

RESPIRATORY PROTECTION

Purpose:

- To make personnel aware of and describe operations at an Immediately Dangerous to Life and Health (IDLH) atmosphere including interior structural firefighting

Overview:

- OSHA Code of Federal Regulations 1910.134 specifies various aspects pertaining to the selection, use, maintenance, and record keeping of appliances used to provide respiratory protection. Respirators shall be provided by the employer when such equipment is necessary to protect the health of the employee. "The employer shall provide the respirators which are applicable and suitable for the purpose intended. The employer shall be responsible for the establishment and maintenance of a respiratory protection program which shall include the requirements outlined in paragraph (c)" of the standard. Medical evaluations are required prior to any use of the respirators. Fit testing shall be done in accordance to 1910.134 (f) Qualitative fit testing (QLFT).

Selected Respirator

- SCBA of the positive pressure type (Scott NXG2) shall be used in IDLH and interior structural fires "beyond the incipient stage". "Incipient stage" means a fire which is in the initial or beginning stage and which can be controlled or extinguished by portable fire extinguishers, Class II standpipe or small hose systems without the need for protective clothing or breathing apparatus (CFR 1910.155(c)(26)). Scott Aviation Air-Pak NXG2 breathing apparatus with AV-2000/ AV-3000 face pieces are to be use for these applications.

Guideline:

- When used in an IDLH atmosphere or for interior structural firefighting, the Officer in Charge shall consider several things:
Teams will work in the buddy system of 2 or more people per team. Visual, or voice contact shall be maintained at all times. Radios are not permitted for contact between members of a team but can be used between teams and for communications out of the structure. The OIC shall ensure that this frequency be monitored at all times.
- OIC shall have assembled two (2) members at a minimum outside the IDLH atmosphere equipped with SCBA and appropriate tools to effect a rescue and to account for where and whom the firefighters are within the structure. The rescue team should be trained and equipped to begin a rescue immediately if any of the firefighters in the hazardous area require assistance." One of the two individuals located outside the IDLH atmosphere may be assigned to an additional role, such as incident commander in charge of the emergency or safety officer, so long as this individual is able to perform assistance or rescue activities without jeopardizing the safety or health of any Firefighter working at the incident" (1910.134 Note 1 to paragraph (g)). In cases where several points of entry are used, teams should be assembled at each point to fulfill the above needs.

- OSHA emphasizes that the requirement for standby personnel does not preclude the incident commander from relying on their professional judgment to make a rescue during a fire emergency. "Nothing in this section is meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled". 1910.134 Note 2 to paragraph (g). In instances where the standard is exception is used, the OIC will make note of circumstances that lead to the determination. If a Firefighter is injured or killed while the exception is being followed, PESH will look at all issues surrounding the incident and if sound judgment was exercised by the OIC.
- Although the standard requires at least two standby persons during the attack on an interior fire, there are obviously situations where more than two persons will be required. Both inside and outside the interior structure, a decision ultimately is to be made by the incident commander of the number of people needed for the operation.
- The OIC should have dispatched to the scene an additional engine with personnel, either from within the department or Mutual Aid, with this teams responsibility being that of a Rapid Intervention Team (RIT). This shall be done upon confirmation of or a high suspicion of there being an incident that needs interior structural firefighting or operation in an IDLH atmosphere. As before, the OIC shall have an ambulance and paramedic dispatched to assist at the scene.

Program Administration:

- The 2nd Assistant Chief shall be the program administrator for purposes as outlined in 1910.134(c)(3). The duties are to include but not limited to:
 - Ensure respirators are maintained and properly recorded.
 - Ensure medical evaluations are performed by accepted practice and consistent with the duties and potential hazards and a record of such is kept and made available in accordance with 1910.1020.
 - Establish a record of the members fit test and include the name of employee, type of test administered, specific type of respirator tested, date of test, and pass/fail record.
 - Evaluate the program on a regular basis for compliance and effectiveness.