

STANDARD OPERATING PROCEDURE #1

Trans-filling Compressed Gas Cylinders

Facility:	U.S. Department of Commerce, Boulder Laboratories, David Skaggs Research Center, NOAA Earth System Research Laboratory Chemical Sciences Division (DoC Boulder Laboratories DSRC ESRL-CSD)
Facilities Affected:	NOAA Buildings 33 (DSRC), 34 (SWPC Observatory) and everywhere else where CSD personnel, affiliates, contractors, guests and or visitors deploy for research to fulfill the CSD mission.
Personnel Affected:	CSD Staff, Affiliates, Contractors, Guests & Visitors
Contact/Author:	Tom Ryerson, PL TC
Scope:	This standard operating procedure (SOP) identifies facilities operation and maintenance performed outdoors at Buildings 33 (DSRC) and 34 (SWPC Observatory).
Effective Date:	August 20, 2014
Revision #:	0
Revision Date:	N/A
Introduction:	The purpose of this SOP is to identify activities performed outdoors at Buildings 33 and 34 which require periodic inspection and on-going best management practice (BMP) implementation. Attached is an inspection form for documenting inspection findings and documenting corrective action.

Requirements for transfilling hazardous gases in the laboratory

T. Ryerson – 20 August 2014

These requirements apply to transfilling toxic (i.e., cylinder contents exceeds 8-hour exposure limits TWA), flammable, and oxidizing gases, at pressures equal to or exceeding atmospheric pressure in the receiving cylinder.

- **Never work alone; always use the buddy system.**
- **Have a working gas alarm (tested within 12 months) at point of use. Check its operability**
- **Use tubing and fittings rated beyond (2x) the highest achievable delivery pressure.**
- **Transfill only in a well-ventilated area.**