ENVIRONMENTAL
HEALTH & SAFETY

OZONE DEPLETING SUBSTANCES PROGRAM

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DOCUMENT REVISION LOG

Document: **Ozone Depleting Substances Program**

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1	11/25/20	Updated logos and in line with new Title VI requirements		CBH

ACRONYMS & DEFINITIONS

Appliance	Any device which contains and uses a class I (CFC), class II (HCFC), or substitute substance as a refrigerant and is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer. EPA interprets this definition to include all air-conditioning and refrigeration equipment except that which is designed and used exclusively for military purposes.
Apprentice	Any person who is currently registered as an apprentice in service, maintenance, repair, or disposal of appliances with the U.S. Department of Labor's Bureau of Apprenticeship and Training (or a State Apprenticeship Council recognized by the Bureau of Apprenticeship and Training).
Approved Equipment Testing Organization	Any organization which has applied for and received approval from the Administrator pursuant to §82.160.
ARI	Air Conditioning and Refrigeration Institute
CAA	Clean Air Act and all amendments including the 1990 Amendments.
CFC	Chlorofluorocarbon – Any such chemical listed as a Class I ODS in Sections 608 or 609 of the Clean Air Act.
Class I	Refers to an ozone-depleting substance that is listed in 40 CFR part 82 subpart A, appendix A. See Attachment A.
Class II	Refers to an ozone-depleting substance that is listed in 40 CFR part 82 subpart A, appendix B. See Attachment A.
Certified Refrigerant Recovery or Recycling Equipment	Equipment certified by an approved equipment testing organization to meet the standards in §82.158(b), (d), or (f); or equipment certified pursuant to §82.36(a).
Comfort Cooling	Air-conditioning appliances used to provide cooling in order to control heat and/or humidity in occupied facilities including, but not limited to: residential, office, and commercial buildings. Comfort cooling appliances include, but are not limited to: chillers, commercial split systems, and packaged roof-top units.
Commercial Refrigeration	Refrigeration appliances used in the retail food and cold storage warehouse sectors. Retail food appliances include the refrigeration equipment found in supermarkets, convenience stores, restaurants and other food service establishments. Cold storage includes the refrigeration equipment used to store meat, produce, dairy products, and other perishable goods.

EHS	Environmental Health and Safety
EPA	Environmental Protection Agency
FM	Facilities Management
HCFC	Hydrochlorofluorocarbon – Any chemical listed as a Class II ODS in Sections 608 or 609 of the Clean Air Act.
Hotline	EPA's Stratospheric Ozone Hotline at 1-800-296-1996, or their website at http://www.epa.gov/ozone
Major Maintenance, Service, or Repair	Maintenance, service, or repair that involves removal of the appliance compressor, condenser, evaporator, or auxiliary heat exchanger coil.
Industrial Process Refrigeration	Complex customized appliances that are directly linked to the processes in which they are used; for example, the chemical, pharmaceutical, petrochemical, and manufacturing industries. This sector also includes industrial ice machines, appliances used directly in the generation of electricity, and ice rinks.
MVAC	Motor vehicle air conditioner
MVAC-like Appliance	Mechanical vapor compression, open-drive compressor appliances used to cool the driver's or passenger's compartment of a non-road vehicle, including agricultural and construction vehicles. This definition excludes those appliances using R-22.
ODS	Ozone Depleting Substance - Any of a group of halogenated hydrocarbon chemicals which photochemically react in the stratosphere in a way which destroys the ozone layer, which protects the Earth from the excessive influx of harmful cosmic & solar radiation.
O&M	Operations & Maintenance
Opening	Any service, maintenance, or repair on an appliance that would release class I, class II, or substitute refrigerant from the appliance to the atmosphere, unless the refrigerant was recovered previously from the appliance. Connecting and disconnecting hoses and gauges to and from the appliance to measure pressures within the appliance and to add refrigerant to or recover refrigerant from the appliance shall not be considered "opening".
Owner	The UNM entity responsible for O&M (e.g., FM Manager or Lab PI) of the RREA, MVAC or other ODS equipment at UNM.

PI	Principle Investigator in a laboratory or person in charge of equipment not O&M'd by FM.
Reclaim	To reprocess refrigerant to at least the purity specified in the ARI Standard 700-1993, Specifications for Fluorocarbon Refrigerants, and to verify this purity using the analytical methodology prescribed in the Standard. Reclamation requires specialized machinery not available at a particular job site or auto repair shop. The technician will recover the refrigerant and then send it either to a general reclaimer or back to the refrigerant manufacturer.
Recover	To remove refrigerant in any condition from an appliance and store it in an external container without necessarily testing or processing it in any way.
Recycle	To extract and clean refrigerant from an appliance for reuse without meeting all of the requirements for reclamation. In general, recycled refrigerant is refrigerant that is cleaned using oil separation and single or multiple passes through devices, such as replaceable core filter-driers, which reduce moisture, acidity, and particulate matter. For MVACs, refrigerant can be removed from one car's air conditioner, recycled on site, and then charged into a different car.
Refrigerant	Any substance, including blends and mixtures, consisting in part or whole of a class I or class II ozone-depleting substance or substitute that is used for heat transfer purposes and provides a cooling effect.
Refrigerant Circuit	The parts of an appliance that are normally connected to each other (or are separated only by internal valves) and are designed to contain refrigerant.
RREA	Refrigeration-Related Equipment & Appliances
Small Appliance	Any of the following products that are fully manufactured, charged, and hermetically sealed in a factory with five pounds or less of refrigerant: refrigerators and freezers designed for home use, room air conditioners (including window air conditioners and packaged terminal air conditioners), packaged terminal heat pumps, dehumidifiers, under-the-counter ice makers, vending machines, and drinking water coolers.
Technician	Any person who performs maintenance, service, or repair that could reasonably be expected to release class I (CFC), class II (HCFC), or substitute substances from appliances, except for MVACs, into the atmosphere. Technician also means any person performing disposal of appliances, except for small appliances, MVACs, and MVAC-like appliances, that could be

	reasonably expected to release class I, class II, or substitute refrigerants from appliances into the atmosphere.

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OZONE DEPLETING SUBSTANCES PROGRAM

We all live under the UV-radiation filtering stratospheric ozone layer that protects both our health and the viability of the agricultural and ecosystems upon which we rely. Therefore, it is in all of our own interests to correctly handle and use ODS's to minimize release into the atmosphere.

The City of Albuquerque's Environmental Health Department and the U.S. EPA enforce environmental regulations that apply to stratospheric ozone depleting substances (ODS), such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and most other refrigerants. The Department of Environmental Health and Safety (EHS) coordinates all environmental compliance efforts at UNM, including those related to ODS.

As with all environmental, health & safety (EH&S)-related issues at UNM, please contact EHS first at 277-2753 for all ODS-related questions and concerns. However, if the persons familiar with ODS at EHS are not available in a timely manner, and if there is an urgent ODS issue, please contact the EPA's Stratospheric Ozone Hotline at 1-800-296-1996 or visit their website https://www.epa.gov/ozone. Regardless, all EH&S-related reporting to regulatory agencies, such as the EPA, must be reviewed by EHS prior to being sent out. Aside from reporting documents, all required record-keeping is the responsibility of the ODS user, storer, or entity which operates & maintains ODS-related equipment.

1. SCOPE

This program applies to UNM entities that use or store ODS for operations & maintenance (O&M) of air conditioning and refrigeration systems and for other ODS use in research, etc. The requirements of this program are also applicable to outside contractors which work on such systems at UNM. The goals of the program are listed in priority as follows:

1. To **prevent and minimize** releases of ODS to the environment;
2. To **comply** with applicable laws and regulations governing ODS; and,
3. To **detect, report, and correct** releases of ODS should they occur.

Program Limitations: Only the environmental compliance aspects of ODS are covered by this program. Equipment operation & maintenance are only covered where absolutely necessary for compliance.

2. RESPONSIBILITIES

2.1. Environmental Health and Safety (EHS) is responsible for:

- Developing and implementing a University-wide program.

2.2. Deans, Directors and Department Heads are responsible for:

- Ensuring departmental compliance with all procedures outlined in this program.

2.3. Supervisors' responsibilities include:

- Ensuring compliance with this program in their work areas;
- Ensuring employees receive the appropriate training; and
- Knowing and complying with the provisions of this program.

2.4. Employees are required to:

- Know and comply with the provisions of this program.

3. ODS Regulatory Framework

The environmental compliance regulations pertaining to ODS, most applicable to UNM, are broken into two general categories:

1. Refrigeration-Related Equipment & Appliances (RREA), such as utility chillers, building air conditioning (AC), refrigerators and freezers (stationary or truck-mounted), dehumidifiers, cold storage, etc. are regulated by Section 608 of the 1990 Amendments to the CAA; and,
2. Motor Vehicle Air Conditioners (MVAC) and (MVAC-like) are regulated by Section 609 of the 1990 Amendments to the CAA.

4. Requirements for Refrigeration-Related Equipment and Appliances (RREA)

4.1. Overview – The following is an overview of ODS management requirements for RREA:

1. Requires servicing practices that maximize recycling of ozone-depleting compounds (including chlorofluorocarbons [CFCs], hydrochlorofluorocarbons [HCFCs] and all non-exempt substitutes) during the servicing and disposal of air-conditioning and refrigeration equipment.
2. Sets certification requirements for recycling and recovery equipment, technicians, and reclaimers.
3. Restricts the sale of refrigerant to certified technicians.
4. Requires persons servicing or disposing of air-conditioning and refrigeration equipment to certify to EPA that they have acquired recycling or recovery equipment and are complying with the requirements of the rule.
5. Requires the repair of substantial leaks in air-conditioning and refrigeration equipment with a charge of greater than 50 pounds.
6. Establishes safe disposal requirements to ensure removal of refrigerants from goods that enter the waste stream with the charge intact (e.g., motor vehicle air conditioners, home refrigerators, and room air conditioners).

7. Sets reporting and record keeping requirements for appliances with more than 5 pounds of refrigerant.

4.2. Exempt Substitutes - This section lists the refrigerants exempt from the prohibition on venting. Only refrigerants specifically listed below are exempt from the prohibition on venting.

1. Carbon dioxide in any application
2. Nitrogen in any application
3. Water in any application
4. Ammonia in commercial or industrial process refrigeration
5. Chlorine in industrial process refrigeration
6. Hydrocarbons in industrial process refrigeration
7. Ethane (R-170) in very low temperature refrigeration equipment
8. Propane (R-290) in retail food refrigerators and freezers; household refrigerators; residential and light commercial air conditioners; vending machines; ice machines; and water coolers
9. Isobutane (R-600a) in retail food refrigerators and freezers; household refrigerators; vending machines
10. R-441A in retail food refrigerators; household refrigerators; household and light commercial air conditioners; vending machines

4.3. Prohibition on Venting

Since July 1992, it has been unlawful to knowingly vent ODS refrigerants into the atmosphere while maintaining, servicing, repairing, or disposing of air-conditioning or refrigeration equipment (appliances). Effective in January of 2017, it is unlawful to release non-exempt substitutes in addition to CFCs and HCFCs. Only four types of ODS releases are now lawful:

1. “De minimis" quantities of refrigerant released in the course of making good faith attempts to recapture and recycle or safely dispose of refrigerant;
2. Refrigerants emitted in the course of normal operation of air-conditioning and refrigeration equipment (as opposed to during the maintenance, servicing, repair, or disposal of this equipment), such as from mechanical purging and leaks. However, the repair of leaks is required for large equipment above a certain size (see “Refrigerant Leaks”);
3. Releases of CFCs or HCFCs that are used for non-refrigerant laboratory uses. See “ODS Phase-out Exemption” below for more information; and
4. Small releases of refrigerant that result from purging hoses or from connecting and disconnecting hoses to charge or service appliances will not be considered violations of the prohibition on venting. However, recovery and recycling equipment manufactured after November 15, 1993 must be equipped with low-loss fittings.

4.4. Service Practice Requirements

Evacuation Requirements - Since July 13, 1993, technicians have been required to evacuate air-conditioning and refrigeration equipment to established vacuum levels when opening the equipment, excluding the small appliances listed below. Evacuation requirements are based on the date of manufacture of the recovery equipment and the type of appliance. Recovery or recycling equipment must have been certified by an EPA-approved equipment testing organization. Persons who simply add refrigerant to (top-off) appliances are not required to evacuate the systems.

4.4.1. Table 1 - Required levels of evacuation for appliances with more than 5 lbs. of refrigerant

Type of appliance	**Inches of Hg Vacuum (relative to standard atmospheric pressure of 29.9 in Hg)**	
	Using equipment manufactured before Nov. 15, 1993	Using equipment manufactured after Nov. 15, 1993
Very High Pressure appliance	0	0
High –pressure appliance, or isolated component with a full charge < 200 lbs	0	0
High-pressure appliance, or isolated component with a full charge ≥ 200 lbs	4	10
Medium-pressure appliance, or isolated component with a full charge < 200 lbs	4	10
Medium-pressure appliance, or isolated component with a full charge ≥ 200 lbs	4	15
Low-pressure appliance	25 mm Hg absolute	25 mm Hg absolute

4.4.2. Small appliances - such as household refrigerators, window air conditioners, and water coolers, technicians must recover:

- 80 percent of the refrigerant when:
  a) The technician uses recovery or recycling equipment manufactured before November 15, 1993, or
  b) The compressor in the appliance is not operating.

- 90 percent of the refrigerant when:
  a) The technician uses recovery or recycling equipment manufactured after November 15, 1993 and
  b) The compressor in the appliance is operating.

In order to ensure that they are recovering the correct percentage of refrigerant, technicians must use the recovery equipment according to the directions of its manufacturer. Technicians may also satisfy recovery requirements by evacuating the small appliance to four inches of mercury vacuum.

4.4.3. Exceptions to Evacuation Requirements

There are limited exceptions to the evacuation requirements for

1. Repairs to leaky equipment and
2. Repairs that are not major and that are not followed by an evacuation of the equipment to the environment.

If, due to leaks, evacuation to the levels in Table 1 is not attainable, or would substantially contaminate the refrigerant being recovered, persons opening the appliance must:

1. Isolate leaking from non-leaking components wherever possible;
2. Evacuate non-leaking components to the levels in Table 1 and evacuate leaking components to the lowest level that can be attained without substantially contaminating the refrigerant. This level cannot exceed 0 psig.

If evacuation of the equipment to the environment is not to be performed when repairs are complete, and if the repair is not major, then the appliance must:

1. Be evacuated to at least 0 psig before it is opened if it is a high- or very high-pressure appliance; or
2. Be pressurized to 0 psig before it is opened if it is a low-pressure appliance. Methods that require subsequent purging (e.g., nitrogen) cannot be used except with appliances containing R-113.

4.4.4. Reclamation Requirement

Refrigerants recovered and/or recycled can be returned to the same system or other systems owned by the same entity without restriction. If refrigerant changes ownership, however, that refrigerant must be reclaimed (i.e., cleaned to the ARI 700-1993 standard of purity and chemically analyzed to verify that it meets this standard) unless the refrigerant was used only in a motor vehicle air conditioner (MVAC) or MVAC-like appliance and will be used in the same type of appliance. Visit the EPA website for an updated the list of reclamation companies.

4.5. Equipment Certification

The EPA has established a certification program for all testing and recycling equipment. Equipment certification requirements are based on the date of manufacture. The certification must be completed by an approved testing organization and labeled as such. The standard for certification is listed with manufacturing date in the table below.

4.5.1. Table 2 – Certification Requirements for Evacuation Equipment

Date of Manufacture	Applicable Certification Standard
Before Nov. 15, 1993	Meets standard if it can achieve values listed in 40 CFR 82.158 (Certification not required)
Between Nov. 15, 1993 and Sep. 22, 2003	ARI 740-1993 or Appx. B1 of Subpart F of Part 82

Between Sep. 22, 2003 and Jan. 1, 2017	ARI 740-1995 or Appx. B2 of Subpart F of Part 82
After Jan. 1, 2017	ARI 740-2016 or Appx. B3/B4 of Subpart F of Part 82

For further information on certification, or to see if your device meets the requirements, contact EHS.

4.6. Refrigerant Leaks

Owners of equipment with charges of greater than 50 pounds are required to repair leaks in the equipment when those leaks together would result in the loss of more than a certain percentage of the equipment's charge over a year. Starting in 2019 the leak rates were tightened. The new and old leak rates are listed below in Table 2. The leak rate that triggers a mandatory repair is dependent on the use of the appliance.

4.6.1. Table 3 – Permissible Leak Rates for Large Appliances

Appliance Type	**Permissible leak rate before 2019**	**Permissible leak rate after 2019**
Industrial Process Refrigeration	35%	30%
Commercial Refrigeration	35%	20%
Comfort Cooling & and All Other Appliances	15%	10%

The trigger for repair requirements is the current leak rate rather than the total quantity of refrigerant lost. For instance, owners of a commercial refrigeration system containing 100 pounds of charge must repair leaks if they find that the system has lost 10 pounds of charge over the past month; although 10 pounds represents only 10 percent of the system charge in this case, a leak rate of 10 pounds per month would result in the release of over 100 percent of the charge over the year. To track leak rates, owners of air-conditioning and refrigeration equipment with more than 50 pounds of charge must keep records of the quantity of refrigerant added to their equipment during servicing and maintenance procedures.

Owners are required to repair leaks within 30 days of discovery. This requirement is waived if, within 30 days of discovery, owners develop a one-year retrofit or retirement plan for the leaking equipment. Owners of industrial process refrigeration equipment may qualify for additional time under certain circumstances. For example, if an industrial process shutdown is required to repair a leak, owners have 120 days to repair the leak. Owners or operators of leaky industrial process refrigeration equipment should both see the “Section 608: Leak Repair fact sheet” (Attachment B) and promptly notify EHS. EHS will assist with information concerning time extensions and pertinent record-keeping and reporting requirements.

4.7. Technician Certification

Any person who could be expected to violate the integrity of the refrigerant circuit during maintenance, service, repair or disposal of appliances containing any non-exempt refrigerant must be certified by an approved technician certification program. Apprentices are exempt from certification requirements provided the apprentice is closely and continually supervised by a certified technician.

4.7.1. The four types of EPA-certification are as follows:

1. For servicing small appliances (Type I);
2. For servicing or disposing of high- or very high-pressure appliances, except small appliances and MVACs (Type II);
3. For servicing or disposing of low-pressure appliances (Type III); and
4. For servicing all types of equipment (Universal).

Certification is not required for those that dispose of small appliances, MVACs, and MVAC-like appliances.

Technicians are required to pass an EPA-approved test given by an EPA-approved certifying organization to become certified under the mandatory program. The website distributes current lists of approved testing organizations.

4.8. Refrigerant Sales Restrictions

The sale of CFC-12 in containers smaller than 20 pounds is restricted solely to technicians certified under EPA's motor vehicle air conditioning regulations. EPA-certified technicians servicing appliances other than motor vehicle air conditioners may still buy containers of CFC-12 larger than 20 pounds.

Effective November 14, 1994, the sale of refrigerants in any size container is restricted to technicians certified either under the program described in Technician Certification above or under EPA's motor vehicle air conditioning regulations. The sales restriction covers refrigerant contained in bulk containers (cylinders or drums) and pre-charged parts. The restriction excludes refrigerant contained in refrigerators or air conditioners with fully assembled refrigerant circuits (such as household refrigerators, window air conditioners, and packaged air conditioners), pure HFC refrigerants.

4.9. Certification by Owners of Recycling and Recovery Equipment

Technicians servicing or disposing of air-conditioning and refrigeration equipment at UNM must certify to EPA Region VI (in Dallas, TX) that they have acquired (built, bought, or leased) recovery or recycling equipment and that they are complying with the applicable requirements of this rule. A copy of the EPA Refrigerant Recovery or Recycling Device Acquisition Certification Form is included in Attachment C. This certification form must be filled out by the UNM entity which O&Ms the equipment, e.g., an FM Manager, who will then forward it to EHS for review. EHS will review the completed form and forward it for signature by a responsible UNM officer. EHS will return a signed copy of the form back to the equipment O&M entity when sending it on to the EPA Region VI Office.

Note that this certification is a one-time requirement. Therefore, if a shop purchased a piece of CFC-12 recycling equipment in the past, and sent the certification to EPA, the shop does not need to send a second certification to EPA when it purchases a second piece of equipment, no matter what refrigerant that equipment is designed to handle. Although owners of recycling and recovery equipment are required to list the number of trucks (or “service vehicles”) based at their shops, they do not need to have a piece of recycling or recovery equipment for every truck.

Outside contractors should certify their own equipment.

4.10. Safe Disposal Requirements

Equipment that is typically dismantled on-site before disposal (e.g., retail food refrigeration, central residential air conditioning, chillers, and industrial process refrigeration) has to have the refrigerant recovered in accordance with EPA's requirements for servicing. However, equipment that typically enters the waste stream with the charge intact (e.g., motor vehicle air conditioners, household refrigerators and freezers, and room air conditioners) is subject to special safe disposal requirements.

Under these requirements, the final person in the disposal chain at UNM (e.g., the FM Manager overseeing an appliance replacement) is responsible for ensuring that refrigerant is recovered from equipment before the final disposal of the equipment. Refrigerant recovery can be performed by outside contractors, but they must provide signed documentation. Such documentation must be kept for 3 years.

4.11. Major Recordkeeping Requirements

4.11.1. Appliances Containing 50 Pounds or More of Refrigerant

Owners or operators of appliances that contain 50 pounds or more of refrigerant must keep records for three years in electronic or paper format. All records should contain the identification of the owner or operator, the address where the appliance is located, and the date of the record. The following records should be kept:

1. The full charge of the appliance;
2. Any record of maintenance, service/repair, or disposal. Include the following:
    a) Part(s) of the appliance being maintained, serviced, repaired, or disposed;
    b) Type of maintenance, service, repair, or disposal;
    c) Name of the person performing the work;
    d) The amount and type of refrigerant added to or removed from the appliance;
    e) The full charge of the appliance; and
    f) The leak rate and method (not applicable to disposal).
3. Records of leak inspections including the method and location of any leaks identified;
4. Records of initial and follow-up leak verification tests;
5. Retrofit or retirement plans;
6. Retrofit or extension requests submitted to EPA;
7. Records of appliance mothballing;
8. Refrigerant excluded from leak rate calculations due to being purged and destroyed or seasonal variations in appliance fill weight; and

9. Records of all reports submitted to EPA.

4.11.2. Appliances Containing 5 to 50 Pounds of Refrigerant

Appliances evacuated that contain more than 5 pounds and less than 50 pounds of refrigerant are subject to record keeping requirements starting in January 2018. The following records must be kept on file for 3 years:

1. The company name, location of the appliance, date of recovery, and type of refrigerant recovered from each appliance;
2. The total quantity of refrigerant, by type, recovered from all disposed appliances in each calendar month; and
3. The quantity of refrigerant, by type, transferred for reclamation and/or destruction, the person to whom it was transferred, and the date of transfer.

4.11.3. Wholesalers of Refrigerants

Wholesalers who sell CFC and HCFC refrigerants must retain invoices that indicate the name of the purchaser, the date of sale, and the quantity of refrigerant purchased. Reclaimers must maintain records of the names and addresses of persons sending them material for reclamation and the quantity of material sent to them for reclamation. This information must be maintained on a transactional basis. Within 30 days of the end of the calendar year, reclaimers must report to EPA the total quantity of material sent to them that year for reclamation, the mass of refrigerant reclaimed that year, and the mass of waste products generated that year.

4.12. Hazardous Waste Disposal

If refrigerants are recycled or reclaimed, they are not considered hazardous under federal law. In addition, used oils contaminated with CFCs are not hazardous on the condition that:

1. They are not mixed with other waste;
2. They are subjected to CFC recycling or reclamation; or,
3. They are not mixed with used oils from other sources.

Used oils that contain CFCs after the CFC reclamation procedure, however, are subject to specification limits for used oil fuels if these oils are destined for burning. Individuals with questions regarding the proper handling of these materials should contact UNM EHS at 277-2753.

For compressor, chiller, etc., oil change procedures in compliance with CAA-requirements please contact EHS.

5. Requirements for Motor Vehicle Air Conditioners (MVACs) & MVAC-Like Air Conditioners

One of the largest uses of CFC-12 in the U.S. is as a refrigerant in motor vehicle air conditioners (MVACs). The EPA has delegated to the Albuquerque Environmental Health Department the authority to establish requirements to prevent the release of refrigerants during the servicing of MVACs and to require recycling of refrigerants. Widespread refrigerant recycling reduces the demand for virgin ODS refrigerants and thus extends the time that they will be available. The following sections describe the requirements of the law and its potential impact on UNM.

5.1. Recycling vs. Reclamation

In the discussion below, recycling means the use of a machine to remove impurities and oil and then recharge the refrigerant into either the same car or a different car. Recycled refrigerant is not as pure as reclaimed refrigerant. Recycling occurs in the service shop.

Reclamation means the removal of all oil and impurities beyond that provided by on-site recycling equipment, and reclaimed refrigerant is essentially identical to new, unused refrigerant. Reclamation cannot be performed in the service shop. Rather, the shop generally sends refrigerant either back to the manufacturer or directly to a reclamation facility.

5.2. Requirements for All MVAC Refrigerants

1. Venting any non-exempt refrigerants is prohibited.
2. Approved Equipment - Technicians who repair or service MVACs must recover the refrigerant and either recycle it on-site or send it off-site to a reclamation facility. Technicians must use EPA-approved equipment to perform the refrigerant recovery and recycling. A list of approved recover/recycle and recover-only equipment is available from the Hotline.
    - Certain EPA-approved models can recycle both CFC-12 and HFC-134a refrigerants.
    - Some CFC-12 recovery/recycling equipment can be converted for use with HFC-134a. However, technicians are prohibited from changing fittings on the same unit back and forth so that the unit is used for CFC-12 in the morning, HFC-134a in the afternoon, then back to CFC-12 again, etc.
    - For refrigerant blends see the Requirements Specific to Refrigerant Blends below.
3. Technician Training and Certification - Technicians who repair or service MVACs must be trained and certified by an EPA-approved organization. If a technician is already trained and certified to handle CFC-12, he does not need to be recertified to handle HFC-134a or refrigerant blends. A list of approved MVAC training and certification programs is available from the Hotline.
4. Recordkeeping Requirements - Service shops must certify to EPA that they own EPA-approved refrigerant recovery or recycling equipment. A copy of the EPA Refrigerant Recovery or Recycling Device Acquisition Certification Form is included in Attachment C.
    - Note that this certification is a one-time requirement. Therefore, if a shop purchased a piece of CFC-12 recycling equipment in the past, and sent the certification to EPA, the shop does not need to send a second certification to EPA when it purchases a second piece of equipment, no matter what refrigerant that equipment is designed to handle. If refrigerant is recovered and sent to a reclamation facility, the shop must retain the name and address of that reclaimer.
5. Sales Restrictions - The sale of ODS refrigerants is restricted to only EPA-certified technicians.

5.3. Requirements Specific to Refrigerant Blends

1. Using Older Equipment to Recover Blends - Technicians have a number of choices in recovering blend refrigerants. One option is that a technician may permanently dedicate an older piece of equipment he or she

owns to recovering one or more blend refrigerants. The technician may also use this equipment to recover contaminated CFC-12 and HFC-134a and other "mystery mixtures." This equipment, however, may no longer be used to recover uncontaminated CFC-12 or HFC-134a. Refrigerant recovered using this kind of "junk" tank must then be shipped off-site for reclamation or destruction.

2. Using New Equipment to Recover Blends - Another option for recovering a blend refrigerant is to use a new piece of EPA-approved equipment designed to recover, but not recycle, any single, specific blend refrigerant.
3. Recycling Blends - Recycling of refrigerant blends used in motor vehicle air conditioning systems (MVACs) is allowed, provided that:
    a) Recycling equipment meets a new Underwriters Laboratories (UL) standard (Standard 2964) and
    b) Refrigerant is returned to the vehicle from which it was removed. The only exception to item b is for fleets of vehicles with a common owner; recycled blend refrigerant may be moved among vehicles within such a fleet. The EPA adopted a new UL standard into regulation and grandfathered any equipment that (1) meets the UL standard and (2) is purchased before the date on which EPA published the UL standard rule.
4. Converting CFC-12 or HFC-134a Recycling Equipment for Use with Blend Substitutes - Conversion of existing CFC-12 or HFC-134a recycling equipment for either temporary or permanent use with a blend refrigerant is prohibited, unless the equipment is used only to recover, but not to recycle, the refrigerant. In the future, the EPA may issue regulations allowing these conversions but placing certain restrictions on who performs the conversions, what models may be converted, etc.

5.4. Retrofitting Vehicles to Alternative Refrigerants

When retrofitting a MVAC for use with another refrigerant (e.g., replacing CFC-12 w/ a blend), the technician must first extract the CFC-12, must cover the CFC-12 label with a label that indicates the new refrigerant in the system and other information, and must affix new fittings unique to that refrigerant. In addition, if a technician is retrofitting a vehicle to a refrigerant that contains R-22, the technician must ensure that only barrier hoses are used in the A/C system. Finally, if the system includes a pressure relief device, the technician must install a high-pressure compressor shutoff switch to prevent the compressor from increasing pressure until the refrigerant is vented.

Much more information about the SNAP program and about retrofitting procedures is available in a fact sheet called "Choosing and Using Alternative Refrigerants" through the EPA's Ozone Hotline (800-296-1996).

6. ODS Phase-Out Exemption

ODS are a broad group of chemicals which have a variety of applications outside of their use as refrigerants. The only exemption to bans on Class I ODS production and import is for essential laboratory and analytical procedures. This exemption will expire on December 31, 2021. Laboratory uses include:

1. Equipment Calibration;
2. Extraction solvent, diluent or carrier for chemical analysis;
3. Biochemical research;
4. Inert solvent for chemical reactions, or as a carrier or laboratory chemical; and

5. Other critical analytical and laboratory purposes.

In order to purchase ODS, laboratory customers (UNM lab manager or PI) must provide the distributor with a one time a year certification for each substance, stating the substance will only be used for laboratory applications and will not be sold or used in any non-laboratory fashion.

7. Purchase and Sale of ODS

The Montreal Protocol, effective since 1989, has phased out the manufacturing and importation of most ODS and restricting the supply. Therefore, the cost for ODS has multiplied and will continue to go up. The high cost of ODS has created a black market for the illegal importation of ODS. To keep your ODS from being potentially confiscated by law enforcement agencies, please purchase ODS from only known, reputable dealers.

If a UNM entity has stocks of surplus ODS that they wish to sell, please contact EHS for advice on if and how the ODS may be legally sold.

ATTACHMENT A

ATTACHMENT A

Class I & II Ozone Depleting Substances (epa.org)

Key:

- The numbers in the "ODP1" column are from the Montreal Protocol. Some numbers have been updated as per amendments to the Protocol.

- Data in the "ODP2" column come from WMO's *Scientific Assessment of Ozone Depletion: 2010*. ODP values listed are semi-empirical and can be found in Table 5-1 of the document.

- The numbers in the "GWP1" column represent global warming potentials over a 100-year time horizon. The numbers are from the Intergovernmental Panel on Climate Change (IPCC) *Fourth Assessment Report: Climate Change 2007* (AR4). The values listed are for direct radiative forcing and can be found in Table 2.14 of the "Physical Science Basis" contribution to the report.

- The numbers in the "GWP2" column also represent global warming potentials over a 100-year time horizon. The numbers are from the IPCC *Fifth Assessment Report: Climate Change 2014* (AR5). The values listed are for direct radiative forcing and can be found in Table 8.A.1 of the "Physical Science Basis" contribution to the report.

Class I ODS

Class I ODS are divided into eight groups.

- Class I ODS listed in Groups 1 through 5 are identified in Title VI of the Clean Air Act.
- Class I ODS listed in Groups 6 and 7, methyl bromide and hydrobromofluorocarbons, are identified in EPA's Accelerated Phaseout final rule.
- Class I ODS listed in Group 8, chlorobromomethane, is identified in EPA's Chlorobromomethane Phaseout final rule.

Chemical Name	Lifetime, in years	ODP 1	ODP 2	GWP 1	GWP 2	CAS Number
Group I						
CFC-11 (CCl3F) Trichlorofluoromethane	45	1	1	4750	4660	75-69-4
CFC-12 (CCl2F2) Dichlorodifluoromethane	100	1	0.82	10900	10200	75-71-8
CFC-113 (C2F3Cl3) 1,1,2-Trichlorotrifluoroethane	85	0.8	0.85	6130	5820	76-13-1
CFC-114 (C2F4Cl2) Dichlorotetrafluoroethane	190	1	0.58	10000	8590	76-14-2
CFC-115 (C2F5Cl) Monochloropentafluoroethane	1020	0.6	0.5	7370	7670	76-15-3
Group II						
Halon 1211 (CF2ClBr) Bromochlorodifluoromethane	16	3	7.9	1890	1750	353-59-3
Halon 1301 (CF3Br) Bromotrifluoromethane	65	10	15.9	7140	6290	75-63-8
Halon 2402 (C2F4Br2) Dibromotetrafluoroethane	20	6	13.0	1640	1470	124-73-2

Chemical Name	Lifetime, in years	ODP 1	ODP 2	GWP 1	GWP 2	CAS Number
Group III						
CFC-13 (CF3Cl) Chlorotrifluoromethane	640	1	1	14420	13900	75-72-9
CFC-111 (C2FCl5) Pentachlorofluoroethane		1	1			354-56-3
CFC-112 (C2F2Cl4) Tetrachlorodifluoroethane		1	1			76-12-0
CFC-211 (C3FCl7) Heptachlorofluoropropane		1	1			422-78-6
CFC-212 (C3F2Cl6) Hexachlorodifluoropropane		1	1			3182-26-1
CFC-213 (C3F3Cl5) Pentachlorotrifluoropropane		1	1			2354-06-5
CFC-214 (C3F4Cl4) Tetrachlorotetrafluoropropane		1	1			29255-31-0
CFC-215 (C3F5Cl3) Trichloropentafluoropropane		1	1			4259-43-2
CFC-216 (C3F6Cl2) Dichlorohexafluoropropane		1	1			661-97-2
CFC-217 (C3F7Cl) Chloroheptafluoropropane		1	1			422-86-6
Group IV						
CCl4 Carbon tetrachloride	26	1.1	0.82	1400	1730	56-23-5

Chemical Name	Lifetime, in years	ODP 1	ODP 2	GWP 1	GWP 2	CAS Number
Group V						
Methyl Chloroform (C2H3Cl3) 1,1,1-trichloroethane	5	0.1	0.16	146	160	71-55-6
Group VI						
Methyl Bromide (CH3Br)	0.8	0.7	0.66	5	2	74-83-9
Group VII						
CHFBr2		1	1			
HBFC-12B1(CHF2Br)		0.74				
CH2FBr		0.73	0.73			
C2HFBr4		0.3-0.8	0.3-0.8			
C2HF2Br3		0.5-1.8	0.5-1.8			
C2HF3Br2		0.4–1.6	0.4–1.6			
C2HF4Br		0.7–1.2	0.7–1.2			
C2H2FBr3		0.1–1.1	0.1–1.1			
C2H2F2Br2		0.2–1.5	0.2–1.5			

Chemical Name	Lifetime, in years	ODP 1	ODP 2	GWP 1	GWP 2	CAS Number
C2H2F3Br		0.7–1.6	0.7–1.6			
C2H3FBr2		0.1–1.7	0.1–1.7			
C2H3F2Br		0.2–1.1	0.2–1.1			
C2H4FBr		0.07–0.1	0.07–0.1			
C3HFBr6		0.3–1.5	0.3–1.5			
C3HF2Br5		0.2–1.9	0.2–1.9			
C3HF3Br4		0.3–1.8	0.3–1.8			
C3HF4Br3		0.5–2.2	0.5–2.2			
C3HF5Br2		0.9–2.0	0.9–2.0			
C3HF6Br		0.7–3.3	0.7–3.3			
C3H2FBr5		0.1–1.9				
C3H2F2Br4		0.2–2.1	0.2–2.1			

Chemical Name	Lifetime, in years	ODP 1	ODP 2	GWP 1	GWP 2	CAS Number
C3H2F3Br3		0.2–5.6	0.2–5.6			
C3H2F4Br2		0.3–7.5	0.3–7.5			
C3H2F5Br		0.9–1.4	0.9–1.4			
C3H3FBr4		0.08–1.9	0.08–1.9			
C3H3F2Br3		0.1–3.1	0.1–3.1			
C3H3F3Br2		0.1–2.5	0.1–2.5			
C3H3F4Br		0.3–4.4	0.3–4.4			
C3H4FBr3		0.03–0.3	0.03–0.3			
C3H4F2Br2		0.1–1.0	0.1–1.0			
C3H4F3Br		0.07–0.8	0.07–0.8			
C3H5FBr2		0.04–0.4	0.04–0.4			
C3H5F2Br		0.07–0.8	0.07–0.8			

Chemical Name	Lifetime, in years	ODP 1	ODP 2	GWP 1	GWP 2	CAS Number
C3H6FBr		0.02–0.7	0.02–0.7			
Group VIII						
CH2BrCl Chlorobromomethane	0.37	0.12	0.12			

Class II ODS

Chemical Name	Lifetime, in years	ODP1	ODP2	GWP1	GWP2	CAS Number
HCFC-21 ($CHFCl_2$) Dichlorofluoromethane	1.7	0.04		151	148	75-43-4
HCFC-22 (CHF_2Cl) Monochlorodifluoromethane	11.9	0.055	0.04	1810	1760	75-45-6
HCFC-31 (CH_2FCl) Monochlorofluoromethane		0.02				593-70-4
HCFC-121 (C_2HFCl_4) Tetrachlorofluoroethane		0.01-0.04				354-14-3
HCFC-122 ($C_2HF_2Cl_3$) Trichlorodifluoroethane		0.02-0.08			59	354-21-2
HCFC-123 ($C_2HF_3Cl_2$) Dichlorotrifluoroethane	1.3	0.02	0.01	77	79	306-83-2
HCFC-124 (C_2HF_4Cl) Monochlorotetrafluoroethane	5.9	0.022				2837-89-0
HCFC-131 ($C_2H_2FCl_3$) Trichlorofluoroethane		0.007–0.05				359-28-4
HCFC-132b ($C_2H_2F_2Cl_2$) Dichlorodifluoroethane		0.008–0.05				1649-08-7

Chemical Name	Lifetime, in years	ODP1	ODP2	GWP1	GWP2	CAS Number
HCFC-133a (C2H2F3Cl) Monochlorotrifluoroethane		0.02–0.06				75-88-7
HCFC-141b (C2H3FCl2) Dichlorofluoroethane	9.2	0.11	0.12	725	782	1717-00-6
HCFC-142b (C2H3F2Cl) Monochlorodifluoroethane	17.2	0.065	0.06	2310	1980	75-68-3
HCFC-221 (C3HFCl6) Hexachlorofluoropropane		0.015–0.07				422-26-4
HCFC-222 (C3HF2Cl5) Pentachlorodifluoropropane		0.01–0.09				422-49-1
HCFC-223 (C3HF3Cl4) Tetrachlorotrifluoropropane		0.01–0.08				422-52-6
HCFC-224 (C3HF4Cl3) Trichlorotetrafluoropropane		0.01–0.09				422-54-8
HCFC-225ca (C3HF5Cl2) Dichloropentafluoropropane	1.9	0.025	0.02	122	127	422-56-0
HCFC-225cb (C3HF5Cl2) Dichloropentafluoropropane	5.9	0.033	0.03	595	525	507-55-1
HCFC-226 (C3HF6Cl) Monochlorohexafluoropropane		0.02–0.1				431-87-8

Chemical Name	Lifetime, in years	ODP1	ODP2	GWP1	GWP2	CAS Number
HCFC-231 (C3H2FCl5) Pentachlorofluoropropane		0.05–0.09				421-94-3
HCFC-232 (C3H2F2Cl4) Tetrachlorodifluoropropane		0.008–0.1				460-89-9
HCFC-233 (C3H2F3Cl3) Trichlorotrifluoropropane		0.007–0.23				7125-84-0
HCFC-234 (C3H2F4Cl2) Dichlorotetrafluoropropane		0.01–0.28				425-94-5
HCFC-235 (C3H2F5Cl) Monochloropentafluoropropane		0.03–0.52				460-92-4
HCFC-241 (C3H3FCl4) Tetrachlorofluoropropane		0.004–0.09				666-27-3
HCFC-242 (C3H3F2Cl3) Trichlorodifluoropropane		0.005–0.13				460-63-9
HCFC-243 (C3H3F3Cl2) Dichlorotrifluoropropane		0.007–0.12				460-69-5
HCFC-244 (C3H3F4Cl) Monochlorotetrafluoropropane		0.009–0.14				
HCFC-251 (C3H4FCl3) Monochlorotetrafluoropropane		0.001–0.01				421-41-0

Chemical Name	Lifetime, in years	ODP1	ODP2	GWP1	GWP2	CAS Number
HCFC-252 (C3H4F2Cl2) Dichlorodifluoropropane		0.005–0.04				819-00-1
HCFC-253 (C3H4F3Cl) Monochlorotrifluoropropane		0.003–0.03				460-35-5
HCFC-261 (C3H5FCl2) Dichlorofluoropropane		0.002–0.02				420-97-3
HCFC-262 (C3H5F2Cl) Monochlorodifluoropropane		0.002–0.02				421-02-03
HCFC-271 (C3H6FCl) Monochlorofluoropropane		0.001–0.03				430-55-7

ATTACHMENT B

EPA's Refrigerant Management Requirements

What Technicians Need to Know

What is Section 608?

Section 608 of the Clean Air Act prohibits the knowing release of refrigerant during the maintenance, service, repair, or disposal of air-conditioning (AC) and refrigeration equipment. EPA requires proper refrigerant management practices by those who buy or sell refrigerant, technicians, owners and operators of AC and refrigeration systems, and others. These requirements apply for all refrigerants that contain ozone-depleting substances, e.g., hydrochlorofluorocarbons (HCFCs), and non-exempt substitute refrigerants, e.g., hydrofluorocarbons (HFCs), hydrofluoroolefins (HFOs) and blends thereof.

Some refrigerants are exempt from the refrigerant management requirements. Examples include carbon dioxide, nitrogen, and water. For a full list of exempt refrigerants, see 40 CFR § 82.154(a).

What are the Section 608 refrigerant management requirements for technicians?[1]

Only certified technicians can use non-exempt refrigerants to service AC and refrigeration equipment. Technicians must comply with the following provisions for ozone-depleting and non-exempt substitute refrigerants. With the exception of the applicability of the leak repair provisions to substitutes, these provisions did not change as a result of EPA's 2020 update.

Sales Restriction

- Refrigerant can only be sold to technicians certified under Sections 608 or 609 of the Clean Air Act, where individuals may only purchase refrigerant consistent with the appliances covered by their certification.
    - There is an exception for small cans (under two pounds) of substitute refrigerant, which can be sold to individuals for use in a MVAC if the can has a self-sealing valve.
- Recovered refrigerant may not be resold unless it has been reclaimed by a certified reclaimer; is being transferred to equipment belonging to the same owner; or was used only in a motor vehicle air conditioner (MVAC) or MVAC-like appliance and was recycled.[2]

Technician Certification

Technicians servicing AC and refrigeration equipment must:

- Pass a certification exam offered by an approved technician certification program in order to maintain, service, repair, or dispose of appliances containing refrigerants.
- Keep a copy of their certificate at their place of business.
- Maintain a copy of their certificate until three years after no longer operating as a technician.

To assist in reissuing lost certification cards, certifying organizations must post online lists of newly certified technicians. Technicians may opt out of the online lists if they so choose.

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[1] This fact sheet highlights select provisions that may be of most interest to this community. Please see the regulations at https://go.usa.gov/xpKhq for the full requirements. Requirements for individuals servicing motor vehicle air conditioners (MVAC) or MVAC-like appliances are discussed in more detail at www.epa.gov/mvac.

[2] This does not apply to the sale of used refrigerant for reclamation or destruction.

Recordkeeping for Appliances with 5 to 50 Pounds of Refrigerant

Technicians who dispose of mid-sized appliances (e.g., residential split AC systems), must keep records of:

- The location, date of recovery, and type of refrigerant recovered for each disposed appliance;
- The quantity of refrigerant, by type, recovered from disposed appliances in each calendar month; and
- The quantity of refrigerant, and type, transferred for reclamation or destruction, the person to whom it was transferred, and the date of the transfer.

Maintenance, Servicing, Repair, and Disposal

Technicians must:

- Evacuate refrigerant before opening or disposing of appliances to the evacuation levels specified in the regulations using certified recovery and/or recycling equipment.
- Before opening or disposing of MVACs or MVAC-like appliances (e.g., construction equipment),
    - Evacuate refrigerant from the appliance in accordance with 40 CFR Part 82, Subpart B; or
    - Reduce the system pressure to below 102 mm of mercury vacuum.

Important Changes to the Section 608 Leak Repair Regulations

The Section 608 regulations include leak inspection and verification test requirements for owners/operators of appliances that contain ozone-depleting refrigerant. These regulations do not apply to appliances containing solely substitute refrigerant such as HFCs.

Leak inspections are required for appliances that have exceeded the applicable leak rate, according to the schedule below. All visible and accessible components of an appliance must be inspected, using a method or methods that are appropriate for that appliance.

Equipment	Full Charge	Frequency of Leak Inspections
Commercial Refrigeration and Industrial Process Refrigeration	> 500 pounds	*Once every three months* until the owner/operator can demonstrate through leak rate calculations that the leak rate has not exceeded 20% (commercial refrigeration) or 30% (IPR) for four quarters in a row.
	50 to 500 pounds	*Once per calendar year* until the owner/operator can demonstrate through the leak rate calculations that the leak rate has not exceeded 20% (commercial refrigeration) or 30% (IPR) for one year.
Comfort Cooling	50 or more pounds	*Once per calendar year* until the owner/operator can demonstrate through the leak rate calculations that the leak rate has not exceeded 10% for one year.

Initial and follow-up verification tests of leak repairs are required for appliances that exceed the applicable leak rate. The verification tests must demonstrate that leaks were successfully repaired.

- An initial verification test must be performed before any additional refrigerant is added to the appliance.
- A follow-up verification test must be performed only after the appliance has returned to normal operating characteristics and conditions. There is no minimum timeframe.

Technicians are required to provide service invoices and records of the results of leak inspections or verification tests to owners/operators.

Additional Resources

Update to the Refrigerant Management Requirements Final Rule: www.epa.gov/section608/revised-section-608-refrigerant-management-regulations

EPA's Section 608 Webpage: www.epa.gov/section608

Section 608 Technician Certification: www.epa.gov/section608/section-608-technician-certification

Section 609 Technician Training and Certification: www.epa.gov/mvac

Contact EPA: www.epa.gov/section608/forms/contact-us-about-stationary-refrigeration-and-air-conditioning

Office of Air and Radiation (6205T)
April 2020

ATTACHMENT C

Form Approved 11/04/2011
OMB No. 2060-0256
Expires: 12/31/2017

ENVIRONMENTAL PROTECTION AGENCY
REFRIGERANT RECOVERY OR RECYCLING DEVICE
ACQUISITION CERTIFICATION FORM

EPA regulations require establishments that service or dispose of refrigeration or air-conditioning equipment to certify that they have acquired recovery or recycling devices that meet EPA standards for such devices. To certify that you have acquired equipment, please complete this form according to the instructions and **mail it to the appropriate EPA Regional Office. BOTH THE INSTRUCTIONS AND MAILING ADDRESSES CAN BE FOUND ON THE REVERSE SIDE OF THIS FORM.**

PART 1: ESTABLISHMENT INFORMATION

Name of Establishment

Street

(Area Code) Telephone Number

City State Zip Code

Number of Service Equipment Based at Establishment

Country

PART 2: REGULATORY CLASSIFICATION

Identify the type of work performed by the establishment**. Check all boxes that apply.**

- ☐ Type A - Service small appliances
- ☐ Type B - Service refrigeration or air-conditioning equipment other that small appliances
- ☐ Type C- Dispose of small appliances
- ☐ Type D - Dispose of refrigeration or air-conditioning equipment other than small appliances

PART 3: DEVICE IDENTIFICATION

	Name of Device(s) Manufacturer	Model Number	Year	Serial Number (if any)	Check Box if Self-Contained
1.					☐
2.					☐
3.					☐
4.					☐
5.					☐

PART 4: CERTIFICATION SIGNATURE

I certify that the establishment in Part 1 has acquired the refrigerant recovery or recycling device(s) listed in Part 2, that the establishment is complying with Section 608 regulations, and that the information gives is true and correct.

Signature of Owner/Responsible Officer Date Name (Please Print) Title

Form Approved 11/04/2011
OMB No. 2060-0256
Expires: 12/31/2017

INSTRUCTIONS

Part 1: Please provide the name, address, and telephone number of the establishment where the refrigerant recovery or recycling device(s) is (are) located. Please complete one form for each location. State the number of vehicles based at this location that are used to transport technicians and equipment to and from service sites.

Part 2: Check the appropriate boxes for the type of work performed by technicians who are employees of the establishment. The term "small appliance" refers to any of the following products tat are fully manufactured, charged, and hermetically sealed in a factory with five pounds or less of refrigerant: refrigerators, and freezers designed for home use, room air conditioners (including window air conditioners and packaged terminal air conditioners), packaged terminal heat pumps, dehumidifiers, under-the-counter ice makers, vending machines, and drinking water coolers.

Part 3: For each recovery or recycling device acquired, please list the name of the manufacturer of the device, and (if applicable) its model number and serial number.

If more that seven devices have been acquired, please fill out an additional form and attach it to this one. Recovery devices that are self-contained should be listed first and should be identified by checking the box in the last column on the right. Self-contained recovery equipment means refrigerant recovery or recycling equipment that is capable of removing the refrigerant from an appliance without the assistance of components contained in the appliance. On the other hand, system-dependent recovery equipment means refrigerant recovery equipment that requires the assistance of components contained in an appliance to remove the refrigerant from the appliance.

If the establishment has been listed as Type B and/or Type D in Part 2, then the first device listed in Part # must be a self-contained device and identifies as such by checking the box in the last column on the right.

If any of the devices are homemade, they should be identified by writing "homemade" in the column provided for listing the name of the device manufacturer. Type A or Type B establishments can use homemade devices manufactured before November 15, 1993. Type C or Type D establishments can use homemade manufactured anytime. If, however, a Type C or Type D establishment is using homemade equipment manufactured after November 15, 1993, then it must <u>not</u> use these devices for service jobs.

Form Approved
OMB No. 2060-0256
Expires: 12/31/2017

EPA REGIONAL OFFICES

Send your form to the EPA office listed under the state or territory in which the establishment is located.

Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

CAA 608 Enforcement Contact: EPA Region I; Mail Code OES04-2; 5 Post Office Square; Boston, MA 02109

New York, New Jersey, Puerto Rico, Virgin Islands

CAA 608 Enforcement Contact: EPA Region II; Mail Code 2DECA-AC; 290 Broadway; New York, NY 10007-1866

Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia

CAA 608 Enforcement Contact: EPA Region III-Wheeling Office; Mail Code 3AP20; 1060 Chapline Street, Suite 303 Wheeling, WV 26003-2995

Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

CAA 608 Enforcement Contact: EPA Region IV; Mail Code APT-AE; 61 Forsyth Street, SW; Atlanta, GA 30303-8960

Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

CAA 608 Enforcement Contact: EPA Region V; Mail Code AE-17J; 77 West Jackson Blvd.; Chicago, IL 60604-3507

Arkansas, Louisiana, New Mexico, Oklahoma, Texas

CAA 608 Enforcement Contact: EPA Region VI; Mail Code 6EN-HM; 1445 Ross Ave., Suite 1200; Dallas, TX 75202

Iowa, Kansas, Missouri, Nebraska

CAA 608 Enforcement Contact: EPA Region VII; Mail Code AWMD/APCO 11201 Renner Boulevard Lenexa, Kansas 66219

Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

CAA 608 Enforcement Contact: EPA Region VIII; Mail Code 8ENE-AT; 1595 Wynkoop Street, Denver, CO 80202

American Samoa, Arizona, California, Guam, Hawaii, Nevada

CAA 608 Enforcement Contact: EPA Region IX; Mail Code AIR-5; 75 Hawthorne Street; San Francisco, CA 94105

Alaska, Idaho, Oregon, Washington

CAA 608 Enforcement Contact: EPA Region X; Mail Code OAQ-107; 1200 Sixth Ave.; Seattle, WA 98101

Form Approved
OMB No. 2060-0256
Expires: 12/31/2017

PUBLIC BURDEN

The purpose and need of this renewed collection request is to facilitate compliance with and enforcement of Section 608 of the Act by reducing emissions of class I and class II ozone-depleting refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances. EPA has used and will continue to use these records and reports to ensure that refrigerant releases are minimized during the recovery and recycling of ozone-depleting refrigerants during the service, maintenance, repair, and disposal of appliances. Collection of this information is mandated by EPA regulations, in accordance with 40 CFR 82.162. This information is not shared with parties outside of the Federal government. EPA's confidentiality regulations (40 CFR 2.201 et seq.) assure computer data security, disclosure prevention, proper handling, proper storage, and proper disposal of the submitted information.

The public reporting and recordkeeping burden for this collection of information is estimated to average one (1) hour per response per respondent annually. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID No. OAR-2003-0018, which is available for public viewing at the Air and Radiation Docket and Information Center in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the OAR Docket is (202) 566-1742. An electronic version of the public docket is available through EPA Dockets (EDOCKET) at http://www.epa.gov/edocket. Use EDOCKET to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. Once in the system, select “search,” then key in the docket ID number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Please include the EPA Docket ID No. (OAR-2003-0018) and OMB control number (2060-0256) in any correspondence.