Subject:	Effective Date:	Initiated by:
Reduction of Ozone Depleting Substance Emissions	**January 31, 2002**	Head, ES&H/Infrastructure Support
	Supersedes: November 28, 2001 Rev. 0	**Approved:** Director

PPPL will minimize the emissions of ozone depleting substances (ODS) to the lowest reasonably achievable level during the maintenance, service, repair and disposal of parts, appliances, or equipment to prevent entry into the stratosphere ozone layer.

Emissions of ozone depleting substances shall be reduced through the following:

- Using certified recycling and recovery equipment during maintenance, service, repair, and disposal of parts, appliances, and/or equipment containing ODS.
- Training PPPL personnel in accordance with the United States Environmental Protection Agency (EPA) training protocol.
- Assuring that the procured parts, appliances, and/or equipment contain apparatus to assist in the recovery of refrigerant, as applicable.
- Buying new equipment without ozone depleting substances, when appropriate.

PPPL Employees subcontractors shall use certified recycling and recovery equipment during service, maintenance, repair, and disposal of items containing ODS.

The Environmental Restoration/Waste Management (ER/WM) Division shall assure that the refrigerant has been removed from the part, appliance, or equipment prior to disposal.

Training with support from the ER/WM Division, shall coordinate training to PPPL personnel in accordance with EPA protocol. Training shall maintain the training and certification records pertaining to EPA protocol. Those individuals who are certified through the EPA must provide the certification records to Training for filing.

The ER/WM Division shall prepare and transmit required notification certifications to the EPA through DOE Princeton Area Office (PAO). ES&H shall provide assistance in fulfilling training requirements for PPPL.

ODSs include chlorofluorocarbons (CFCs), halons, carbon tetrachloride, methyl chloroform, and halogenated chlorofluorocarbons (HCFCs). Examples of common ODSs and their use at the Laboratory are listed below. This list includes common ODSs, not all of which are in current use at PPPL. Materials in current use are identified by underlining. Please note, however, this list is provided for general information and is not meant to be and is not all-inclusive.

OZONE-DEPLETING SUBSTANCE	USE AT PPPL
CFCs (CFC-11, -12, -113, 114, -115, -500, -502)	Chillers (C and D Sites), degreasers, modulator regulator boxes, refrigerators/ freezers, air conditioners
Halons (Halon -1211, -1301, -2402)	Fire extinguishing systems (portable and stationary
CFCs (CFC-13, -111, -112, -211, -212, -213 -214, -215, -216, -217)	Stored cylinder
Carbon Tetrachloride	Not used or stored
Methyl Chloroform, or 1, 1, 1-trichloroethane	As a degreaser. Major component of Inhibisol,. Various locations on C and D Sites
HCFCs (HCFC -21, -22, -31, -121, -122, -123, -124, -131, etc.)	Air conditioning units, degreasers

References

Clean Air Act Amendment (CAAA), Section 608, 1990.
40 CFR, Part 82, Protection of Stratospheric Ozone; Refrigerant Recycling Final Rule.
Executive Order 13148, "Greening the Government through Leadership in Environmental Management," April 22, 2000.