

LAKEWOOD FIRE DEPARTMENT STANDARD OPERATING GUIDELINES

SOG NUMBER: 201.02	SAFETY AND HEALTH
DATE IMPLEMENTED: JUNE 14, 2017 DATE REVISED:	TITLE: RESPIRATORY PROTECTION

PURPOSE:

These provisions are promulgated and designed to establish policy, responsibilities and requirements for the protection of firefighters whose job requires the use of respiratory protection. They will also provide assistance to firefighters in the use and care of respiratory protection.

SCOPE:

This guideline shall apply to all Department personnel and the Safety Officer (as designated by the Chief of the Department) has full authority to make necessary decisions to ensure the success of this program.

GENERAL:

1. Firefighters shall wear self-contained breathing apparatus (SCBA) under the following conditions:
 - a. While engaged in interior structural firefighting.
 - b. While working in confined spaces where toxic products or an oxygen deficiency may be present.
 - c. During emergencies involving hazardous materials or toxic substances.
 - d. During all phases of firefighting and overhaul.
2. Firefighters wearing an SCBA must activate their personal alert safety system (PASS) device before entering an area where respiratory protection is required.
3. Firefighters wearing SCBA shall conduct a seal check prior to each use.
4. Firefighters shall not remove the SCBA at any time in the dangerous atmosphere.
5. All firefighters shall continue to wear an SCBA until the Incident Commander determines that respiratory protection is no longer required.
6. Nothing stated or implied herein shall prevent a firefighter from donning an SCBA when in his judgement, a threat exists to his personal safety.

PROCEDURE FOR INTERIOR STRUCTURAL FIREFIGHTING:

1. At least two (2) firefighters shall enter the immediately dangerous to life and health (IDLH) atmosphere together and remain in visual and voice contact with one another at all times.
2. Electronic methods of communication such as the use of radios shall not be substituted for direct visual contact between team members in the danger area.
3. The firefighters in the IDLH atmosphere shall have voice or radio communications between themselves and the officer in charge OIC.
4. All firefighters involved in interior structural firefighting will use SCBA.
5. At least two (2) firefighters shall remain outside the IDLH atmosphere to assist in rescue if the interior firefighters become incapacitated in any way. They must be trained, equipped and prepared to enter if necessary to rescue firefighters inside.
6. The OIC has the responsibility and flexibility to determine when more than two (2) outside firefighters are necessary given the circumstances of the fire. The two-in/two-out rule does not require an arithmetic progression for every firefighter inside, i.e. the rule should not be interpreted as four-in/four-out, eight-in/eight-out, etc.
7. Firefighters will wait to commence interior structuring firefighting, until the proper number of firefighters can be assembled on the scene as required by the response. During this time, the fire will be attacked only from the outside, sizing-up operations will occur and emergency rescue necessary to save lives may take place.
8. One of the firefighters located outside the hazardous area may be assigned to an additional role, such as Incident Commander or Safety Officer so long as that firefighter is able to perform assistance or rescue activities without jeopardizing the safety or health of any firefighter working at the incident.
9. Nothing stated or implied in this procedure is meant to preclude firefighters from performing emergency rescue activities before the entire team is assembled.

FIREFIGHTER SAFETY:

1. Firefighters wearing an SCBA shall be fully protected with the use of approved structural firefighting clothing that meets the requirements of the PEOSHA Standards for Firefighters. Protective clothing shall include turnout coat, bunker pants, gloves, boots, helmet, fire resistant hood and personal alert safety system (PASS) device.

TRAINING:

1. Initial SCBA training is to be provided during the Firefighter 1 Course at a NJ State approved training academy. No firefighter is to use respiratory protection unless training has been successfully completed. Firefighters trained at other than a state approved fire academy must be certified by the Department Safety Officer before wearing an SCBA.

2. Training in the use of SCBA shall be done in two phases. Each new firefighter recruit will be given initial training before using SCBA and annual training thereafter.
3. No firefighter shall wear SCBA without proper training and fit-test.
4. Firefighters wearing SCBA shall be trained in its proper use, cleaning, and maintenance.
5. All firefighters will be fit-tested annually. Each firefighter must pass a facepiece fit-test during initial and annual training.
6. All members will be issued a personally sized facepiece/mask as determined by initial and annual fit testing. Each firefighter will be responsible for maintaining their facepiece.
7. Training for the actual use of SCBA shall include but not be limited to the following:
 - a. Procedures for donning and doffing SCBA.
 - b. Practice of controlled breathing.
 - c. Psychological and physiological factors.
 - d. SCBA's do not provide protection from skin-absorbed materials/contaminants.
 - e. Emergency procedures including SCBA malfunctions.
 - f. Preventive maintenance and proper storage.
 - g. Why the SCBA is necessary and how improper fit or maintenance can compromise the protective effect of the SCBA.
 - h. The limitations and capabilities of the SCBA.
 - i. How to recognize medical signs and symptoms related to SCBA use.
 - j. Practice in simulated hostile environments.
 - k. Refilling of SCBA tanks, including but not limited to:
 1. Procedures for inspecting SCBA cylinders for damage.
 2. Ensuring the cylinder has the proper/acceptable hydrostatic test date.
 3. Ensuring that composite cylinders older than fifteen (15) years are not filled and removed from service.
 4. Procedures to safely operate charging station(s).
 5. Procedures for recharging of air tanks.
 6. If a cylinder is found empty and it is not known how it was emptied (used in training, during a fire, etc.), do not refill the cylinder until it is determined that the cylinder can be safely refilled. It is possible that the cylinder has a flaw that caused the cylinder to leak.

FACEPIECE FITTING AND SEAL CHECK:

1. Each firefighter must pass a facepiece fit-test during initial and annual training.
2. When using SCBA, each firefighter shall wear their personally issued facepiece as determined by initial and annual fit testing.
3. A firefighter shall not wear respiratory protection unless their properly sized facepiece is available and their equipment is in proper working condition according to the manufacturer's specifications.

4. An effective face-to facepiece seal is extremely important when using respiratory protective equipment. Minor leakage can allow containments to enter the facepiece, even with a positive pressure SCBA. Any outward leakage will increase the rate of air consumption, reducing the time available for use and safe exit. The facepiece must seal tightly against the skin, without penetration or interference by any protective clothing or other equipment.
5. Nothing can be between the sealing surface of the mask and the face of the wearer, including but not limited to, eyeglasses, protective hoods, and beards or other facial hair.
6. Firefighters shall perform a seal check prior to every SCBA use. SCBA can only be worn when an adequate seal is achieved.

INSPECTION, STORAGE, AIR SUPPLY:

1. Regular periodic inspections are required to ensure that all respiratory protection equipment is properly operating and available for use.
2. All SCBA and spare cylinders shall be inspected after each use and at least monthly.
3. In the event replacement or repair of SCBA components is necessary, it shall be performed according to manufacturer's instructions and only by persons trained and certified by the manufacturer or returned to the manufacturer's service facility.
4. Firefighters will not subject SCBA units to unnecessary abuse due to neglect and/or carelessness. Caution must especially be exercised to protect the facepiece section of the mask from being scratched or damaged.
5. Each SCBA shall be cleaned and disinfected after each use. Only cleaning/sanitizing solutions for respiratory equipment will be used for cleaning and disinfection.
6. SCBA cylinders shall be hydrostatically tested within the period specified by the manufacturer and applicable governmental agencies. Metal cylinders must be tested every five (5) years and composite cylinders every three (3) years. Composite cylinders will be removed from service after fifteen (15) years from the first hydrostatic test date.
7. All units shall be stored so that they are protected against direct sunlight, dust accumulation, severe temperature changes, excessive moisture, fumes, and damaging chemicals. Care is to be taken so that the means of storage does not distort or damage rubber or elastomeric components.
8. Breathing air in the SCBA cylinder shall meet the requirements of the Compressed Gas Association G-7.1-1989, COMMODITY SPECIFICATION FOR AIR, with a minimum air quality of Grade D. The Fire Department shall ensure that private vendors supplying compressed air provide a copy of the most recent inspection and certification.
9. The purity of the air from the Fire Department's air compressor shall be checked by a competent laboratory at least annually.
10. The Fire Department shall assure that sufficient quantities of air are available to refill SCBA for all emergencies. This shall be accomplished through mutual aid or through the use of a

mobile air fill station.

11. Air cylinders for SCBA shall be filled only by personnel who have completed fill station training.
12. Compressed oxygen shall not be used in open-circuit SCBA.

RECORD KEEPING:

1. Each SCBA Pack (tank and harness) and shall have an identifiable number assigned and it shall be recorded on the SCBA Checklist and maintained in the SCBA notebook at each Fire Station. Monthly checks, cleaning and checks after fires, and cleaning and checks after drills shall be similarly recorded on the SCBA Checklist with the signature of the individual who performed the check and maintained in the notebook.
2. The Safety Officer shall be responsible for ensuring SCBA inspection and maintenance records are being properly completed and maintained.
3. In the event that there is a problem with any SCBA Pack (harness or tank) the unit is to be taken out of service. A memo specifically describing the issue will be submitted to the Chief of Department with copies forwarded to the Department Safety Officer and Board Office. A copy shall also be attached to the SCBA Pack.
4. The upkeep of records regarding respiratory protection will be coordinated between the Department Training Officer and Department Safety Officer. The Training Officer shall be responsible for maintaining training records and the Safety Officer shall be responsible for maintaining fit-test as well as SCBA inspection and maintenance records.