

Elkins Park Fire Company

Title:	Filling SCBA Cylinders with Compressed Air
Number:	SOP AFE-501
Effective Date:	07 June 2022

1. PURPOSE:

To provide the company with a procedure to safely fill SCBA cylinders with the air compressor.

2. OBJECTIVE:

To have SCBA cylinders filled to 4500psi with cylinders staying at room temperature.

3. SAFETY:

High pressure air is dangerous, handle the high pressure air connections will care to prevent serious injury or death. The proper use of the air filling station requires training. All cylinders must be hydrostatically tested every five years.

4. DEFINITIONS/ACRONYMS:

SCBA - Self Contained Breathing Apparatus.

psi - pounds per square inch

5. PROCEDURE:

5.1 Turn the air compressor on. Ensure the window in the compressor room is open and move the knife switch to the "on" position. If the compressor does not automatically switch on follow these steps:

5.1.1 At the fill station screen hit F2 to begin.

5.1.2 Push the "Operate" button.

5.1.3 Push the "Auto" button.

5.1.4 Push "Start" to turn on the compressor.

5.1.5 Ensure the flow control is adjusted to 50/50, Red/Green.

5.1.6 When complete, hit "Stop" and allow for cool down time.

5.1.7 Turn the knife switch to the "off" position and close the compressor room window.

5.2 Ensure SCBA cylinder is turned off.

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- 5.3 Ensure all air is bled out the air compressor by opening the bleed valve.
- 5.4 Remove the adaptor cap and attach the SCBA cylinder to the air compressor, two cylinders may be attached at a time.
- 5.5 Open the chamber by unlocking the door by operating the handle on the right side of the chamber so that the yellow lock bars are not showing.
- 5.6 Rotate the chamber door 180 degrees until it clicks into position.
- 5.7 Close and lock the charging chamber door handle. The door is locked when the yellow lock bars are visible around the door frame.
- 5.8 Leave the fill pressure regulator at 4500 psi.
- 5.9 Slowly turn the fill control valve counterclockwise to begin filling the cylinders; you will see the compressor pressure gauge increasing very slowly.
- 5.10 Adjust the fill control value as needed to keep the SCBA filling at a slow rate.
- 5.11 Once the compressor pressure gauge reads 4500 PSI one must shut off the fill control valve.
- 5.12 Open the chamber by unlocking the door by operating the handle on the right side of the chamber so that the yellow lock bars are not showing.
- 5.13 Rotate the chamber door 180 degrees.
- 5.14 Ensure all air is bled out the air compressor by opening the bleed valve.
- 5.15 Disconnect the SCBA cylinder.
- 5.16 If the SCBA cylinder is hot or warmer than room temperature repeat process and fill at a slower rate than previously done if the SCBA cylinder pressure drops below 4300 psi.
- 5.17 Record each cylinder filled on the attached SCBA Cylinder Filling Log along with the date and run number or training.

6. ASSOCIATED FORMS

SCBA Cylinder Filling Log

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Document -	AFE-501 Filling SCBA Cylinders with Compressed Air	
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