

# STATION 28 - SCBA FILLING INSTRUCTIONS

**All Fill Station Operators must be familiar with and comply with BCFR and FCFD SOP's and Guidelines, as well as NFPA 1404, 1500, 1852 &1981**

1. Check the SCBA Fill Station Book for any maintenance or service notes, and update accordingly. The Fill Station Book has two logs that must be completed each use:
  - a. Fill Station Log Book – Records Date, # of Bottle Filled and Operator
  - b. SCBA Bottle Log – Records Ser # of Every Bottle Filled
2. Prepare the Cascade System
  - a. Visually inspect hoses and hardware for signs of damage or excessive wear. If any equipment appears damaged, report the damage, and do not use the system.
  - b. Open the valves on the top of the two yellow storage bottles, and confirm sufficient pressure to start filling (5000psi to fill 4500 bottles, 3000 psi to fill 2216 bottles)
3. It is best to group SCBA's to be filled by their remaining pressure. This will minimize the cross-over equalization that will happen between the bottles when filling. Do Not fill 2.2 and 4.5 SCBA bottles at the same time.
4. Adjust the Regulator on the Fill Station for correct Fill Pressure
  - a. 4500 psi for 4.5 bottles
  - b. 2216 psi for 2.2 bottles
5. Open Fill Station by pressing down on the blue handle, and tilting the fill chamber out for access
6. For each SCBA bottle to be filled:
  - a. Make sure your regulator is set correctly for the bottle pressure you are filling
  - b. Visually Inspect All SCBA Bottles to be filled and make sure there is no damage & and the bottle is within valid Hydrostatic Testing date range prior to filling
  - c. Insert SCBA bottle into either fragmentation containment position
  - d. Connect the Fill Station whip to the SCBA bottle, just hand tight
  - e. Make sure the black bleeder valve is closed tightly
  - f. Open the SCBA bottle valve completely .
  - g. You should hear the air pressure fill the hose then stop. Listen for leaks and correct if needed
7. Repeat Above Step for a second SCBA if needed
8. Close the Fill Station door, and make sure the blue handle returns to the upright, locked position.

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9. For each SCBA bottle to be filled, adjust the fill limit valve for the corresponding position so that the tank is filled at **between 300 and 600 psi per minute**. Rapid filling of SCBA bottles will overheat the bottle, can damage the cylinder, and could result in catastrophic cylinder failure while filling or later when in use. At a minimum, filling a bottle too fast will result in lower final pressures once the bottle cools.
10. It may be necessary to re-adjust the supply regulator pressure once the bottles begin to fill.
11. It may be necessary to adjust the fill rate, because it is normal for the fill rate to slow down as the pressure in the bottle being filled approaches the supply pressure.
12. If the pressure in the fixed Cascade supply bank is not sufficient to reach full SCBA bottle pressure, you will need to turn on the compressor (see Station 28 Cascade Filling Instructions)
13. Once the both the SCBA bottles being filled have reached the target pressure, the operator can close the corresponding fill valves, or if more bottles are being filled, the fill valve can be left at the set fill rate.
14. Open Fill Station by pressing down on the blue handle, and tilting the fill chamber out for access (Air supply to the bottles will be automatically cut off when the fill chamber is opened)
15. For each SCBA bottle being filled:
  - a. Close the SCBA bottle valve
  - b. Bleed off the residual pressure in the fill hose by slowly opening the black bleeder valve. – **Failure to Bleed off Pressure before disconnecting, will damage the fill station fitting -**
  - c. Once the pressure has been bled off, disconnect the Fill Station Whip and return it to its storage position
  - d. **Record the SCBA Bottle Serial Number, the Date and the Final Pressure fill in the Log Book**
16. Once ALL bottles are filled, make sure the Fill Station Log book is updated with the Date, Number of Bottles Filled, Operator Name, and the ending pressure- Refer to Station 28 Cascade Fill Instruction to ensure system is left full for the next user.