Workplace Supervisor Respirator Awareness

DOE Worker Safety and Health Regulation, 10 CFR 851 mandates that all those who oversee staff assigned to a work area where respirator use is required certify their understanding of the information in this document annually. This mandate is also part of the Jefferson Lab respiratory protection program that meets OSHA Respiratory Protection Standard 29 CFR 1910.134 and DOE 10 CFR 851.

I certify that I have read and understand the following:

a) Basic respiratory protection practices;

Respiratory protection is the last line of defense against contaminants that may be inhaled or oxygen deficient atmospheres when administrative and engineered controls are not effective. Respiratory protection used at Jefferson Lab includes air purifying and air supplied respirators.

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

Certain tasks at Jefferson Lab require the use of respiratory protection. The table below identifies these tasks and the training required to carry them out:

<table>
<thead>
<tr>
<th>Task</th>
<th>Respirator Required</th>
<th>Training requirement</th>
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<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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<td>Unbound nanomaterial handling</td>
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<td>Grinding &amp; welding</td>
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<td>(Specifically FCAW, plasma cutting, grinding aluminum, or welding in a confined space).</td>
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<td>Chemistry with hydrofluoric acid</td>
<td>PAPR with Tychem SL hood or equivalent facepiece</td>
<td>MED13 &amp; SAF200</td>
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<tr>
<td>ODH2</td>
<td>Escape Pack (5-minute Supplied Air Respirator)</td>
<td>MED13 &amp; SAF210</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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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. 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. Dust masks may only be obtained from IH.
c) Principles and criteria for selecting respirators;

As detailed in the Table above, respirator selection is task specific. The ESH&Q Division IH Group is responsible for selecting/issuing appropriate respiratory protection, providing training & fit testing, and developing filter change-out schedules. Respirator type and filter change schedules are based on the contaminant and potential exposures that may be encountered during a task.

Respirators (as well as “dust masks”) may not be obtained from other sources. ALL respiratory protection must be selected and purchased by/through the IH Group.

d) Respirator inspection and storage;

Respirators must be inspected before use. This is the responsibility of the respirator user; instructions are provided as part of respirator training. The IH Group inspects Escape Packs and SCBAs monthly. The IH Group or a 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.

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/m$^3$ or less
- Carbon monoxide content of 10 ppm or less
- No noticeable odor

The IH Group ensures that breathing air inside escape packs and SCBAs meet these requirements.

Click the icon at the right to certify