

Navy Public Works Center  
Detachment Philadelphia

STANDARD OPERATING PROCEDURE

COMPRESSED GAS AND AIR CYLINDERS

PROCEDURE NUMBER 500 .11

**DISCLAIMER:** These Standard Operating Procedures (SOP) are for the exclusive use of NAVY PUBLIC WORKS CENTER (PWC) NORFOLK DETACHMENT PHILADELPHIA. They are promulgated as guidance for other NAVFAC COMMANDS. If intended to be used by other Activities, they must be tailored to each Activities particular requirement and must be reviewed/approved by the activities Safety Professionals prior to use.

---

*Preparer:* \_\_\_\_\_ (Date)

*Approved:* \_\_\_\_\_ (Date)

*Safety Professional:* \_\_\_\_\_ (Date)

*Department Head:* \_\_\_\_\_ (Date)

*Officer in Charge* \_\_\_\_\_ (Date)

**Standard Operating Procedure  
For Use Of  
Compressed Gas/ Air Cylinders**

**A. Compressed Gas Cylinders**

1. Cylinders shall be legibly marked to identify the gas content.
2. Cylinders containing non-compatible gas shall not be stored together.
3. Compressed gas cylinders shall be lashed and chained in such a manner to prevent accidental tipping or rolling which could cause damage to the cylinder and jeopardize the safety of personnel and material.
4. Compressed gas cylinders not in use must be stored with their protective valve cap in place.
5. Cylinders showing evidence of excessive rust, corrosion, dents or other surface defects shall be considered hazardous and shall be bled down to atmospheric pressure, marked as defective, and properly disposed of.  
**NOTE: Contact Environmental Department for bleeding, to ensure that released gas will not violate EPA Regulations.**
6. Cylinder, cylinder valves, couplings or regulators that have an apparatus shall be kept free from oil and grease.
7. Cylinders not having fixed band wheels shall have keys, handles, or non-adjustable cylinder wrenches attached to the cylinder during transport.
8. Cylinders shall be transported with the valve end up and the valve cap in place.
9. Gauges shall not be attached to cylinders during transport.
10. Cylinders shall never be lifted by an employee without assistance or without proper lifting equipment, i.e. dollies.
11. Before connecting the regulator to the cylinder valve, the valve shall be opened slightly for an instant and then closed. Always stand to one side of the outlet when opening the cylinder valve.
12. Before a regulator is removed from a cylinder valve, the cylinder valve shall be closed and the gases released from the regulator.

13. If acetylene cylinders are found to have leaky valves or fittings which cannot be stopped by closing of the valve, the cylinders shall be taken out doors away from sources of ignition and fire department notified immediately

14. An acetylene cylinder valve shall not be opened more than one and one-half turns of the spindle, or a maximum of 30 P.S.I.

15. When acetylene valves are coupled, approved flash arresters shall be installed between each cylinder and coupler block.

16. Cylinder valves shall be closed when work is finished and valve protection caps installed.

17. Empty cylinders shall have their valves closed.

18. Cylinders shall be kept far enough away from welding and cutting operations so that sparks, hot slag or flame will not reach them, or fire resistant shields shall be provided.

19. Gauges shall not be attached to cylinders when cylinders are not in use.

20. Valve protection caps, where the cylinder is designed to accept a cap, shall always be in place, hand tight, except when cylinders are in use or connected for use.

21. Valve protection caps shall not be used for lifting cylinders from one position to another or for carrying cylinders.

22. Union nuts and connections on regulators shall be inspected before use to detect faulty seats, which may cause leakage of gas.

23. Regulators with broken glass covers, or other obvious defects, shall not be used.

24. After attachments to cylinders, the regulator shall be observed while the cylinder valve is quickly opened and closed to ensure the regulator is opening.

## **B. Compressed Air**

1. Compressors with receiver tanks five cubic feet and larger shall be tested and certified safe every two years.

2. Compressed air used for cleaning shall not exceed 30 PSI.

3. Compressed air is prohibited to be used to blow dust, dirt or other items off of personnel.

