Bath Township Fire Department			Standard Operating Guideline	
Section **Equipment**	**Referral No.** **E-17**	**Subject:** **SCBA Care & Maintenance**	**Date Issued** **5/05**	**Date Revised** **11/13**

Purpose:

- The purpose of this SOG is to establish the procedures to be used in Self Contained Breathing Apparatus (SCBA) care and maintenance to comply with NFPA 1852.
- To ensure SCBA's are properly maintained in a state of readiness at all times.

Scope:

- This standard operating guideline shall apply to all personnel.

Responsibilities:

- Officer
  - All officers will ensure that all personnel are properly trained in the care and maintenance of SCBA units and related equipment.
  - All officers will ensure that SCBA units are maintained in a state of readiness at all times.
- Personnel
  - All personnel have the responsibility of caring for and maintaining SCBA units and related equipment.

General:

- It is the policy to ensure that firefighters avoid any respiratory contact with products of combustion, superheated gases, toxic products, or other hazardous contaminants. All personnel expected to respond to and function in areas of atmospheric contamination, shall be equipped with SCBA, and be trained in its proper use and maintenance.
- Each member of the Fire Department that is issued an SCBA face piece is responsible for maintaining the face piece in a ready, clean, and usable condition.

Guidelines:

- SCBA units shall be inspected daily, weekly, and after each use.
- Only qualified SCBA technicians shall perform all maintenance, repairs or replacements of parts.
- Any member finding a SCBA unit in need of repair or service shall immediately tag and place the unit out of service, complete an equipment repair request, and notify the Fire Chief, Deputy Fire Chief or designee.
- All respirators shall be inspected before each use and during cleaning.
- All SCBA packs and Masks will be cleaned after each use.

- Inspection of respirators shall include, but are not limited to, the following:
    1. Check tightness of connections, and the condition of the various parts including, but not limited to, the face piece, head straps, valves, connectors, and hoses.
    2. Check elastic parts for pliability and for signs of deterioration.
    3. At each inspection, it must be determined that the regulator, low-air warning devices, heads-up display, and PASS alarms function properly.
    4. Prior to starting on the checklist, make sure that:
        a. The high-pressure hose connector is tight on the cylinder.
        b. The bypass valve is closed.

Component Inspection Checks

- This inspection shall include the following:
    - Cylinder pressure
        - Anything below 4300 PSI on 4500 bottles and anything below 2100 PSI on 2216 bottles will be refilled.
        - Visually inspect cylinder gauge to see if gauge face, needle and lens are in working order.
        - Open cylinder mainline valve; listen or feel for leakage around packing.
    - High-pressure hose check.
        a. Hose fittings should be tight.
        b. Listen or feel for leakage in hose or at hose-to-cylinder connector.
            - Bubble in outer hose covering may be caused by seepage of air through hose when stored under pressure
            - Look for cuts or severe abrasions, if present the hose needs to be replaced.
    - Regulator and low-pressure alarm check.
        a. Purge valve shall be properly operating.
        b. Ensure no excessive or abnormal noise is heard from the regulator when activated.
        c. Close cylinder valve. Slowly open by-pass valve. Air should flow from outlet, and gauge pressure should begin to decrease immediately. Alarm should sound at pressure reading between 1500 and 1380
    - Face piece check
        a. Face piece assemblies
            (1) Straps
            (2) Integrity of the face piece
            (3) Speaking diaphragm assembly

(4) Lens for scratches, cracks, blemishes, cleanliness, and a tight seal with the face piece rubber
(5) Check couplings for damage and all connections for tightness.

- The backpack and harness assembly check
  a. Frayed or damaged straps, rivets pulling loose where affixed to back plate.
  b. Buckle locking functions as designed.
  c. Visually check the back plate for cracks, missing rivets and screws.
  d. All harness and carrier components for cuts, tears, abrasions or signs of heat or chemical related damage.
  e. Cylinder bands and latches – ensure it holds the cylinder securely.
- Audible alarm checks
  - Ensure that the low-pressure alarm bell is in proper alignment and is on tightly.
- Cylinder should be checked for:
  a. Blistering or peeling
  b. Gouging
  c. Discoloration due to excessive heat exposure
  d. Hydrostatic date (within 3 years)
  e. Dents
  f. Bruises
  g. De-lamination
  h. Bulge
- Systems check
  - Ensure the purge valve is closed.
  - Open the cylinder valve fully. Audible alarm must sound. No air should flow from regulator at this time.
  - Harness gauge reading must be within plus or minus 5% of cylinder pressure.
  - Open purge. Listen for air. Close purge.
  - Close cylinder valve. Watch harness pressure gauge. Pressure must not drop more than 100 psi. In 10 seconds.
  - Crack purge and watch pressure gauge. *Audible alarm must start to sound as gauge needle enters the red zone.*
- Check PASS device for proper operation
  - Activate the PASS for operation.
  - Verify pre-alarm and alarm modes.
  - Reset operates properly.