FIRE DEPARTMENT

SCBA STANDARD OPERATING PROCEDURES

REQUIREMENTS

SOPs outlining the critical procedures for SCBA Training, Selection / Use and Maintenance should be available. The SOPs are an element of the department's Respiratory Protection Program and must be followed and enforced to ensure program effectiveness. The SOPs provide written documentation that when followed will increase the consistent respiratory protection of personnel and secure department compliance with OSHA / State regulations and NFPA recommendations. Procedures should be detailed but concise. The following outlines provide basic content for the three primary SCBA SOPs.

SCBA TRAINING

- Respiratory Hazards
- SCBA Protection Limits
- Construction Details and Safety Features
- Air Supply Duration & "Point of No Return"
- Procedures for Use
- Practical Applications
- Care & Storage, Inspections, Maintenance
- Emergency Conditions

SCBA SELECTION and USE

- Positive-pressure SCBA Selection
- Medical Clearance
- Facepiece Fit Testing, Qualitative or Quantitative Using AQL Testing Services
- Donning and Doffing SCBA
- Safety Procedures
- Incidents Requiring Mandatory Use of SCBA / Safety Officer
- Fireground Procedures
- Command Responsibilities
- Personnel Responsibilities
- Atmosphere Monitoring to Determine Safe Conditions for Approval of SCBA Removal
- Special Issues - Low Temperature, High Temperature, Confined Spaces

**SCBA MAINTENANCE**

- Manufacturers Recommendations
- Equipment Inventory Identification
- Inspection Frequency and Procedures
- Cleaning Procedures
- Storage Procedures
- Preventative Maintenance
- Equipment Repairs
- "Out of Service" Equipment
- Testing Procedures
  - SCBA Performance
  - Cylinder Hydrostatic
  - Compressor /Cascade Breathing Air Quality Program Using AQL Testing Services
- Record Keeping
Purpose:

- To establish a guideline to indicate the proper maintenance, training, use, and cleaning of self-contained breathing apparatus in order to ensure the safety of the fire department personnel.

Responsibility:

- It is the responsibility of the Chief to assure that the SCBA’s are kept in working order and that all member of the fire department are trained in accordance with the Standard Operating Produces.

Inspection and Records:

- An assigned person shall make monthly inspections on all SCBA in use by the Gorham Fire Department. The inspections shall consist of a checking the entire unit for deteriorated components, air tightness of cylinders, valves, gauge comparison, reducing valve, and bypass valve operation, regulator, exhalation valve and low air alarm. The face piece and harness shall also be visual inspected. The entire SCBA will be cleaned, dried if necessary. The P.A.S.S. device shall be tested and attached to each of the SCBA. The hydro test dates will be checked on each cylinder and sent to be hydro tested if needed. Records shall be kept on each of the inspection. If there is any malfunction found the SCBA shall be taken out of service until it is repaired.
- Inspections shall be made before and after each use. This inspection shall consist of a visual check of the face piece, harness, and cylinder pressure. The user shall also check for leaks, gauge comparison, proper fit, and the air bottle is fully charged. If there is any malfunction found the SCBA, it shall be taken out of service until it is repaired. Inspection by another firefighter shall be made before entering a hazardous area, this will be known as a "Buddy Check."
- A qualified person shall conduct annual inspection and service of SCBA; this inspected shall be preformed according to manufactures recommendations.

Maintenance:

- SCBA’s that need maintenance work done to them; will be done by trained maintenance personnel only. If repair work is needed on a SCBA it shall be taken out of service, tagged with a note describing the problem, and reported to the officer in charge. O-rings are the only part that can be replaced by a firefighter; at no time shall any firefighter open the regulator to do repairs.
Training:

- New Hampshire SCBA instructors shall train firefighters, the firefighter shall pass all requirements set forth by New Hampshire Fire Standards and Training and certificate be on file with the Gorham Fire Department before using the SCBA in hazardous areas.
- The firefighter shall demonstrate competence in the proper donning and doffing procedures, identifying hazardous areas, and knowledge of equipment at least once a year. It will be the responsibility of the training committee to set up two SCBA training programs a year.
- It is recommended that at least one firefighters entering a hazardous area be firefighter I or firefighter level I.

Emergency Scene Use:

- SCBA will be used by all firefighter who are exposed to respiratory hazards or be exposed to such hazards without warning. The hazard shall include car fires, dumpster fires, interior structure fires, outside area where there is a possibility to encounter heat and/or smoke, liquid propane leaks, chemical contaminated areas, oxygen deficient areas, and any other hazardous atmosphere.
- Firefighters shall only enter hazardous areas when there are at least four firefighters on the scene and incident command is in place.
- When using a SCBA, firefighter shall use the "buddy check," to inspect SCBA and personal protective equipment, be monitored for indications of fatigue, work with a minimum of one other firefighter that is in constant communication with each other, and have at least one portable radio between the team.
- One firefighter with a radio shall be assigned to remain outside the point of entry, maintaining constant awareness of the number, identities, location, function, and time of entry, of the firefighters inside.
- Two firefighters with SCBA’s shall be "standing by," available for rescue, this is also known as a Rapid Intervention Crew.
- When the evacuation signal is sounded (three long blasts of an air horn, pause then repeated until everyone is accountable), everyone inside the hazardous area will immediately withdrawal from the building and report to staging for roll call.

Face Piece Seal:

- Eyeglass frames, facial hair, and beards that interfere with the seal of the face piece shall be prohibited. This mean there shall be skin contact around the whole seal.
- Annual fit test program shall be conducted on each firefighter qualified to wear a SCBA.

Personal Protective Equipment:

- Personal protective equipment shall be worn in accordance to Standard Operating Procedure #1.
- The P.A.S.S. device shall also be worn and activated.
- Nomex hood shall be worn over the face piece harness.

Two Bottle Rule:

- Firefighter that use two air bottles shall report to rehab or ambulance crew to have vitals checked. This will allow the firefighter time to recover, rehydrate, and be monitor for signs of fatigue. If the incident should continue, rehab shall be needed between each bottle after the initial two bottles.

Buddy Breathing:
• At no time shall the integrity of the SCBA be breached.
• Buddy breathing take constant training to work effectively.

Point of no Return:

• Firefighters shall only go to a point that when the low air alarm activates, they will have enough time to make a safe exit. This is approximately a 5-minute escape time.

Low Air Alarm:

• When the low air alarm is activated for any reason, all firefighter on the team will exit the hazardous area.

Cascade System:

• Only trained firefighter shall fill air bottles form the cascade system.
• The cascade system shall only be used at incidents that will deplete the supply of air bottles.

Cleaning and Returning to Service:

• Return all straps to the loosest position.

• Clean harness, airlines, and regulator of dirt and debris, using air hose (wear safety goggles), brush, or wash with warm water and mild detergent, than rinse with warm water. **Do not wash with Acetone, Alcohol, White Spirit, or Trichloroethylene.**
• Clean face piece with 10:1 warm water, bleach solution, rinse with warm water, then spray with disinfectant, allow setting for 10 minutes, and then rinsing with warm water.
• Replace air cylinder with full air cylinder, the pressure shall be between 2000 psi and 2216 psi.
• The SCBA need to be fully dried before they are returned to service.

Conclusion:

• It is for the safety of ever firefighter to keep the Self Contained Breathing Apparatus in proper condition. Regular inspections, maintenance, and training of the SCBA’s can accomplish the level of safety needed during an emergency. It is essential to use the SCBA’s whenever the situation dictates and to follow this standard operating procedure. Following this standard operating procedure will help in preventing injuries that can occur from smoke and heat that can damage your lungs. These injuries can have an acute or chronic, effect on your health. The chronic effects may not be noticed for years. Accountability will also be assured at incidents if this standard operating procedure is followed.
DALLAS VOLUNTEER FIRE DEPARTMENT

STANDARD OPERATING GUIDELINES

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PROTECTIVE CLOTHING

The purpose of this guideline is to assure that all personnel are prepared for fire suppression or rescue operations immediately on arrival at an emergency scene while maintaining the highest degree of personnel safety for all personnel. This guideline shall apply to all personnel operating at the scene of any emergency incident or training exercise. As with any guideline, primary responsibility for adherence to this guideline rests with the individual. Company Officers are responsible for enforcement of this guideline within their respective companies. Authority to deviate from this guideline rests solely with the Company Officer who bears full responsibility for the results of any deviation.

For the purpose of this guideline, full protective equipment shall consist of helmet with face shield or goggles, sock hood, turnout coat, turnout pants, boots and gloves. All equipment is to be properly fastened and closed with sock hood on, coat collar turned up and helmet ear flaps turned down. All equipment shall be manufactured in accordance with appropriate NFPA standards. Alterations to any equipment, such as the removal of coat or pant liners, are prohibited. If the need for some alteration is needed, it must first be approved by the Chief Officer. Damaged equipment shall be brought to the attention of the Chief.
Protective equipment shall be worn by all personnel during fire or rescue calls.

**DALLAS VOLUNTEER FIRE DEPARTMENT**

**STANDARD OPERATING GUIDELINES**

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**SCBA UNITS**

The purpose of this guideline is to assure that all personnel are prepared to perform emergency operations while maintaining the highest degree of personal safety for all personnel. The use of self-contained breathing apparatus (SCBA) is an essential part of the complete personal protective equipment provided for each member of this fire department. All personnel are expected to use the SCBA whenever the need for respiratory protection is indicated. This shall include any atmosphere that is contaminated with smoke, gases or other byproducts of combustion or any atmosphere that contains any known contaminants not normally present in clean air. Each member is responsible for restoring to service the SCBA they used during an emergency. This shall include replacing the cylinder with a full cylinder, cleaning of the facepiece and harness, testing the unit for proper operation and storing the SCBA in its assigned position. Any problems should be immediately reported to the Officer in Charge and be tagged as “OUT OF SERVICE”.
Purpose:
It is the intent of this document to promote the proper use and care of the Self Contained Breathing Apparatus’s (SCBA’s) in use by the Emporium Volunteer Fire Department. It is not intended to replace SCBA training in any way shape or form.

Scope: This document will explain:
A) When an SCBA is to be used.
B) Pre-use operational checks.
C) Post-use operational checks.
D) Monthly maintenance checks.
E) Annual factory maintenance.
F) SCBA Fill Station.
Qualified personnel are defined by meeting one or more of the following requirements:
- Have attended and completed “Basic Fire School”
- Have completed module #4 of the new Delmar system
- Have completed a certified “Air Pack training course”
- Fire Fighter level I
- Fire Fighter level II

All qualified personnel **shall** have a clean path in order to dawn an SCBA
Example:
- No long side burns
- No beards
- No goatees

**Guidelines:**

A) **When Should an SCBA be used:** SCBA’s **shall** be used only by qualified personnel whenever structural or vehicular fire is being fought, during mop up operations after a structural or motor vehicle fire and any time a hazardous material **may** be involved.

B) **Pre-use Operational checks:** It is the responsibility of each individual Fire Fighter to ensure the SCBA they are going to use is in good repair and fully operational before entering into the hot zone of any scene. This is to be done by inspecting SCBA, donning the SCBA and insuring its’ function ability by breathing through the mask while it is properly fitted to the Fire Fighter’s face. If the SCBA is fitted with a Pass Alarm, the Pass Alarm **shall** be checked for proper operation and **shall** be activated and remain activated whenever the Fire Fighter is in the hot zone.

C) **Post-use Operational Cleanup:** Any Fire Fighter who uses an SCBA for any reason and for any length of time **shall** thoroughly clean the SCBA and SCBA mask after each use, ensure there is not less than 4,000 lbs. of air supply and that the SCBA is properly stowed on it’s assigned apparatus before the officer in charge of that unit can release his or her accountably tag. If any said person does not clean the SCBA the officer will turn the accountably tag in to the Chief Officer.
and that person may be subject to a Chief’s suspension of not more than 30 days.

D) **Monthly Maintenance Checks:** SCBA maintenance *shall* be completed on a monthly basis and is the responsibility of the apparatus captain(s) to which the SCBA is assigned to ensure that this check is done. It *shall* be done in accordance with the SCBA monthly checklist provided by the manufacturer of the SCBA. All deficiencies *shall* be reported to the officer in charge of SCBA maintenance. Any officer who is not familiar with this process *shall* make it his or her responsibility to contact the officer in charge of SCBA maintenance and become adept at this process.

E) **Annual Factory Maintenance:** Each and every SCBA on inventory at the Emporium Volunteer Fire Department *shall* be inspected and bench tested for proper operation by a qualified factory service technician on an annual basis. This *shall* be the responsibility of the officer in charge of the SCBA’s. All air cylinders *shall* be hydro tested as per factory recommendations by a qualified factory trained technician. This also *shall* be the responsibility of the officer in charge of the SCBA’s.

F) **SCBA Fill Station:** Only qualified personnel who *shall* follow all procedures outlined by the owner’s manual located at the SCBA Fill Station *shall* operate the SCBA Fill Station. Training in the operation of the SCBA Fill Station *shall* be performed by the officer in charge of the SCBA’s or by an assigned training officer. The SCBA Fill Station *shall* be maintained in a clean and ready for service condition. All maintenance *shall* be performed by qualified factory service technicians and by properly trained personnel of the Emporium Volunteer Fire Department on a schedule set forth in the SCBA Fill Station owner’s manual.