AIR QUALITY

ENVIRONMENTAL MANAGEMENT PROCEDURE (EMP)

4.4.6.1

JBLE-EUSTIS



25 June 2020 (Revised 20 DEC 2024)



DEPARTMENT OF THE AIR FORCE **HEADQUARTERS 633D AIR BASE WING** JOINT BASE LANGLEY-EUSTIS VA

25-Oct-24

MEMORANDUM FOR ALL 733 MSG UNITS AND FEVA ORGS

FROM: 633 ABW/CD

SUBJECT: JBLE-Eustis Environmental Management Procedures (EMPs)

1. EMPs apply to all JBLE-Eustis activities (including tenants, associated units, and contractors) that impact any environmental resource area on the installation, to include, but not limited to Air Quality, Water Quality, Hazardous Waste, Hazardous Materials, Natural Resources, Cultural Resources, Solid Waste and Recycling, Inspections, Training, Tanks, Spill Prevention, Pollution Prevention, and Pest Management.

a. EMPs enable our compliance with Federal, State, Department of Defense, and Air Force regulations, directives, instructions, and manuals, and are specific to JBLE-Eustis.

b. EMPs assign responsibilities, provide instruction and guidance for appropriate management of environmental programs to ensure the installations regulatory compliance.

2. JBLE-Eustis personnel may access these EMPs electronically via the JBLE-Eustis Environmental website at: https://www.jble.af.mil/Units/Army/Eustis-Environmental/.

3. The Office of Primary Responsibility for this document is 733d Civil Engineer Squadron Environmental Element (733 CES/CEIE), and will review all EMPs annually, and update as appropriate. Major revisions require concurrence from the JBLE-Eustis Environmental Management System (EMS) Cross-Functional Team (CFT) and approval by the Environmental Safety and Occupational Health Council (ESOHC).

4. All EMPs are unclassified and will be posted in "Read Only" .pdf format, reviewed, revised and rescinded IAW current directives.

> DILLENBURGER.S Dgtally signed by TEVEN.P. 12396151 DILLENBURGER STEVEN P. 123 9615100 Date 2024 10 25 13 15 19 -04000 STEVEN P. DILLENBURGER, Colonel, USAF **Deputy Installation Commander**

Defend The Base | Support The Fight | Take Care of Airmen. Soldiers. & Their Families

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SECTION: 4.4.6.1

SUBJECT: Air Quality Pollution Management

PURPOSE AND POLICY:

- A. Purpose: Establishes the procedures to implement a policy for properly managing of the Air Quality program.
- B. Policy: The installation will comply with applicable Federal, State, and local air quality regulations by executing its air permit. The Installation will continuously examine methods to improve air quality on The Installation and in partnership with neighboring communities and to eliminate the use of ozone-depleting substances (ODS).

DOCUMENT CONTROL:

This EMP is a controlled document. Controlled documents are updated as required, reviewed at least annually, and re-dated if changed. Any documents to include blank forms appearing in paper form are not controlled and should be checked against the file version before use on the:

JBLE – Eustis Environmental website: <u>http://www.jble.af.mil/Units/Army/Eustis-Environmental/</u>

REFERENCES:

- A. AFMAN 32-7002, Environmental Compliance and Pollution Prevention
- B. AFMAN 32-1062, Electrical Systems, Power Plants, and Generators
- C. Joint Base Langley- Eustis Stationary Source Permit 17 December 2010

SCOPE:

Applies to all activities and personnel, including military, civilians, vendors, suppliers, and contractor personnel who enter JBLE-Eustis.

ROLES AND RESPONSIBILITIES:

- A. Civil Engineer Squadron (CES) will exercise the overall direction and coordination of the Air Quality program.
- B. CES/Environmental (CEIE) will ensure that all data is reported to the appropriate agencies within the prescribed timeframes.
- C. CES/Environmental (CEIE) will execute the program. The CES/CEIE will:

(1). Develop and disseminate policy on air pollution management.

- (a). Provide guidance on policy and regulations concerning air pollution sources management that reflects DOD and DAF guidance and pertinent provisions of air pollution control laws. Supplement and implement, as required, Federal Clean Air Act regulations and Commonwealth of Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution.
- (b). Maintain copies of all relevant federal, state, regional, and local regulations; DOD and Air Force directives; and other pertinent documents on air emissions.
- (c). Maintain air quality emission data for stationary air pollution sources.
- (d). Maintain liaison with air quality control agencies and authorities.
- (2). Provide an overview of air pollution control projects.
 - (a). Manage the identification, budgeting, reporting, engineering, design, and construction of projects required to control and monitor emissions per applicable federal, state, regional, and local air quality standards.
 - (b). Ensure that all new stationary sources of pollutants and all major modifications to existing stationary sources are designed to meet or exceed applicable standards.
- (3). Obtain required state, regional, and local air pollution permits and submit reports required by pertinent air pollution regulations.
- (4). Coordinate and monitor program execution.
 - (a). Conduct and maintain up-to-date emissions inventories of stationary sources of air pollution located on JBLE-Eustis and respond to notifications of changes.
 - (b). Review emission data to identify and minimize or eliminate sources of air pollution.
 - (c). Inform units and activities with sources of air pollutants of all required operations and maintenance upgrades.
- (5). Identify training requirements for air pollution compliance and coordinate installationlevel training to be provided as appropriate, including annual training on Operations and Maintenance Manual procedures for operators of selected air pollution sources.
- D. Activities will provide to the CES/CEIE all air quality data that apply to any of the following:
 - (a). Equipment Owner
 - (b). Equipment Operator
 - (c). Process operations

- E. Only the Commanding General can authorize the purchase of Class 1 ODCs under special circumstances.
- F. Commanders/Directors JBLE-E Activities
- G. Provide qualified personnel for the proper use and disposal of ODCs.

RESPONSIBLE ACTIVITIES WILL:

- A. Obtain Stationary Source Permit to Operate or Pre-Construction Permits prior to Installation, Modification, Movement, or Removal for all stationary sources. Examples of equipment/sources requiring an Application and a Permit to Construct and Operate for approval include:
 - (1). Fuel-burning equipment such as boilers, heaters, or generators.
 - (2). Refuse burning equipment such as incinerators.
 - (3). Process equipment such as air strippers, degreasers/parts washers, and gasoline/avgas storage tanks.
 - (4). Processes such as media blasting, dry cleaning, electroplating, fiberglass operations, soil venting, in-door spray painting operations, and woodworking/other material working equipment using a vacuum system to collect dust.
 - (5). Training equipment, such as engine test cells.
- B. Use the following sections for the respective areas:
 - (1). Use section 4.4.6.1.2, Guidance for Preparations of O&M Plans for all Operations & Maintenance Plans.
 - (2). Use section 4.4.6.1.3, Outdoor Burning, for conducting any outdoor burning operations.
 - (3). Use section 4.4.6.1.4 Ozone Depleting Chemicals for acquisition, storage, handling, use, disposal, or otherwise managing Ozone Depleting Substances (ODS) or Chemicals (ODCs).
 - (4). Use section 4.4.6.1.5 NESHAP for Renovation and Demolition (Asbestos).
- C. Report all data and operations IAW Air Quality Program Reporting Requirements.

AIR QUALITY PROGRAM REPORTING REQUIREMENTS:

A. Document sources on the Activity Facilities and Operations Inventory FEVA Form 32-600. Submit an updated copy semiannually.

- B. Report the previous quarterly or monthly operational data by the 10th day of each following month, closing the respective period (monthly, quarterly, semiannually, etc.) to CES/CEIE Air Program Manager.
- C. Certify that all data submitted is true and accurate by the AEC.
- D. Submit all reports by email with appropriate attachments needed. The AEC's certification must include the following: "I certify that the reported information being submitted is complete and accurate. I understand that I am subject to potential civil or criminal enforcement for making false certifications."
- E. Have the Commander/Director have AEC appointing authority to sign all reports and submit them to CEIE when the Activity does not have an AEC. Commanders and Directors cannot delegate to subordinates. SEE EMP 4.4.2 Environmental Awareness and Competency Training.
- F. Maintain copies of this data submission for three years.
- G. Report any of the following operational changes to CES/CEIE as they occur:
 - (1). New equipment
 - (2). Equipment removed from service
 - (3). System modifications
 - (4). Ownership
 - (5). Relocations
 - (6). Changes/additions to Source types
- H. Report the following source types monthly using Air Quality Program Reporting Forms where applicable: (Use the appropriate worksheet):
 - (1). Stationary Generator Run Time Reported from meter readings (hours and tenths)
 - (2). Peak Generator Run Time Reported from meter readings (hours and tenths)
 - (3). Fuel Combustors Reported in gallons or cubic feet
 - (4). Helicopter Engine Run Time Reported from meter readings (hours and tenths)
 - (5). Marine Engine Run Time Reported from meter readings (hours and tenths)
 - (6). Aviation Fuels JP-A Fuel and Mogas Reported in gallons

- (7). Woodworking-cyclone turned in drums and hopper weight Reported in lbs.
- (8). Stationary Abrasive Blasting -Reported in lbs.
- (9). HazMart Data
- (10). Paint usage at Permitted Paint Booths located in Buildings 1411, 1417, 27502, 3513, and 2411.
- I. Report the following Solvent Sinks & Parts Washers information quarterly:
 - (1). Equipment Type
 - (2). Manufacture
 - (3). Serial Number
 - (4). Solvent Type with SDS
 - (5). Solvent capacity
 - (6). Location
- J. Emergency Generators
 - (1). The Contractor shall provide monthly generator run time readings for all generators to the CEIE Environmental Element. Contractors can enter the readings into the Air Quality Programs tracking database APIMS by the 10th of the following month for the previous month's readings. Monthly meter readings are required under the Fort Eustis Stationary Source Permit to Operate issued by The Virginia Department of Environmental Quality. All generators shall be maintained IAW manufacturer's standards and EPA regulations. Maintenance records will be retained indefinitely for regulatory review.
- K. Boiler Plant Operation
 - The Contractor shall maintain all maintenance records and operational logs. Boilers shall be operated IAW all Federal, state, and local regulations, laws, and AF Manuels. (AFMAN 32-7002)

SECTION: 4.4.6.1.1

SUBJECT: STATIONARY AIR POLLUTION SOURCE REQUIREMENTS

PURPOSE:

Establishes the procedures for properly managing Stationary Air Pollution Sources Construction, Installation, Modification, Movement, or Removal.

ROLES AND RESPONSIBILITIES:

- A. The CES/Environmental/ (CEIE) will execute the program.
- B. Activities will:
 - (1). Minimize their impact on air quality to the maximum extent possible.
 - (2). Ensure procedures and reporting requirements are met.

PROCEDURES:

- A. Stationary Air Pollution Sourced Construction, Installation, Modification, Movement, or Removal.
 - (1). New or Modified Sources. An application for a New Source Review must be submitted to and approved by the local air pollution control authority. The proponent for constructing, reconstructing, installing, or modifying an air pollution source will coordinate with CES/CEIE and Virginia Department of Environmental Quality.
 - (2). Permit to Construct and Operate. An application for a Permit to Construct and Operate must be submitted to and approved by the local air pollution control authority to construct, reconstruct or modify air pollution generating equipment/sources as per 9 VAC 5-80. The project proponent will ensure the completion and submission of these documents through CES/CEIE or the appropriate environmental office.
- B. Examples of equipment/sources requiring an Application and a Permit to Construct and Operate for approval include:
 - (1). Fuel-burning equipment such as boilers, heaters, or generators.
 - (2). Refuse burning equipment such as incinerators.
 - (3). Process equipment such as air strippers, degreasers/parts washers, and gasoline/avgas storage tanks.
 - (4). Processes such as media blasting, dry cleaning, electroplating, fiberglass operations, soil venting, in-door spray painting operations, and woodworking/other material working equipment using a vacuum system to collect dust.
 - (5). Training equipment, such as engine test cells.
- C. Responsibility for obtaining the Permit to Construct and Operate.
 - (1). Work is done in-house: Coordination will be made with CES/CEIE for project review and assistance completing the application. CES/CEIE will submit the application and obtain the Permit to Construct and Operate.

- (2). A contractor does work: Coordination will be made with CES/CEIE for project review and assistance completing the application. CES/CEIE will obtain the Permit to Construct and Operate.
- D. Implement the Best Available Control Technology (BACT) as determined by the regulatory authority in the air pollution source design and construction/installation/operation.
- E. Assure that all the standards/limits included in the Permit to Construct and Operate are implemented or met. The permit consists of performance testing of the air pollution source, installing control or monitoring equipment, and installing equipment that meets the specified emission limits.
- F. General Conformity Determination. 40 CFR Part 51 requires the federal government to evaluate the effect of specific criteria air pollutants generated by projects funded by the federal government or on federal land. It is required to determine the criteria for air pollutants must be evaluated for which the project area is in maintenance or nonattainment. Fort Eustis is in the maintenance area for nitrogen oxides (NOx) and volatile organic compounds (VOCs). When the project results in emissions of one or more of these pollutants:
 - (1). A general conformity applicability analysis must be completed, which examines the direct and indirect emissions produced by a project. Suppose the requirements of the general conformity rule do not apply to a specific action. CEIE shall prepare a Record of Non-Applicability (RONA). A RONA is a short, written document that verifies a proposed action has been appropriately reviewed. It provides written evidence of that review in the form of a project description, emission rate calculation (if necessary), citation of exemption category (if applicable), and any other information needed to support the declaration of "non-applicability." CES/CEIE will provide guidance and assist activities in preparing a RONA.
 - (2). A general conformity determination must be completed if the project emissions exceed the *de minimus* level for that pollutant or if the project does not qualify for one of the listed exemptions.
 - (3). Any mitigating measures or emissions trading may be needed to continue the project.
- G. Removal or Movement of a Stationary Source. CES/CEIE must be notified (878-7373) when a registered source of air pollution has been removed or planned for movement. The movement of a source may require one of the actions outlined under paragraph "A. 2" above.
- H. General Operating and Equipment Requirements for Stationary and Fugitive Air Pollution Sources.
 - (1). Owners or operators of air pollution sources must obtain the proper permits, if applicable, as outlined in paragraph 6 above.

- (2). Owners or operators of air pollution sources must follow the Joint Base Langley-Eustis Stationary Source Permit to Operate for any additional applicable sourcespecific permits. Joint Base Langley-Eustis' most recent Permit to Operate was issued on 17 December 2010. Contact Environmental (878-7373) regarding applicable permits.
- (3). Owners/operators of affected air pollution sources identified in a permit must prepare and maintain an Operation and Maintenance (O&M) Plan. Guidance on the preparation of O&M Plans is in paragraph 8 below.
- (4). Any exceedances or violations by an air pollution source must be reported to CEIE or the appropriate environmental office verbally within one business day and written within three business days.
- (5). Air pollution source operators must perform testing, monitoring, record keeping, inspections, and reporting requested by CEIE or required by an applicable permit or regulation.
- (6). All equipment must be maintained in good working order and operated following a good industrial practice.
- (7). Air pollution monitoring devices must be calibrated and maintained according to the manufacturer's instructions, industry practice, regulation, or permit.
- (8). Monitoring gauges (opacity, pressure differential monitors, and flow monitors) will be marked with the permitted operating range per manufacturer's instructions, industry practice, regulation, or permit.
- (9). An air pollution source must not emit visible emissions (i.e., smoke from a stack or dust from a bag-house) exceeding the visible emission limit standard outlined in the permit or applicable regulation.
- (10). Waste-derived fuel (e.g., used oil) must not be burned in any Fort Eustis air pollution source without prior coordination with CES/CEIE (878-7373).
- (11). Construction, demolition, or material transfer projects will minimize fugitive dust by employing a technique such as water spray or a closed system. In addition, fugitive dust must not be emitted from air pollution generating equipment such as boilers and incinerators.
- (12). Air pollution sources must not emit air pollutants that are dangerous to human health, plant, animal life, property, or interferes with the enjoyment of life and property.
- (13). Persons must not conceal or mask the emission of any air pollutant, which violates air pollution regulations or causes a detriment to the health, safety, or welfare of any person.

- (14). All activities shall keep solvent, paint, Misc. containers, and parts washing sinks closed when not in immediate use to avoid fugitive emissions. In addition, part washing sinks must be labeled with official signage available at CES/CEIE. 878-7373.
- I. Guidance for Preparations of O&M Plans:
 - (1). The JBLE-Eustis Stationary Source Permit to Operate issued by the Commonwealth of Virginia Department of Environmental Quality (DEQ) requires operators of equipment generating or controlling air pollution on JBLE-Eustis to take the following measures to minimize the duration and frequency of excess emissions.
 - (2). Develop a maintenance schedule and records of all scheduled and non-scheduled maintenance.
 - (3). Maintain an inventory of spare parts.
 - (4). Have available written operation procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - (5). Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. Operators shall maintain training records with the trainees' names, the training date, and the nature of the training.
- J. Source-Specific Operating and Equipment Requirements for Stationary Air Pollution Sources:
 - (1). JBLE- Eustis' Stationary Source Permit to Operate lists the permitted equipment, operating requirements/emission limitations, records, and general conditions. A copy of the permit can be obtained from CES/CEIE. Any changes in the permit application specifications or existing facilities that alter the facility's impact on air quality may require a permit. Failure to obtain such a permit before construction may result in enforcement action.
- K. Distillate oil requirements from the JBLE- Eustis Stationary Source Permit to Construct and Operate.

SECTION: 4.4.6.1.2

SUBJECT: GUIDANCE FOR PREPARATION OF O&M PLANS

PURPOSE:

Establishes the procedures to accurately prepare and maintain an Operation and Maintenance (O&M) Plan.

ROLES AND RESPONSIBILITIES:

- A. CES will exercise the overall direction and coordination of the air pollution management program and execute the program through Environmental (CEIE).
- B. Activity Directors will:
 - (1). Provide qualified personnel to support equipment Operation and Maintenance requirements.

PROCEDURES:

- A. Activities that operate air pollution sources identified in the JBLE-Eustis Stationary Operating Permit must prepare and maintain an Operation and Maintenance (O&M) Plan. The O&M Plan will contain the following information
 - (1). A maintenance schedule and records of all scheduled and non-scheduled maintenance.
 - (2). An inventory of spare parts.
 - (3). We have written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - (4). A training plan for all operators of the equipment
 - (5). Training records for all operators.
 - (6). Instructions prohibit unattended or not immediate use of open containers. (Examples; paint, solvents, parts washing sinks.) Paint cans are not to be air-dried. Solvent sink lids must be closed when not in use. Proper signage is required.
- B. CES-CEIE will inspect O&M Plans during annual Activity Assessments.

SECTION: 4.4.6.1.3

SUBJECT: OUTDOOR BURNING

ROLES AND RESPONSIBILITIES:

A. CES will exercise the overall direction and coordination of the air pollution management program and will execute the program through CES/Environmental (CEIE).

PROCEDURES:

- A. Outdoor burning is not permitted unless prior coordination is made through CES/CEIE.
 - (1). Prescribed burning by CES/CEIE or other installation activity for maintaining firedependent ecosystems or improving forestlands, for instruction in the methods of

forest fire fighting, and to prevent or decrease a forest fire hazard will not be conducted without coordination with appropriate federal, state and local agencies.

SECTION: 4.4.6.1.4

SUBJECT: OZONE-DEPLETING CHEMICALS

ROLES AND RESPONSIBILITIES:

- A. Only the Commanding General can authorize the purchase of Class 1 ODCs under special circumstances.
- B. Commanders/Directors JBLE-Eustis Activities
- C. Provide qualified personnel for the proper use and disposal of ODCs.

PROCEDURES:

- A. Activities will identify all personnel with a role in ODC usage to the CES/CEIE
- B. Activities performing maintenance on ODC containing equipment must maintain records of servicing, the amount of ODCs added to the system or removed, and the disposal location of any ODC.
- C. Activities utilizing products with Class 1 ODCs as components, must document the requirement to use and prove that there is no approved substitute for the Class 1 ODC. As with all Hazardous Materials, all ODCs must be acquired through the HazMart.
- D. Activities will ensure that their personnel is instructed not to vent any ODCs to the atmosphere, as this is a significant legal infraction. In addition, only personnel who have completed the EPA's training and certification program are allowed to service or otherwise maintain ODC containing equipment. Each Activity will maintain a list of personnel who are certified and submit the list to the Air Quality Program Manager at Fort Eustis Environmental Element.
- E. All ODC containing equipment, generally small appliances, being disposed of must have the ODC and contaminated oil removed from the equipment by a certified technician. But, again, it's the owner's responsibility to fund this. Documentation of the ODC and contaminated oil removal will be provided at the time of turn-in. In addition, the certified technician will sign a statement listing the serial number of the equipment and date of removal, along with a copy of their license. Metal parts of these appliances will be separated from the non-metal portions before turn-in at the Solid Waste Recycling Center (SWRC). Abandoned equipment found on Post will be reported to the Military Police and then taken to SWRC for disposal. CES/CEO will provide a certified technician to remove the ODCs.
- F. CES/CEO will maintain a supply of ODCs to be used by the installation. All excess ODCs destined for turned-in or disposal will be coordinated with CES/CEO to determine

the installation's need for the ODC. All ODCs declared over installation requirements would be turned in to the Defense Logistics Agency (DLA), which maintains the DOD ODC Reserve. The turn-in should be to the Defense Depot Richmond (DDRV) SW04, Cylinder Operations, 8000 Jefferson Davis Highway, Richmond, VA. 23297-5900 (804-279-4256/2393 or DSN 695-4256/2393). The Activity's responsibility is to fund the disposal, including any transportation and associated costs. There is no charge for disposal, but the packaging, transportation, etc., usually incur a monetary fee. Activities will notify CES/CEIE of all turn-ins.

- G. ODCs, which cannot be reutilized by the installation or turned in to DLA, must be treated as hazardous or non-hazardous wastes and turned into the HWAF IAW the HWMP.
- H. Group I (from section 602 of the CAA)

	(1). Trichlorofluoromethane	CFC-11	(CCl3F)	75-69-4	
	(2). Dichlorodifluoromethane	CFC-12	(CC12F2)	75-71-8	
	(3). 1,1,2-Trichlorotrifluoroethane	CFC-113	(C2F3C13)	76-13-1	
	(4). Dichlorotetrafluoroethane	CFC-114	(C2F4Cl2)	76-14-2	
	(5). Monochloropentafluoroethane	CFC-115	(C2F5Cl)	76-15-3	
I.	Group II (from <u>section 602</u> of the <u>CAA</u>)				
	(1). Bromochlorodifluoromethane	Halon 1211 (CF2ClBr) Halon 1301 (CF3Br) Halon 2402 (C2F4Br2)		353-59-3	
	(2). Bromotrifluoromethane			75-63-8	
	(3). Dibromotetrafluoroethane			124-73-2	
J.	Group III (from section 602 of the CAA)				
	(1). Chlorotrifluoromethane	CFC-13	(CF3Cl)	75-72-9	
	(2). Pentachlorofluoroethane	CFC-111	(C2FC15)	354-56-3	
	(3). Tetrachlorodifluoroethane	CFC-112	(C2F2C14)	76-12-0	
	(4). Heptachlorofluoropropane	CFC-211	(C3FC17)	422-78-6	
	(5). Hexachlorodifluoropropane	CFC-212	(C3F2C16)	3182-26-1	
	(6). Pentachlorotrifluoropropane	CFC-213	(C3F3Cl5)	2354-06	
	(7). Tetrachlorotetrafluoropropane	CFC-214	(C3F4C14)	29255-31-0	

	(8). Trichloropentafluoropropane	CFC-215	(C3F5Cl3)	4259-43-2		
	(9). Dichlorohexafluoropropane	CFC-216	(C3F6Cl2)	661-97-2		
	(10). Chloroheptafluoropropane	CFC-217	(C3F7Cl)	422-86-6		
K. Group IV (from section 602 of the <u>CAA</u>)						
	(1). Carbon tetrachloride	CCl4		56-23-5		
L.	L. Group V (from section 602 of the CAA)					
	(1). Methyl Chloroform (1,1,1-trichloroe	ethane)	(C2H3Cl3)	71-55-6		
M. Group VI (listed in the Accelerated Phase-out Final Rule)						
	(1). Methyl Bromide		(CH3Br)	574-83-9		

EPA REFRIGERANT MANAGEMENT MANDATORY REQUIREMENTS:

- A. Provide the name, address, telephone number, and technician certification of each person employed by the facility, including contractors. At any time since October 1, 2005, who has serviced, repaired, maintained, and disposed of any equipment containing and/or using a class I or class II substance as a refrigerant. You must have an EPA Section 608 certification to service refrigeration and air conditioning equipment containing HCFCs. EPA does not require certification for technicians to service appliances with non-ozone-depleting refrigerants.
- B. Provide the name, address, telephone number, and technician certification of each person employed by the facility, including contractors. At any time since October 1, 2005, who has serviced, repaired, maintained and disposed of any equipment containing or using a non-ozone depleting substance as a refrigerant.
- C. Since October 1, 2005, maintenance is required to provide a list of appliances located at the facility, owned or operated by the facility or its contractors, that have a capacity of fifty pounds or more of class I or class II refrigerant and provide the following information for each appliance:
 - (1). The type of device, i.e., commercial refrigeration (CR) appliance, industrial process refrigeration (IPR) appliance, comfort cooling appliance, or other types of refrigeration appliance;
 - (2). The location of each appliance (please provide a floor plan of the facility);
 - (3). The manufacturer, serial number, or other methods of identification utilized by the facility or its contractors; and

- (4). The amount of the full charge of refrigerant, the type of refrigerant used, and the date of full charge were determined.
- D. Since October 1, 2005, records, work logs, service tickets, invoices, and supporting documentation shall be provided by the facility producing work performed by the facility employees and/or contractors. All work identified in response to question 1, of maintenance, service, repair, and/or disposal of the facility's appliances, containing 50 pounds or more of class I or class II refrigerant. The documentation required should include the following:
 - (1). The date and type of service performed, i.e., repair, maintenance or disposal;
 - (2). The date any leak was discovered;
 - (3). A complete, detailed description of any service performed;
 - (4). The amount of refrigerant added after each service performed; and
 - (5). The name of the technician who performed the work.
- E. For each repair done on an IPR appliance since October 1, 2005, indicate whether an **initial** verification test was conducted. Describe the procedures and identify the specific records provided in response to question 1 that document such initial verification. [Please provide second copies of such documentation if doing so facilitates identification.]
- F. For each initial verification test conducted on an IPR appliance since October 1, 2005, indicates whether a **follow-up** verification test was performed. Describe the procedures and identify the specific records provided in response to question 1 that document such follow-up verification. [Please provide second copies of such documentation if doing so facilitates identification.]
- G. Since October 1, 2005, the facility and its contractors that have mothballed any appliance located at the facility shall identify:
 - (1). The date on which the device was mothballed with supporting records;
 - (2). The type of appliance, i.e., CR, IPR, comfort cooling, or other types of appliances;
 - (3). The manufacturer;
 - (4). The unit's serial number or other methods of identification utilized

Records provided in response to question 4 document repair for initial and follow-up verification of the unit before or after mothballing. [Please provide second copies of such documentation if doing so facilitates identification.]

- H. Since October 1, 2005, it has been required to identify any appliance located at a facility that has leaked refrigerant. Indicates whether the facility and its contractors intended to develop a retrofit or retirement plan. Provide a dated copy of each plan developed by the facility. For each appliance identified in response to this question, provide supporting documentation with the following information:
 - (1). The date the facility notified EPA about its intention to develop a retrofit or retirement plan; and
 - (2). Whether the facility complied with the one (1) year time limit for the plan's development.
- I. If the facility and its contractors, owned or operated, at any time since October 1, 2005, any equipment to recover or recycle refrigerants used at the facility, provide the following information:
 - (1). A copy of any invoice or other record documenting the purchase or rental of such equipment, including the type of equipment, the manufacturer's name, the equipment model number, year manufactured, and any associated serial number; and
 - (2). A copy of the facility's and its contractors' equipment certification shall be sent to the EPA, demonstrating that the facility has acquired approved refrigerant recovery and recycling equipment. In addition, the contractors shall identify whether the equipment is working correctly based on the ARI Standard and that the facility knows how to use such equipment properly.
- J. Since October 1, 2005, any purchases or acquisitions made by the facility or its contractors provide copies of records, including, receipts, invoices, purchase orders, or bills of lading concerning refrigerant. The information should include the name, address, and telephone number of each person, agent, or business entity from whom the facility purchased refrigerant.
- K. Provide a copy of supporting documentation for any modifications or revisions to the SOP for Facility-wide management of the CFC appliances. Include the date of implementation of each SOP. Indicate that no modifications or revisions were made and provide an explanation.
- L. Provide a copy of all leak-rate calculations performed and all follow-up actions.

M. It is illegal to intentionally release refrigerants, including the alternatives like HFCs (for example, R-410A).

N. The Contractor must maintain all ODC's removal, addition, loss, leak rate calculations, and disposal records. Applicable
Federal, state, local, and Air Force regulations and instructions are followed. A list of equipment locations, amounts of refrigerant contained, and type must be kept—Ozone
Depleting Substances (ODSs). Venting of ODSs into the atmosphere violates Public Law. At no time shall the Contractor knowingly vent or release ODSs. (AFMAN 32-7002)



Hydrochlorofluorocarbons

Hydrochlorofluorocarbons, or HCFCs, are chemicals that are mainly used as refrigerants in the air-conditioning and refrigeration industries. Unfortunately, releases of HCFCs damage the ozone layer, which shields the Earth from harmful ultraviolet radiation and are greenhouse gases. The United States is one of more than 195 countries to phase out the manufacture of ozone-depleting substances and find alternatives.

Phaseout of HCFC-22 and HCFC-142b

HCFC-22 (or R-22) is often used in air-conditioning and refrigeration equipment. HCFC-142b is also used as a refrigerant, often as a component of a blend. It had also been used for foam blowing or as a propellant in aerosol cans. These two HCFCs are being phased out according to the following schedule:

January 1, 2010 Ban on production, import and use of HCFC-22 and HCFC-142b except for on-going servicing needs of existing equipment

January 1, 2020 Ban on remaining production and import of HCFC-22 and HCFC-142b

After 2020, the servicing of systems that use R-22 or blends containing HCFC-22 or HCFC-142b will rely on recovered or stockpiled quantities. It is difficult to predict when these supplies will run out. Supplies may be available until almost all equipment containing R-22 or R-142b is retired. However, in the future, supplies will be more limited and costs of HCFCs will likely rise.

SEPA United States Environmental Protection Agency

EPA Ozone Web Site http://www.epa.gov/ozone/ EPA Stratospheric Ozone Information Hotline 1.800.296.1996

> ENERGY STAR Web Site http://www.energystar.gov/

U.S. Environmental Protection Agency Mail Code 6205J 1200 Pennsylvania Avenue, NW Washington, D.C. 20460-0001

EPA-430-F-09-081

Disclaimer: EPA promotes energy efficiency and the safe use of ozone-friendly substances, and does not endorse any particular company or its products. What Technicians and Contractors Need to Know About Phasing Out HCFC Refrigerants to Protect the Ozone Layer





