II. Breathing Air Station Operating Procedure

All users of the Breathing Air Station should be qualified on both the Air Compressor and the Fill Enclosure. When using the Fill Enclosure to fill more than one bottle please run the Air Compressor and refill the air storage to 6000 psi.

A. Air Compressor Procedure.

1. Open front door of compressor and check site glass for oil level. If oil is not visible contact Chief to have oil added. Close door.
2. Start compressor by depressing white compressor “power on” button. Button should light up and compressor should start up. If compressor does not start check for high air from previous compressor use, or check CO monitor for calibration issue. For a CO calibration issue follow directions on LED screen to start compressor. For all other issues contact Chief.
3. The compressor will stop automatically when air pressure reaches 6000 psi and then will start automatically when air pressure drops back to 5500 psi. Water is drained automatically every 15 minutes. If a problem develops the system will stop and alert you. In the event of a problem turn breaker switch to ‘OFF’ and contact a Chief.
4. When finished filling SCBA bottles and restoring storage to 6000 psi, depress “power on” button to shut off compressor. Fill out log. Eventually, because the CO Detector uses a constant flow of air, the compressor will lose air pressure. If “on” it would restart in an idiot loop wasting electricity. BE SURE TO SHUT OFF COMPRESSOR BEFORE CLOSING DOOR.

B. Fill Enclosure Procedure:

1. Tilt the SCBA bottle rack out for loading. Place empty bottles in the rack. Note the PSI rating on the bottles. (All bottles must be the same pressure rating).
2. To connect the appropriate fill hose for each bottle remove the quick connector from the connector holder by depressing the Red Locking lever and then raising the operating lever.

3. Remove the quick connector from the connector holder and place the connector onto the cylinder valve until it stops.
4. The connection is made by lowering the operating lever beyond 90° which locks the split jaws onto the cylinder valve. Be sure the threads mesh.

5. Check to be sure the locking sleeve has locked the collar by checking the Green stripe on the locking post. The left hand bottle holder needs to be at a 45 degree angle toward the left rear corner.

6. Continue to load bottles and connect to fill hoses. Fill hoses that are not being used must be connected to the dummy connections inside the enclosure.

7. On Nxg2 bottles do not open the bottle valve. On other styles of bottles open the valves on each SCBA bottle. Push the SCBA rack back into the fill position inside the enclosure. Check that the bleed valve is closed.

8. Close the enclosure access door slowly, do not slam! The fill process will then automatically start with the 2216 psi regulator. The fill valve on the control panel is preset, do not touch, (if the valve has been closed, open 1/8 of a turn to allow filling and then leave alone.)

9. This is a regulated system, to choose the 4500 psi regulator push in the red button. (When the door is opened this will automatically reset to the 2216 psi regulator.)

10. Once the SCBA gage has reached the desired pressure, open the enclosure door to stop the air fill. Hint: the source gage will read 4600 psi.

11. Tilt the SCBA rack out. Close any open bottle valves. On Nxg2 bottles make sure the bottle valve is closed fully. Open the bleed valve on the panel; this releases trapped air from the fill hoses and retracts the safety peg. The integrated safety peg on the Clickmate prevents a disconnection under pressure and will stop locking lever movement.

12. Disconnect the fill hoses from the bottles by depressing the Red Locking lever and then raising the operating lever. Remove the quick connector from the cylinder valve and place the connector onto the connector holder until it stops. If more bottles need to be filled do not lock connector.

13. Remove bottles from the fill enclosure. Continue to unload/load bottles.

14. Close bleed valve and when finished using a quick connector for filling bottles lower the operating lever 90° which locks the split jaws onto the connector holder. DO NOT pressurize lines when the quick connectors are unlocked! Go to step 2 to fill additional bottles.

15. When finished filling bottles leave enclosure door open and fill out log. BE SURE TO SHUT OFF COMPRESSOR BEFORE CLOSING DOOR TO COMPRESSOR ROOM

Notes:

1. All valves should be hand tight -- NO WRENCHES!!

2. The main breaker for the air compressor is located in the breaker box in the truck bay. Marked as #1.

3. Compressor maintenance is required once a year (usually in May) to replace oil and filters.

4. Air testing is performed quarterly by in house staff using a kit supplied by Trace Analytics LLC following NFPA 1989-2008 and OSHA 1910-134.

5. Recalibration of the CO monitor and draining of the condensate tank is performed quarterly by in house staff. CO monitor has a 90 day timer, at which time the compressor cannot be started normally, (see Air Compressor step #2.)
III. Truck 11 or Rescue 8 Filling Procedure

A. Use Grey hose stored on back of fill enclosure. Connect purge valve end of hose to fill enclosure unregulated outlet, tighten using a 1-1/8” and a 1-1/4” wrenches, and test airflow by cracking open the fill valve. Close bleed valve. If filling Rescue 8 change fitting on truck end to 5000 psi hand tightened connector.

B. Open cylinder valve on truck and test airflow by opening truck fill valve.

C. Connect fill hose to truck. On Truck 11 use wrenches to tighten connector. On Rescue 8 hand tighten connector.

D. Start air compressor.

E. Open fill valves on fill enclosure unregulated outlet and truck to begin filling cylinders on truck.

F. When the air pressure in the fill enclosure storage system is the same as the air pressure in the truck cylinders close the fill storage valve located on the upper back corner of the fill enclosure. Now you are only filling the truck bottles.

G. Continue to fill truck bottles from the air compressor.

H. When the air compressor shuts off or a satisfactory pressure has been reached turn off the air compressor and close the fill enclosure unregulated outlet valve, truck fill valve and truck cylinder valves.

I. Purge air from the fill hose by opening the bleed valve on the hose. Alternatively with the truck fill valve open you could open the bleed on the truck air filter in front of the turntable control stand.

J. Disconnect the hose, and reopen the fill storage valve located on the upper back corner of the fill station.

K. Restart the air compressor to top off the fill enclosure storage system back to at least 5500 psi.

L. If filling Rescue 8 change fitting on truck end back to 6000 psi wrench tightened connector. Store hose on back of fill enclosure.

M. Be sure to shut off air compressor before closing door and leaving.

References:

1. Pre-existing directive/documents from the Fire District in effect as of December 2012
2. Manufacturer’s Instructions of each device referenced.