Jackson Hole Fire/EMS Operations Manual

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PURPOSE

The purpose of this procedure is to assure that all personnel are prepared to perform operations while maintaining personal safety. It is the policy of this department that personnel not be exposed to any hazardous atmosphere without Self-Contained Breathing Apparatus (SCBA). Instances of exposure shall be thoroughly investigated by the Safety Officer. The Safety Officer shall make appropriate recommendations to prevent a recurrence.

SECTION I – APPLICATION

This procedure will apply to all JH Fire/EMS personnel. The IC will ensure that mutual aid agencies abide by this policy or are limited to operations in non hazardous environments.

SECTION II – RESPONSIBILITY

Each member is responsible to follow this procedure. Authority to deviate from this procedure rests with the Incident Commander. Additional procedures and programs that also apply to SCBA include but not limited to Air Management, Carbon Monoxide SOP and Respiratory Protection Program.

SECTION III – DEFINITIONS

- Use of SCBA: Shall mean the wearing of SCBA with the facepiece in place, low pressure hose connected to the regulator and breathing air from the cylinder.
- Proficiency of Use: User will be able to correctly don and activate the SCBA component of PPE within 1 minute, SCBA is correctly worn, controlled breathing techniques are utilized, emergency procedures are enacted if the SCBA fails, all low-air warnings are recognized and air management within hazardous atmospheres are understood.
- Hazardous Atmosphere: Any atmosphere that is oxygen deficient or that contains a toxic or disease producing contaminant. A hazardous atmosphere may not be immediately dangerous.

SECTION IV – USE

The use of SCBA is mandatory for all personnel working in the following environments:

- Atmosphere is suspected of being hazardous.
- Atmosphere is known to be hazardous.
- Atmosphere may rapidly become hazardous.
- When the Incident Commander or Safety Officer determines the need for SCBA.

This would include personnel in the following:

- In area with active fire.
- Inside a building involved in fire.
- In a potential fire or explosion area, such as a flammable vapor leak (natural gas leak).
- Where smoke is visible, including vehicle and dumpster fires.
- Where toxic products are present, suspected of being present, or could be released without warning.
- In unventilated confined spaces or in any below grade areas determined by the Incident Commander or Safety Officer to be hazardous.
- In any areas suspected of containing carbon monoxide, including all areas under overhaul and where carbon monoxide detectors indicate the presence of carbon monoxide (Follow Carbon Monoxide SOP).

Personnel using SCBA shall also wear complete personal protective clothing, full fire or EMS bunker gear. Removal of SCBA is at the discretion of the Incident Commander. For removal of SCBA the atmosphere must be free of smoke and the area must be thoroughly ventilated. Gas monitoring through carbon monoxide or hydrogen cyanide will be utilized to confirm the non-hazardous atmosphere, see Carbon Monoxide SOP.

Personnel operating in areas where the atmosphere could become hazardous, but where there would be warning prior to danger, may wear SCBA with the facepiece removed. It must be ready for immediate use should conditions change rapidly.

Users are responsible to ensure that the SCBA used during an incident are cleaned, cylinders filled, and that they are put back in service on that apparatus.

SECTION V – FACEPIECE SEAL PROTECTION

In order to ensure the safety of all responders, no hair will compromise use of Personal Protective Equipment, specifically, no facial hair shall be permitted that come between the sealing surface of the face piece and the face or that interferers with the valve function, or any condition that interferes with the face piece-to-face seal or valve function.

The standard for facial hair and SCBA use shall be NFPA Standard 1404 A6.9.2(7) and OSHA standard 1910.134.

1. Employees whose facial hair violates the standards will be informed of the necessary corrections needed for compliance. In cases of extreme violations or safety hazards, employees will not be permitted to be on duty or respond until the correction has been made.
2. Employees who refuse to comply with these standards and directives may be subject to disciplinary action up to and including discharge.

In addition, hair must not interfere with the effective use of all PPE required by the member. Braiding of hair is considered to be an acceptable means of securing it. If the braid gets in the way of a member's ability to perform their job, it must be modified.

SECTION VI – TRAINING

Initial Training shall take place in every member's probationary period or within 6 months of the initiation of this procedure. Per NFPA 1001, requisite knowledge and skills must be acquired.

Requisite Knowledge – Conditions that require respiratory protection, uses and limitations of SCBA, components of SCBA, donning procedures, breathing techniques, indications for and emergency procedures used with SCBA, and physical requirements for SCBA.

Requisite Skills – The ability to control breathing, replace SCBA air cylinders, use SCBA to exit through restricted passages, initiate and complete emergency procedures in the event of SCBA failure or air depletion and complete donning procedures.

Quarterly Proficiency Training on use of SCBA shall be sufficient to ensure that every member can don and effectively use SCBA. Training shall include a 2-minute drill, including bunker gear and SCBA. Documentation of the training will be completed through the use of a Fire/EMS roster and Member Task Book.

SECTION VII - INSPECTION

Frequency of inspection per NFPA 1882 for an SCBA that is assigned to an individual for a duty period will be at the beginning of each duty period. For an SCBA on an apparatus not assigned to an individual, frequency of inspection will be weekly.

Facepiece

- Material checked for deterioration, dirt, cracks, tears, holes, pliability and tackiness
- Head-harness buckles, strap and webbing checked for breaks, loss of elasticity or wear
- Lens checked for holes, cracks, scratches, heat-damaged areas and proper seal with facepiece material
- Exhalation valve checked for valve seat
- Regulator connection checked for proper operation and damage

Backframe and Harness Assembly

- Harness straps and backframe checked for cuts, tears, abrasion, indications of heat damage and indications of chemical-related damage
- All buckles, fasteners and adjustments checked for proper operation
- Cylinder retention system checked for damage and proper operation
- Cylinder checked for secure attachment to the backframe
- Harness straps checked for full extension

Breathing Air Cylinder

- Hydrostatic test date on the cylinder checked to be current – Carbon fiber bottles require hydrostatic testing every 5 years

- Gauge checked for damage
- Cylinder body checked for gouges in the carbon fiber down to the black carbon layer, indications of heat damage and indications of chemical damage
- Cylinder valve outlet sealing surface and threads checked for damage
- Valve hand wheel checked for damage, proper alignment, serviceability, and secure attachment
- Cylinder checked for full charge – greater than 4,000 PSI

Regulator

- Regulator controls checked for damage and proper function
- Regulator checked for any unusual sounds such as whistling, chattering, clicking, or rattling during operation
- Regulator bypass checked for proper function
- Heads-up display functioning
- Cleaned and disinfected after use by previous user

Remote Gauge

- Checked for damage
- Cylinder gauge and remote gauge within 10% of each other

PASS

- Manual and automatic operating modes checked for proper alarm initiation
- Low battery warning signal of a chirp and red light in heads up display