UNIVERSITY of VIRGINIA Facilities Management

DIRECTIVE NO. 797D **DATE: March 21, 2018**

SUBJECT: Refrigerant **and Halon** Management

REFERENCES: Code of Federal Regulations (40 CFR 82 Subparts A to F **and H**) and the general conditions of the University of Virginia's Title V Permit.

PURPOSE: To establish a policy and procedure for managing refrigerant **and halon** in compliance with the applicable federal regulations **and to minimize emissions of refrigerants and halon which contribute to ozone depletion and/or climate change.**

CANCELLATION: This directive is effective immediately and supersedes and cancels Directive No. **797C**, dated **June 25, 2003; Subject: Refrigerant Management**. **Significant changes from the previous directive are printed in bold face type.**

BACKGROUND: Scientists have observed that the stratospheric ozone layer has deteriorated significantly, which has been linked to the emissions of certain human-made chemical substances. These ozone depleting substances (ODS) are commonly used for refrigeration, air conditioning and fire suppression. The U.S. EPA has developed regulations and implemented a program to phase out the production and use of ODS in the United States, which may make ODS-based refrigerants **and halon** very expensive and/or difficult to procure**. These regulations both require and prohibit certain procedures while performing service, maintenance, repair or disposal of equipment containing refrigerant or halon. Adequate recordkeeping is one of the most important aspects of demonstrating compliance by documenting that technicians are properly trained, refrigerant recover/recycle equipment is certified, and other required information is retained. In 2016, EPA extended these requirements to non-ODS substitutes, many of which are potent greenhouse gases.**

POLICY: Facilities Management (FM) shall manage and control the use of refrigerants **and halon in equipment it operates or maintains** in accordance with the regulatory requirements**. This directive does not address refrigerant in motor vehicles; motor vehicle air conditioning systems should be serviced by an outside vendor or P&T.**

DISTRIBUTION LIST
On-Line

REVIEW DATE:
March 2023
OFFICE OR DEPARTMENT RESPONSIBLE FOR REVIEW:
Director, Operations

PROCEDURES:

1. **Technician Training and Certification**

   a. **Any person who could reasonably be expected to open a refrigerant circuit during maintenance, service, repair or disposal of equipment must pass a certification exam offered by an EPA approved technician certification program. This is different from a journeyman or master tradesman license.**

   b. **Apprentices are exempt from the requirement to be certified provided the apprentice is closely and continually supervised by a certified technician while performing any maintenance, service, repair, or disposal of refrigerant containing equipment.**

   c. **Technicians who test, maintain, service, repair, or disposal of halon-containing equipment must be trained regarding halon emissions reduction.**

2. **Refrigerant & Halon Purchases**

   a. **To improve tracking and accountability of our chemical inventory, each group below is encouraged to designate one primary and one alternate technician to order refrigerant and halon:**

      i. **Chiller Plants**
      ii. **Each HSPP maintenance zone**
      iii. **Each Operations maintenance zone**
      iv. **Fire & Life Safety**

   b. **Supervisors or procurement staff must forward copies of purchase records to the Refrigerant Compliance Manager. Purchase records must be maintained for five years.**

3. **Refrigerant Storage and Inventory**

   a. **Each group listed above shall designate specific refrigerant storage areas. The storage areas will be indoors, out of direct sunlight or freezing conditions. Where feasible, the storage areas will be conditioned spaces to minimize thermal expansion losses and the storage area or cabinet will be lockable or otherwise secured to prevent unauthorized use of the refrigerant.**

   b. **All new refrigerant not in immediate use or reclaimed refrigerant will be stored in one of the designated storage areas until used or disposed/recycled.**

   c. **Any addition or removal of refrigerant from a designated storage area can be tracked using Attachment 1, Refrigerant Storage Area Inventory Log to ensure all material use is accounted for.**

4. Equipment Servicing

a. Only EPA certified **or trained** technicians will perform work on refrigerant circuits **or halon systems** following the required practices pertaining to testing, maintenance, service, repair, and disposal of such equipment.

b. EPA-approved methodology for minimizing loss and maximizing recovery of refrigerants **and halon** shall be used. Intentional venting of **ANY** refrigerant **or halon** into the atmosphere is prohibited while testing, performing preventive maintenance, servicing, **changing oil**, repairing or disposing of equipment. This prohibition does not apply to the emergency release of halons for the legitimate purpose of fire extinguishing.

c. **No halon may be released during testing of fire extinguishing systems.**

d. **Prior to opening any refrigerant circuit, the technician must evacuate the refrigerant in either the entire unit or the part being serviced to a receiver within the system** or to a certified recovery and/or recycling machine to prescribed vacuum levels. **The technician must verify that the applicable level of evacuation has been reached before opening the equipment.**

e. Follow one of these two procedures to minimize the loss of refrigerant during oil changes:

i. Evacuate or pressurize the equipment or isolated portion to a pressure of no greater than 5 psig before it is opened; or

ii. Drain the oil into a system receiver to be evacuated or pressurized to a pressure no greater than 5 psig.

5. Requirements Applicable Only to Equipment ≥ 50 pounds of Refrigerant per Circuit

a. Technicians will complete a Refrigerant Use Form every time refrigerant is charged to or removed from a piece of equipment and submit the form to the **appropriate supervisor (Chiller Plants, HSPP or Operation Zones)** within one business day of service and to the Refrigerant Compliance Manager within five business days of service. The Refrigerant Use Form is provided in Attachment 2. Refrigerant use will be tracked to the nearest pound.

b. The Refrigerant **Compliance** Manager will perform leak rate calculations **using the annualizing leak rate method** for equipment containing ≥ 50 pounds of refrigerant per circuit. If the equipment leak rate exceeds the regulatory thresholds, the appropriate manager whose personnel are responsible for servicing that unit will be informed. **The allowable leak rates are:**

i. **30% for industrial process refrigeration equipment**,

ii. **20% for commercial refrigeration equipment (i.e., food storage), and**

iii. **10% for comfort cooling and other equipment.**

c. Equipment found leaking refrigerant in excess of the regulatory thresholds, must be repaired **or a retrofit/retirement plan prepared** within 30 days **of equipment exceeding the allowable leak rate**. **If needed, consult with the Refrigerant Compliance Manager to request an extension to the 30 day repair period. Mothballing equipment can extend the time lines.**

d. An initial verification test must be performed to confirm the repairs stopped the leak. This test must be performed after completing the repairs and before adding refrigerant to the appliance and be within the 30 day repair period. If the initial verification test indicates that the repairs have not been successful, conduct additional repairs and initial verification tests as needed within the original 30 day repair period. Verification testing should be documented on the same Refrigerant Use Form filled out to document the original repair attempt.

e. A follow-up verification test must be performed within 10 days of the successful initial verification test or within 10 days of the equipment reaching normal operating characteristics and conditions. This test must demonstrate that the repairs stopped the leak. If the follow-up verification test indicates that the repairs have not been successful, conduct additional repairs and verification tests as needed within the original 30 day repair period. Verification testing should be documented on the same Refrigerant Use Form filled out to document the original repair attempt.

f. **For equipment that exceeds the allowable leak rate and is not continuously monitored with an automatic leak detection system, a leak inspection must be conducted one year after the original repair attempt to verify the equipment is below the allowable leak rate. The inspection must be conducted by a certified technician using method(s) determined by the technician to be appropriate for the equipment. All visible and accessible components must be inspected. Leak inspections should be documented using the Leak Inspection Form provided in Attachment 3.**

g. **Automatic refrigerant leak detection systems used in lieu of leak inspections must be audited or calibrated annually. The Refrigerant Compliance Manager must be informed of each date the monitoring system identifies a leak and the location of the leak.**

6. <u>Equipment Inventory</u>

a. If any equipment containing ≥ 50 pounds of refrigerant is installed, removed or retrofit to use a different refrigerant, submit a completed Equipment Inventory Control Form (Attachment 4) to the Refrigerant Compliance Manager within one week of work completion.

b. The Refrigerant Compliance Manager will maintain a database with information on all equipment containing ≥ 50 pounds of refrigerant **in an individual circuit. The inventory shall include the type of equipment (e.g., commercial refrigeration or**

comfort cooling), location, full charge capacity and the method used to determine the full charge.

c. The Fire Protection Manager will maintain an up-to-date inventory of halon-containing equipment.

7. Equipment Disposal or Resale

a. When disposing of equipment (regardless of the size), all refrigerant will be evacuated to the EPA-prescribed level prior to disposal and the amount recovered will be documented on the Refrigerant Use Form **for equipment with ≥ 50 lbs/circuit and the Equipment Disposal Form in Attachment 5 for units with < 50 lbs/circuit. Recovered refrigerant will be stored in a designated storage area until sent off for recycling or destruction.**

b. All equipment slated for disposal, including that taken to a landfill or scrap metal recycling business or placed in any dumpster including the metal recycling container, **must be labeled using a sticker provided by the Refrigerant Compliance Manager to document that the refrigerant has been evacuated from the equipment.**

c. Equipment turned over to Surplus does not need to be evacuated. **Only equipment in good working order and not leaking refrigerant may go to Surplus.**

d. Halon-containing equipment may only be disposed by sending it for halon recovery to a manufacturer, fire equipment dealer or recycler operating in accordance with NFPA 10 and NFPA 12A standards. This requirement does not apply to emptied containers or ancillary system devices not necessary to the secure containment of halon within the equipment.

8. Refrigerant Recovery and/or Recycling Equipment

a. All recovery and/or recycling equipment used to evacuate refrigerant must be certified for the type of refrigerant and equipment. This equipment must be certified by an approved testing organization to meet EPA's minimum requirements; a label to this effect should be on the equipment.

b. All recovery and/or recycling equipment shall be used and maintained in accordance with the manufacturer's instructions. No person may alter the design of certified refrigerant recovery and/or recycling equipment in a way that would affect the equipment's ability to meet the certification standards.

9. Waste Materials

a. Used refrigerant, unwanted halon and used oil contaminated with ODS are not hazardous wastes if sent to a reclaimer.

b. Used refrigerant can be aggregated in recovery cylinders for bulk recycling. Different refrigerants should not be mixed in order to maximize the value of the

reclaimed refrigerant. To avoid cross contamination, use a grease/wax pencil, sticker or masking tape to note which type of refrigerant is in the recovery cylinder. Local vendors who will take reclaimed refrigerant include Aireco, Baker Distributing, Rapid Recovery, R.E. Michel, Southern Refrigeration and equipment manufacturers.

c. Destruction of used refrigerant and halon is another allowable disposal option.

d. Submit a copy of the receipt or other pertinent documentation for disposal or reclamation of used refrigerant or halon to the Refrigerant Compliance Manager.

10. Contracted Services

a. If hiring an outside contractor to **install, test, service or** dismantle **FM operated or maintained** equipment containing refrigerant or halon, ensure that the contractor understands and follows the EPA-required practices. **Prior to soliciting a quote, provide prospective contractors with the applicable regulatory requirements in Attachment 6. Include a copy of these requirements with the Request for Materials/Service form requesting use of an outside contractor.**

b. Obtain documentation of the work performed from the contractor as specified in Attachment 6, Contractor Requirements.

RESPONSIBILITIES:

1. Chief Facilities Officer

Appoint a Refrigerant **Compliance** Manager, who will implement and administer the requirements of this directive.

2. Department Directors (Operations, HSPP, FP&C, Project Services)

a. Provide a copy of this directive to all affected employees within their department and ensure that all supervisory and other personnel in their department are aware of the responsibilities assigned to them by this directive.

b. Develop long-range plans for replacement or conversion of equipment containing refrigerant or **halon scheduled for phase out**.

3. Refrigerant **Compliance** Manager

a. Serve as a resource to FM personnel regarding refrigerant **and halon** management compliance issues.

b. Monitor changes in regulations concerning refrigerants **and halon** and alert the Directors to pending changes in program requirements.

c. Conduct semiannual audits (at a minimum) of the refrigerant **and halon** management system to ensure compliance with 40 CFR 82 and the University's Title V Permit.

d. Maintain a database of all equipment containing ≥ 50 pounds of refrigerant **per circuit.**

e. Perform leak rate calculations **and alert the appropriate supervisor of the need to conduct initial and follow-up verification tests.**

f. Schedule leak inspections in AiM as needed.

g. Submit annual report to EPA regarding chronically leaking equipment (≥125% of full charge in a calendar year).

h. Create equipment retrofit or retirements plans as necessary. Coordinate correspondence with EPA.

i. Maintain records of refrigerant use, disposal and leak rate calculations for a minimum of five years.

j. Conduct annual refresher training to all employees responsible for refrigerant- and halon-containing equipment and associated technicians.

4. Fire & Life Safety Manager

1. **Develop and maintain a list of designated and secured halon storage areas.**
2. **Maintain an up-to-date inventory of equipment containing halon. Ensure AiM or other computerized maintenance management system records reflect any new and/or removed equipment.**
3. **Ensure that technicians working on halon-containing equipment are trained regarding halon emissions reduction.**
4. **Ensure that halon-containing equipment their personnel service are tested, maintained, serviced, repaired or disposed in accordance with this directive.**
5. **Ensure contractors servicing or disposing of halon-containing equipment are in compliance with regulatory requirements as summarized in Attachment 6.**
6. **Ensure that records related to purchase, recycling and disposal of halon or halon-containing equipment are maintained on-file for five years.**

5. Chiller Plants Manager and HVAC Supervisors

a. Develop and maintain a list of designated and secured refrigerant storage areas.

b. Ensure that refrigerant-containing equipment their personnel service are repaired, replaced, converted or modified as necessary **and in accordance with this directive**.

c. Ensure that technicians working on refrigerant-containing equipment are certified by an EPA-approved certifying organization.

d. Ensure technicians are tracking refrigerant purchase, use and reclamation in accordance with this directive and appropriate documentation is forwarded to the Refrigerant Compliance Manager within five business days of generation.

e. Ensure initial and follow-up leak rate verification tests and leak inspections are conducted in accordance with this directive and/or as requested by the Refrigerant Compliance Manager.

f. For any project that includes installation or removal of equipment containing ≥ 50 pounds of refrigerant per circuit, complete Attachment 4, Equipment Inventory Control Form, and submit it to the Refrigerant Compliance Manager within one week of work completion. Ensure AiM records reflect the new and/or removed equipment.

g. Ensure contractors servicing or disposing of refrigerant-containing equipment are in compliance with regulatory requirements as summarized in Attachment 6.

h. Ensure that service and disposal records related to refrigerant-containing equipment are maintained on-file for five years.

6. FP&C and Project Services Project Managers

a. For any project that includes servicing, repairing or removing equipment containing refrigerant, have the technician performing the work complete the appropriate Refrigerant Use Form and submit it to the Refrigerant Compliance Manager within five days of work completion.

b. Ensure contractors servicing or disposing of refrigerant- or halon-containing equipment are in compliance with regulatory requirements as summarized in Attachment 6.

c. For any project that includes installation or removal of equipment containing ≥ 50 pounds of refrigerant per circuit, complete Attachment 4, Equipment Inventory Control Form, and submit it to the Refrigerant Compliance Manager within one week of work completion. Alert the Fire Protection Manager of the installation or removal of halon-containing equipment. Ensure AiM records reflect the new and/or removed equipment.

7. Technicians

a. Technicians with an EPA certification must keep a copy of their certificate at their place of business. Technicians must maintain a copy of their certificate until five years after no longer operating as a technician.

b. Provide a receipt for refrigerant or halon purchases, disposal and recycling or forward electronic invoices to their Supervisor.

c. Document addition or removal of refrigerant to or from a designated storage area on the Refrigerant Storage Area Inventory Log, if used by their zone.

d. Follow the required practices pertaining to testing, maintenance, service, repair, and disposal of equipment containing refrigerant **or halon**. **Verify that the applicable level of evacuation has been reached in refrigerant-containing equipment or the part before it is opened.**

e. When refrigerant is added or removed from any **FM operated or maintained** equipment, submit a completed Refrigerant Use Form **for equipment with ≥ 50 lbs/circuit or Equipment Disposal Form for equipment with < 50 lbs/circuit to their supervisor** within one business day of service.

f. Document initial and follow-up verification tests for refrigerant containing equipment on the same Refrigerant Use Form documenting the original leak repair. Submit the form to their supervisor within one business day of conducting the tests.

g. Label evacuated equipment slated for disposal using a sticker noting the name of the person who recovered the refrigerant and the date the refrigerant was recovered.

8. Surplus

a. Any refrigerant-containing equipment that does not sell and is slated for disposal or recycling must have the refrigerant recovered and a corresponding Refrigerant Use Form completed and turned in to the Refrigerant Compliance Manager within five business days.

9. Human Resources

a. Verify employees that work with refrigerant have the required EPA certification if their job description requires it.

b. Maintain a hard copy or digital scan of each technician's certificate in their Human Resources file.

Donald E. Sundgren
Chief Facilities Officer

Attachments:

1. **Refrigerant Storage Area Inventory Log**
2. **Refrigerant Use Form (Equipment ≥ 50 lbs per circuit)**
3. **Leak Inspection Form**
4. **Equipment Inventory Control Form**
5. **Equipment Disposal Form (Equipment < 50 lbs per circuit)**
6. **Contractor Requirements**

DIRECTIVE 797D ATTACHMENT 1
Refrigerant Storage Area Inventory Log

Month_____

DIRECTIVE 797D ATTACHMENT 1
Refrigerant Storage Area Inventory Log

Storage Area Name:	**Responsible Cost Center:**

Starting Inventory:

Refrigerant	# of Cylinders	Total Weight (lbs)	Refrigerant	# of Cylinders	Total Weight (lbs)

Date	Time	Technician	Refrigerant Type	Cylinder ID#	Cylinder Size	Cylinder Weight (lbs)	Cylinder Status (circle one)
							Add / Remove
							Add / Remove
							Add / Remove
							Add / Remove
							Add / Remove
							Add / Remove
							Add / Remove
							Add / Remove
							Add / Remove
							Add / Remove
							Add / Remove

Ending Inventory:

Refrigerant	# of Cylinders	Total Weight (lbs)	Refrigerant	# of Cylinders	Total Weight (lbs)

DIRECTIVE 797D ATTACHMENT 2
Refrigerant Use Form

(Equipment with ≥ 50 lbs/circuit)

Refrigerant Use Form

Copy to:
Kristin Carter
kma4z@virginia.edu
434-982-5034

USE THIS FORM WHENEVER ANY REFRIGERANT IS ADDED TO OR REMOVED FROM ANY MACHINE CONTAINING ≥ 50 LBS OF REFRIGERANT PER CIRCUIT

Submit this form within 1 business day of service to your Manager & within 5 business days to the Refrigerant Compliance Manager

GENERAL INFORMATION		
Building Name/ No.:	**Work Order #:**	**AiM Asset #:**
Equipment Name (manufacturer and circuit #):		
DETAILS FOR SERVICE/REPAIR WORK & INITIAL VERIFICATION TEST		
Date work performed (MM/DD/YY):	**By (EPA certified technician):**	
Briefly describe the work performed: (e.g., part worked on, nature of repair, or equipment disposal)		
Did you verify the applicable level of evacuation was reached before the machine was opened? YES or NO or N/A		
Refrigerant Type:	**Amount of NEW refrigerant added to equipment (lbs):** *If extracted refrigerant is returned to the circuit, do not record that as new refrigerant added.	
Was this machine leaking refrigerant? YES or NO	**Was the leak repaired?** (not just topped off) YES or NO	
How was the leak repair verified? Note the type of test used, test result and test date if different from repair date. *This must be done BEFORE adding refrigerant to leaking equipment.		
If leak not repaired, what action will be taken? *Repairs must be made within 30 days. If not feasible, alert the Refrigerant Compliance Manager immediately.		
Amount of refrigerant extracted for disposal (lbs):	**Refrigerant storage area:**	

Refrigerant Use Form

SECTION TO BE COMPLETED BY REFRIGERANT COMPLIANCE MANAGER		
Circuit full charge (lbs):	**Leak Rate (%) by annualizing method:**	**Over allowable rate?** YES or NO

DETAILS FOR FOLLOW-UP VERIFICATION TEST –TECHNICIAN PERFORMING TEST TO COMPLETE

Follow-up testing must be performed within 10 days of successful initial verification testing OR within 10 days of the appliance reaching normal operating characteristics and conditions.

Only the part or system where a repair attempt was made needs to be tested. See the other side of form for details on the repair attempt.

Date of Follow-Up Verification Testing (MM/DD/YY):	**Was the leak repair successful?** YES or NO

Part of System Tested:

Which method of testing was used to verify leak repair? Check all that apply.

☐ Soap Bubbles	☐ Electronic/Ultrasonic Leak Detectors	☐ Pressure/Vacuum Testing
☐ Fluorescent Dye and Black Light	☐ Infrared/Near Infrared Testing	☐ Handheld Gas Detection Device
☐ Purge Runtime	☐ Other_____	

Results of Testing:

If repairs not successful, what action will be taken? *Repairs must be made within 30 days of the original repair attempt.

Follow-up Verification Test Performed By (Print): _____ Zone: _____

EPA Certified Technician

DIRECTIVE 797D ATTACHMENT 3
Leak Inspection Form

(Equipment with ≥ 50 lbs/circuit)

UNIVERSITY of VIRGINIA | Facilities Management

Copy to:
Kristin Carter
kma4z@virginia.edu
434-982-5034

Leak Inspection Form

All visible and accessible components of the circuit must be inspected with the following exceptions:

(i) Where components are insulated, under ice that forms on the outside of equipment, underground, behind walls, or are otherwise inaccessible;

(ii) Where personnel must be elevated more than two meters above a support surface; or

(iii) Where components are unsafe to inspect, as determined by site personnel.

GENERAL INFORMATION		
Building Name/ No.:	**Work Order #:**	**AiM Asset #:**
Equipment Name (manufacturer and circuit #):		

DETAILS FOR LEAK INSPECTION

Which method of inspection was used to conduct the leak inspection? Check all that apply.

Methods that determine the equipment is leaking refrigerant, but not the leak location. Use with methods that determine leak location as necessary.

- ☐ Standing pressure/vacuum decay tests
- ☐ Sight glass checks
- ☐ Viewing receiver levels
- ☐ Pressure checks
- ☐ Charging charts
- ☐ Purge Runtime
- ☐ Other_____

Methods that find refrigerant leak locations:

- ☐ Ultrasonic tests
- ☐ Gas-imaging cameras
- ☐ Bubble tests
- ☐ Leak detection device
- ☐ Other_____

In the space below, list the location of each leak identified. If refrigerant is added to the circuit, document that on a Refrigerant Use Form. If the circuit is not leaking, state that.

I certify that all visible and accessible parts of the refrigerant circuit were inspected.

EPA Certified Technician Name: **Date:**

DIRECTIVE 797D ATTACHMENT 4
Equipment Inventory Control Form

(Equipment with ≥ 50 lbs/circuit)

DIRECTIVE 797D ATTACHMENT 4
Equipment Inventory Control Form

COMPLETE THIS FORM FOR UNITS CONTAINING ≥ 50 LBS OF REFRIGERANT PER CIRCUIT

PLACED INTO SERVICE

AiM Asset ID:					
Equipment Type *	**CHECK ONE:** ☐ Comfort cooling & other non-industrial cooling ☐ Commercial refrigeration				
Machine (mnf, model #, serial #)					
Equipment Location (bldg, room)					
Area Served					
Cooling Capacity in Tons					
Refrigerant Type:		# of Circuits:		Full Charge (lbs/circuit):	
How was full charge determined?	**CHECK ONE:** ☐ Manufacturer's data; ☐ Calculated; ☐ Measured; ☐ Mid-point of estimated range				
Is it equipped with:	**CHECK ALL THAT APPLY:** ☐ Automatic leak detection system ☐ Purge ☐ Neither				
Installation Date (MM/YY)					

**** Comfort cooling*** is used to control heat and/or humidity in occupied spaces. ***Commercial refrigeration*** is used for food storage applications.

REMOVED FROM SERVICE

AiM Asset ID:	
Machine (mnf, model #)	
Equipment Location (bldg, room)	
Refrigerant Type	* Extracted refrigerant should be documented on a Refrigerant Use Form

RETROFIT (refrigerant change)

AiM Asset ID:					
Machine (mnf, model #)					
Equipment Location (bldg, room)					
Existing Refrigerant Type	* Extracted refrigerant should be documented on a Refrigerant Use Form				
New Refrigerant Type		# of Circuits:		Full Charge (lbs/circuit):	

Name of Person Providing Information: _____ Date: _____

DIRECTIVE 797D ATTACHMENT 5
Equipment Disposal Form

(Equipment with < 50 lbs/circuit)

Copy to:
Kristin Carter
kma4z@virginia.edu
434-982-5034

Equipment Disposal Form

EQUIPMENT < 50 LBS OF REFRIGERANT PER CIRCUIT

Submit this form within 1 business day of service to your supervisor
& within 5 business days to the Refrigerant Compliance Manager

GENERAL INFORMATION	
Building Name/ No.:	**Equipment Location:**
Equipment Name (manufacturer and circuit #):	
Work Order #:	**AiM Asset # (if available):**

DETAILS FOR CIRCUIT EVACUATION		
Date refrigerant recovered (MM/DD/YY):		
Did all the refrigerant leak out of the equipment?		YES or NO
Was certified recover/recycling equipment used if the machine was opened?		YES or NO or N/A
Did you verify the applicable level of evacuation was reached before the machine was opened?		YES or NO or N/A
Refrigerant Type:	**Amount of refrigerant recovered (lbs):**	
Refrigerant storage area:		

Work Performed By (Print): _____

(Signed): _____
EPA Certified Technician

DIRECTIVE 797D ATTACHMENT 6
Contractor Requirements

Refrigerant Contractor Requirements

1. **Only EPA certified technicians will be allowed to maintain, service, repair, and dispose of equipment containing refrigerant. Provide a copy of the certification card for the technicians working a UVA.**

2. **All refrigerant recovery and/or recycling equipment must be certified by an approved equipment testing organization in accordance with 40 CFR 82 Subpart F.**

3. **Technicians must follow the required practices pertaining to maintenance, service, repair, and disposal of refrigeration and air conditioning equipment provided in 40 CFR 82 Subpart F on Refrigerant Recycling and Emissions Reductions.**

4. **For equipment containing more than 50 lbs of refrigerant per circuit, provide a written record documenting:**

   a. **The identity and location of the equipment;**
   b. **The date the work was performed;**
   c. **The part(s) of the equipment being worked on;**
   d. **The type of maintenance, service, repair or disposal performed for each part;**
   e. **The name of the person performing the work;**
   f. **The amount and type of refrigerant added to or, in the case of disposal, removed from the equipment.**

   This record shall be provided to the UVA project manager or HVAC supervisor upon work completion. The attached form may be used for this recordkeeping requirement. ***[Provide the contractor with a copy of the Refrigerant Use Form in Attachment 2.]***

5. **For disposal of equipment containing more than 5 and less than 50 lbs of refrigerant per circuit, provide a written record documenting:**

   a. **The identity and location of the equipment;**
   b. **The date the recovery; and**
   c. **The quantity and type of refrigerant recovered and to whom it was transferred for reclamation or disposal.**

   This record shall be provided to the UVA project manager or HVAC supervisor upon work completion. The attached form may be used for this recordkeeping requirement. ***[Provide the contractor with a copy of the Equipment Disposal Form in Attachment 5.]***

6. **For disposal of equipment containing 5 lbs or less of refrigerant per circuit, provide:**

   a. **A signed statement or contract that all refrigerant that had not leaked previously has been recovered from the equipment. Include the name and address of the person who recovered the refrigerant and the date the refrigerant was recovered; or**
   b. A signed statement that all refrigerant had leaked out of the equipment and recovery was not possible.

   This record shall be provided to the UVA project manager or HVAC supervisor upon work completion.

Halon Contractor Requirements

1. **Technicians who test, maintain, service, repair, or dispose of halon-containing equipment must be trained on how to minimize unnecessary releases of halon and how to maximize halon recovery and recycling.**

2. **Technicians must follow the required practices pertaining to testing, maintenance, service, repair, and disposal of halon and halon-containing equipment provided in 40 CFR 82 Subpart H on Halon Emissions Reduction.**

3. **Upon work completion, submit a receipt or other pertinent documentation regarding any purchase, disposal or reclamation of halon or halon-containing equipment to the UVA project manager or Fire & Life Safety Manager.**