Workplace Supervisor Respirator Awareness  Updated 3/6/2024

Purpose
This awareness is for workplace supervisors, who have the responsibility of overseeing the work activities of staff assigned to a work area or task where a respirator is required. This training is required annually per the DOE Worker Safety and Health Regulation, 10 CFR 851. The Jefferson Lab respiratory protection program meets OSHA Respiratory Protection Standard 29 CFR 1910.134 and DOE 10 CFR 851.

Training

a) Basic respiratory protection practices; Respiratory protection is the last line of defense against contaminants that may be inhaled or oxygen deficient atmospheres (ODH) when engineering controls and administrative controls do not effectively control the respiratory hazard. Respiratory protection used at Jefferson Lab includes air purifying and air supplied respirators.

b) Nature and extent of respiratory hazards encountered by persons under their supervision;

Certain tasks at Jefferson Lab require use of respiratory protection. The table below identifies tasks requiring respiratory protection and the training required for use:

<table>
<thead>
<tr>
<th>Task</th>
<th>Respirator Required</th>
<th>Training requirement</th>
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</thead>
<tbody>
<tr>
<td>Lead shielding handling in quantities of 10 or more bricks</td>
<td>Air Purifying Respirator (APR) or Powered Air Purifying Respirator (PAPR)</td>
<td>MED13 &amp; SAF200</td>
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<tr>
<td>Unbound nanomaterial handling</td>
<td>PAPR with Tychem SL hood or equivalent facepiece</td>
<td>MED13 &amp; SAF200</td>
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<td>Grinding &amp; welding</td>
<td>(Specifically, FCAW, stick welding, plasma cutting, grinding aluminum, or welding in a confined space).</td>
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<tr>
<td>Chemistry with hydrofluoric acid</td>
<td>Escape Pack</td>
<td>MED13 &amp; SAF210</td>
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<tr>
<td>ODH2</td>
<td>(5-minute Supplied Air Respirator)</td>
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<tr>
<td>Refrigerant leaks (Freon) response</td>
<td>Self-Contained Breathing Apparatus (SCBA)</td>
<td>MED13 &amp; SAF109</td>
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</tbody>
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NOTE:
1. New tasks or new chemicals/materials require an Industrial Hygiene (IH) assessment to determine respiratory protection needs.

2. Filtering facepiece respirators (e.g. N95 type dust mask) may be worn for tasks that do not require specific respiratory protection. Contact the IH Group for assistance for determining respiratory protection requirements. N95 type dust masks may only be obtained from IH.

c) Principles and criteria for selecting respirators used by persons under their supervision;

As detailed in the table above, respirator selection is task specific. The ESH Division IH Group is responsible for selecting/issuing appropriate respiratory protection for staff, providing training & fit testing, and developing a filter change out schedules. Respirator type and filter change schedule is based on the contaminant and potential exposures that staff may encounter during their work.

Respirators may not be obtained from other sources. ALL respiratory protection must be selected and purchased through the IH Group.
d) Respirator inspection and storage;
Respirators must be inspected before use. This is the responsibility of the respirator users; inspection instructions are provided as part of respirator training. The IH Group completes monthly inspections of Escape Packs and SCBAs. The IH Group or qualified manufacturer representative performs periodic maintenance on respiratory protection.

The respirator user must clean and store facepieces after each use. Respirators must not be left out on workbenches or other areas. Respirators are stored in a clean storage bag or container, labeled with the user's name, in a secure location such as the user's workbench or locker.

e) Supplied breathing air quality requirements;
Escape Packs and SCBAs are filled with Grade D or better breathing air. Grade D air is defined as air that meets the following:

- Oxygen content (v/v) of 19.5 – 23.5%
- Hydrocarbon content of 5 mg/m³ or less;
- Carbon monoxide content of 10 ppm or less; and
- Lack of noticeable odor.

The IH Group is responsible for ensuring that breathing air inside escape packs and SCBAs meet these requirements.