whenever it is in use. The safety department will periodically spot respirators for fit, usage and condition. The use of defective respirators is not permitted. If a defective respirator is found during inspection, it must be returned to the safety department.
 - 3.8.3 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 recommendations.

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- 3.8.4 Cleaning: Respirators not discarded after one shift use, except filtering face-piece 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.
- 3.8.5 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 face piece 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.
- 3.8.6 Compressed Air System: Special precautions will be taken to assure breathing quality air when an air line respirator of 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 (ASNSI/CGAG-7.1), 1989. Cylinders of purchased breathing air must have a certificate of analysis from the supplier that the air meets Grade D requirements. The moisture content in the cylinder must not exceed a dew point of -50°F at 1 atmosphere pressure. For air from compressors, the moisture content must be minimized so that the dew point at I atmosphere pressure is at least 10°F below the ambient temperature.

3.9 Program Evaluation:

- 3.9.1 The workplace will be reviewed and evaluated at least every 12 months (the program administrator can establish more frequent evaluations/assessments) 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.
- 3.9.2 A written report will be made of each evaluation, summarizing the findings. For each deficiency identified, corrective action taken will be noted.