

WORK INSTRUCTIONS

DISPOSAL OF REFRIGERANT APPLIANCE

Reference Procedure:

AQ-PROC-400

Purpose:

The purpose of these instructions is to properly document refrigerant evacuated from appliances before the appliance is disposed to demonstrate compliance with 40 CFR 82.155, *Safe disposal of appliances*; 40 CFR 82.156, *Proper evacuation of refrigerant from appliances*; and 40 CFR 82.175, *Appliance maintenance and leak repair*. To meet those requirements, data from the disposal of an appliance must be collected and maintained on form AQ-FORM-401 and either enter or supply the data to be entered in SAP (where available on Lexington campus) or submitted to the AQCM for submittal into SPHERA to maintain inventory records.

Scope:

These instructions apply to all University employees, contractors, and vendors that dispose of refrigerant appliances.

Responsible Personnel:

Environmental Management – Air Quality Compliance Manager
University, Contractor, and Vendor 40 CFR 82, Subpart F Certified Technicians

Supporting Documents:

Refrigerant Management Plan
AQ-FORM-401

Work Instructions:

- As new appliances were added into SAP and SPHERA, an appliance identification number was assigned. The disposal of an appliance should be identified by that number. If the number is unknown, please contact the AQCM.
- The requirements for appliance disposal are the responsibility of the final processor unless the supplier to the final processor verifies that the refrigerant has been recovered in compliance with the regulation. The University is not the final processor, i.e., the person taking the final step in the disposal process such as a scrap recycler or landfill operator. In the event that an appliances refrigerant leaked out, a vendor or contractor acting as a final processor will require a signed statement/contract from the

University that any refrigerant leaked out due to system failure, accidents, or other unavoidable occurrences. If the University recovers refrigerant from the appliance before disposal, the contractor/vendor will require a statement or contract that the University followed the evacuations procedures of 40 CFR 82.155. All contractors or vendors that receive appliances with refrigerant intact from the University must adhere to the disposal and evacuation requirements of the regulation. Refer to additional information which follows.

- With the exception of contractor agreements for demolition, disposal of all refrigerant appliances, other than small appliances, MVAC, or MVAC-like appliances in Fayette County or appliances purchased with University funds, should be sent to Facilities Services Recycling through Surplus Properties, provided Surplus Properties was unable to place the appliance. Appliances are then collected by Environmental Recycling Company for refrigerant evacuation and disposal. All other University owned properties must work with a contractor or vendor to evacuate the refrigerant detailed in the specific procedures which follow before final disposal. At no time should appliances containing refrigerant be finally disposed with the refrigerant still intact.

Disposal of Small Appliances, MVAC, or MVAC-like appliances (§82.155)

- Before final disposal of an appliance, refrigerant must be recovered using a certified recovery and/or recycling machine. The standards for equipment certification are located in 40 CFR 82.158(e) – 40 CFR 158(g). If the appliance contains refrigerant at the time of disposal, the disposal contract must require the final processor to remove remaining refrigerant in accordance with 40 CFR 82. If the refrigerant leaked out prior to disposal, provide the final processor with a signed statement indicating the leak. If the refrigerant was recovered prior to disposal, provide the final processor with a signed statement which includes the date the refrigerant was recovered and the name and address of the person recovering the refrigerant.
- The requirements for percentage of refrigerant recovery or vacuum level of the appliance are listed in 40 CFR 82.156(b) – 40 CFR 82.156(d), 40 CFR 156(g), and 40 CFR 156(h). Use of a certified technician is not required.
- It is the responsibility of the final processor to keep a copy of applicable signed statements or contracts for three years.

Disposal of appliance with greater than 5 lbs & less than 50 lbs refrigerant per circuit (when contractor/vendor certified technician evacuates appliance) (§82.155, §82.156)

- It is the responsibility of contractors and vendors that evacuate appliances for disposal to maintain the recordkeeping requirements of evacuation. Section I of form AQ-FORM-401 must be completed and submitted to the AQCM. The disposal contract must require that the Contractor/Vendor adhere to all requirements of 40 CFR 82.
- The AQCM will update SPHERA and contract the appropriate University staff to update SAP of the removal.

Disposal of appliance with greater than 5 lbs & less than 50 lbs refrigerant per circuit (when University certified technician evacuates the appliance) or

Disposal of appliance with 50 lbs or more refrigerant per circuit that is not part of a retirement plan due to leaks above leak rate allowable (§82.156, §82.157)

- Before disposal of an appliance, refrigerant must be recovered using a certified recovery and/or recycling machine. The standards for equipment certification are located in 40 CFR 82.158.
- The required percentage of refrigerant evacuated from or vacuum level of the appliance is listed in 40 CFR 82.156 and use of a certified technician is required.
- System-dependent equipment may not be used with appliances with a full charge of more than 15 pounds of refrigerant, unless the system-dependent equipment is permanently attached to the appliance as a pump-out unit.
- Appliances that contain pump-out units are exempt from the requirement to use certified, self-contained recovery and/or recycling equipment.
- University certified technicians that update appliance information into the SAP tracking system must collect the disposal information on appropriate Section II or Section III of form AQ-FORM-401 for appliances where the technician evacuated the appliance. Use of the actual form is not required as long as the data is entered into SAP.
- For appliances with 50 pounds or more refrigerant per circuit where the evacuation was performed by a contractor/vendor, the contractor/vendor must provide the information on form AQ-FORM-401, Section III to the AQCM. The AQCM will update SPHERA and forward the information to University staff that update appliance information into SAP.
- Departments or buildings that own and operate refrigerant appliances not maintained through PPD, MCPPD, or Athletics must complete form AQ-FORM-401, Section II or III and submit to the AQCM whenever an appliance is evacuated for disposal if a University certified technician performs the work. Section III must be submitted to the AQCM if a contractor/vendor is evacuating an appliance with 50 pounds or more of refrigerant per circuit. The AQCM will enter the information into the SPHERA refrigerant software.
- The AQCM will run weekly reports from SAP to retrieve disposal information of equipment to be entered into SPHERA.
- The AQCM must track monthly reports of total quantity of refrigerant, by type, recovered from the disposed appliances.
- The AQCM must track the monthly the quantity of refrigerant recovered, by type, and transferred for reclamation and/or destruction; the person to whom it is transferred, and the date of transfer.
- Disposal records must be kept for three years.