

<b>PPPL</b>	<b>PRINCETON PLASMA PHYSICS LABORATORY</b>	<b>POLICY</b>		<b>No. P-062 Rev. 4</b> <b>page 1 of 2</b>
		<b>Subject:</b>  <b>Reduction of Ozone Depleting Substance Emissions</b>	<b>Effective Date:</b>  <b>4/13/18</b>	<b>Initiated by:</b>  Head, Environmental Services Division
		<b>Supersedes:</b> Rev.3 April 30, 2012	<b>Approved:</b>  Director	

**Management System (Primary):** 09.00 ESH and Integrated Safety Management (ESH)  
**Management System Owner:** Head, ES&H  
**Management Process:** 09.10 ES&H – Environmental Management and Compliance  
**Process Owner:** Head, ES&H  
**Sub-Process:** 09.10.01 Air Monitoring, Air Quality, and Air Effluent Management  
**Sub-Process Owner:** Head, ES&H/Head, Environmental Service Division  
**Subject Matter Experts (SMEs):** Head, Environmental Service Division

In accordance with the Clean Air Act Amendments (CAAA) Section 608 “Stratospheric Ozone Protection” requirements. 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. PPPL seeks to eliminate all Class I and II ODS by replacing them with Non-ODS to the maximum extent practicable. ODS include chlorofluorocarbons (CFCs), halons, carbon tetrachloride, methyl chloroform, and halogenated chlorofluorocarbons (HCFCs)

Emissions of ODS 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 and documenting PPPL HVAC personnel in accordance with the United States Environmental Protection Agency (EPA) training protocol.
- Purchasing products using US EPA Significant New Alternative Policy (SNAP) to evaluate, regulate substitutes and offer safer alternatives for ODS, where feasible.

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

The Material Services Division shall assure that the refrigerant has been removed from the parts, appliances, and/or equipment prior to recycling or disposal.

Line managers shall coordinate training for applicable PPPL personnel in accordance with EPA regulations. The Human Resources Training Office shall maintain the training and certification records pertaining to EPA protocol. EPA certified technicians must provide the certification records to HR Training for filing per ENG-044, HVAC Mechanic Qualification.

The Environmental Services Division (ESD) shall prepare and transmit required notification certifications to the EPA through DOE Princeton Site Office (PSO).

Examples of common ODS and their use at the PPPL are listed below. Please note, however, this list is provided for general information and is not comprehensive.

OZONE-DEPLETING SUBSTANCE CURRENTLY IN USE AT PPPL	
Halon 1211	Fire extinguishers
Methyl Chloroform, or 1, 1, 1-trichloroethane	As a degreaser, major component of Inhibisol, Various locations on C and D Sites
CFCs (CFC 12, 22, HFC-134A, 404a, 407c HCFC-408a, 409b, 410a, 414b	Air conditioning units, degreasers
OZONE DEPLETING SUBSTANCES NO LONGER USED AT PPPL	
CFC, HCFCs (CFC-11, 13, 21, 31, 111, 112, 113, 114, 115, 121, 122, 123, 124, 131, 211, 212, 213, 214, 215, 216, 217, 500, 502, ect.)	No longer used or stored
Carbon Tetrachloride	No longer used or stored
Halons (Halon 1301, 2402)	Fire extinguishing systems

**References**

- EWM-008, Management of Stratospheric Ozone Depleting Substances, Non-Exempt Refrigerants and Associated Equipment
- Clean Air Act Amendments of 1990 (CAAA), Title VI, “Stratospheric Ozone Protection, National recycling and emission reduction program” Section 608, 6013
- 40 CFR 82, Subpart A-I, Protection of Stratospheric Ozone
- 40 CFR 82 Subpart D (§ 82.80- 82.86) – Federal Procurement
- 40 CFR 612 Significant New Alternatives Policy (SNAP)
- Executive Order 13693, "Planning for Federal Sustainability in the Next Decade"
- ENG-044, HVAC Mechanic Qualification