

Subject: Self Contained Breathing Apparatus (SCBA)

Purpose: This policy identifies the components of the Northern Piatt County Fire Protection District's (NPPFD) Respiratory Protection Program as they relate to self contained breathing apparatus (SCBA). This document is intended to satisfy the requirements of OSHA 29CFR 1910.134, NFPA 1404 and NFPA 1500.

Scope: This policy applies to all personnel of the Northern Piatt County Fire Protection District.

Definitions

Immediately Dangerous to Life of Health (IDLH)

An atmosphere that poses an immediate threat to life and would cause irreversible adverse health effects or would impair an individual's ability to escape from a dangerous atmosphere.

Policy

Purchasing and selection

All SCBA purchased shall be of open circuit positive pressure design and comply with all current applicable standards that exist at the time of purchase. The minimum duration of air cylinders shall be 15 minute.

Equipment testing

Minimum air quality

All compressors shall produce minimum air quality of Grade "E".

Harnesses and regulators

All harnesses shall be inspected monthly by fire department personnel. All regulators shall be flow tested annually. All harnesses and regulators shall comply with current applicable standards.

Face Piece

All face pieces shall be inspected monthly. All face pieces shall be fit tested annually. The testing shall ensure that the face piece is functioning properly. Each

member shall be issued a face piece upon completion of initial SCBA training. It shall be that member's responsibility for cleaning and maintenance of face piece.

Cylinders

All metal bottles shall be hydrostatic tested every 10 years from the date of manufacture or last test date. No cylinder shall be used which is out of date. Fire officers will coordinate the testing procedure with a third party authorized by the Northern Piatt County Fire Protection District and track when the cylinders are due for testing.

Altering Equipment

There shall be no alterations made to any SCBA equipment. Only manufacturer approved equipment shall be added to the SCBA harness, cylinders, or face pieces.

Storage of SCBA

All units shall be properly secured in the bracket provided on each vehicle. Spare cylinders shall be stored in the brackets or holder provided and shall not be stored loose or where they may be at risk of damage.

Certification for Use

Medical

All personnel who are expected to use SCBA shall be evaluated and certified on an annual basis. All new personnel shall be medically evaluated prior to initial SCBA use. Record of the medical evaluation shall be kept in the individual's personnel file.

Fit Testing

All personnel shall annually be quantitatively fit tested to ensure proper face piece size. This test will be conducted by department officers. All new personnel shall be fit tested prior to initial SCBA use. Records of this testing shall be maintained in the individual's personnel file.

Training

All personnel shall be trained in the proper use of SCBA. The training of the personnel is under the auspices of the department Training Officer. The Training Officer shall keep a list of all personnel trained to wear SCBA. Training program will follow Illinois Office of the State Fire Marshal's Firefighter II SCBA objectives. Once an individual has been properly trained and signed off, the individual will have an SCBA face piece issued to them.

The department performance standard for complete donning of SCBA shall be sixty (60) seconds.

Monthly inspection

All personnel are responsible for the monthly inspection of department SCBA. Personnel are also responsible for inspecting all in service cylinders as well as any spare cylinders.

The harness monthly inspection shall consist of the following:

- Air pressure within the green section of the cylinder pressure gauge
- Visual inspection of straps and harness
- High pressure hose connector is tight
- Unit is clean and secured properly
- The by-pass valve is operating properly
- The PASS device is in working condition
- The regulator is attached to the belt holder
- Turn on air supply and breathe off the regulator to ensure proper function

All personnel are issued a face piece. The inspection and cleaning are the responsibility of the wearer. The face piece monthly inspection shall consist of the following:

- Visual inspection of the face piece and head harness
- Check for a tight seal
- Exhalation valve is working properly
- Nose cup is properly installed

Usage

Personnel shall don SCBA in the following scenarios:

- The atmosphere is hazardous
- The atmosphere is suspected of being hazardous
- The atmosphere may rapidly become hazardous
- During confined space and/or below grade operations
- In any oxygen deficient atmosphere
- When instructed to do so by an officer

Personnel responding to a potential fire incident shall have SCBA strapped on and ready for use when reporting to the Incident Commander for assignment. On apparatus that are not equipped with a built in SCBA bracket on the seat, the harness shall not be donned en route.

All personnel shall don and place in operation their SCBA before entering any IDLH atmosphere. Personnel operating in SCBA shall do so in teams of at least two (2), in accordance with department two in-two out policy.

The decision to discontinue SCBA use shall be approved by the Incident Commander and the benchmark "SCBA removed" is to be provided to Communications. Prior tot

removal of SCBA, fire areas shall be thoroughly ventilated and, where necessary, continuous ventilation shall be provided.

When airborne particulate matter is present and cannot be positively identified as harmless, SCBA shall be worn.

When SCBA are removed, they shall not be dropped or left in the building where they may be damaged. SCBA will be returned to a central staging area for service and returned to a condition ready for use then returned to their respective apparatus.

Air Management and Emergency Procedures

Any crew entering an IDLH atmosphere must monitor their remaining air supply carefully. They shall leave the IDLH atmosphere while they still have sufficient air supply to reach a safe area.

If any member of the crew receives a low air alarm or has a malfunction of any part of their SCBA, the entire crew shall exit the building immediately.

After Use Inspection

After every use of a SCBA, the wearer shall be responsible for the following:

- Clean and wipe dry the harness, cylinder, and face piece
- Fill all empty cylinders
- Perform a monthly inspection as outlined previously

Refilling of cylinders

Routine refilling

The routine refilling of cylinders shall be done in accordance with the recommendations of the cylinder and cascade system manufacturers. Cylinders shall be placed inside the fragmentation guards (tubes) during refilling.

SCBA cylinders are not assigned to a particular fire department unit. Each cylinder will be marked and numbered with appropriate fire department identification sticker. SCBA harnesses shall be assigned to each apparatus.

The following is the procedure that will be used for refilling air cylinders:

- Each unit is responsible for filling their cylinders after an incident.
- Cylinders are to be refilled at the main fire station or from the mobile cascade on Rescue 349
- Ensure that the proper numbers of cylinders are returned to the apparatus.
- If a cylinder is damaged, replace it with a spare. These cylinders are located in the tool room. **DO NOT TAKE FULL CYLINDERS AND**

LEAVE EMPTY ONES IN THEIR PLACE. Follow the maintenance procedure after replacing a damaged cylinder.

Cylinders from an outside agency

When a request is made to fill air cylinders from another fire department, the hydrostatic test date of the cylinder(s) shall be checked for compliance. **If the cylinders are found to be out of date, they shall not be filled. All filling of cylinders shall be done by a Northern Piatt Fire Department member.**

Maintenance

Harnesses and Cylinders

Any time there is need for repair of SCBA equipment, it shall be tagged and a department officer notified. If possible, an email should be sent to the officer that the member is reporting the problem to. Information given needs to include where the equipment is from, a brief description of the problem, and who is submitting the equipment for repair.

Face Piece

If there is a repair required with a mask that renders it unusable, a department officer should be notified. If possible, an email should be sent with the same information as for a broken air pack. Spare face pieces shall be issued by a department officer.

Compressors

The compressor at the main fire station shall be inspected monthly by station personnel. During this inspection, the compressor should be run for a minimum of ten (10) minutes. When a maintenance need is found, a department officer shall be notified.

Spectacles and contact lenses

Personnel shall not wear standard eye glasses in conjunction with SCBA. All styles of spectacles that break the face piece seal are prohibited. Contact lenses are permitted, and spectacle kits that attach to the inside of the face piece are available upon request to a department officer. Purchasing of the lenses is the responsibility of the individual.

Records and Reports

It shall be the responsibility of the department officer in charge of protective gear to insure that records are kept for each of the following areas:

- Serial numbers of face pieces, harnesses, and cylinders
- Air quality testing results
- SCBA equipment out of service for repair
- SCBA equipment testing and repairs
- Compressor repairs and routine maintenance

SCBA program evaluation

The department shall annually review the SCBA program for the purpose of determining the need to upgrade or change various aspects of the program.

By the order of : _____
Fire Chief

Date: _____