

University of Kentucky – Standard Operating Procedure for Installation of Refrigerant-Containing Appliances (AQ-PROC-100)

Purpose

The purpose of this standard operating procedure is to standardize and maintain records of appliances which contain more than 5 pounds of refrigerant per circuit (all appliances except small appliances) required for compliance with EPA regulations 40 CFR 82.156, *Proper evacuation of refrigerant from appliances* and 40 CFR 82.157, *Appliance maintenance and leak repair*.

There is no inventory requirement for the installation of small appliances.

Scope & Procedures

This procedure applies to all University employees, contractors, and vendors that install new appliances which contain more than 5 pounds of refrigerant per circuit.

Responsible personnel ensure the work instructions in AQ-WI-101 are followed; the form AQ-FORM-101 is completed for a new appliance (or an existing appliance not previously inventoried); and the form is submitted to UK's Air Quality Compliance Specialist (AQCS), [Leo Smart](mailto:leo.smart@uky.edu), at leo.smart@uky.edu.

The AQCS must enter appliance information into the University's refrigerant tracking system, SPHERA.

Responsible Personnel

- For new equipment – the project manager.
- For an existing appliance not previously inventoried – the supervisor in charge of operating the equipment.
- The AQCS ensures records are added in SPHERA and properly maintained.

Associated Work Instructions and Forms

AQ-WI-101 and AQ-FORM-101

Supporting Document

Refrigerant Management Plan

University of Kentucky – Work Instructions for Installation of Refrigerant-Containing Appliances (AQ-WI-101)

Purpose

The purpose of these instructions is to define the EPA recordkeeping required on form AQ-FORM-101 for the installation of new refrigerant-containing appliances that contain more than 5 pounds of refrigerant per circuit.

Scope

These instructions apply to all University employees, contractors, and vendors that install and/or initially charge new appliances (or an existing appliance not previously inventoried) which contain more than 5 pounds of refrigerant.

As appliances are installed, a University equipment identification number will be assigned, and future maintenance or disposal will rely on that identifier to manage the appliance.

Responsible Personnel

Responsible personnel must follow these work instructions; complete form AQ-FORM-101; and submit the form to UK's Air Quality Compliance Specialist (AQCS), **Leo Smart**, at leo.smart@uky.edu.

Responsible personnel include:

- The installer of the appliance.
- The EPA Certified Technician (40 CFR 82, Subpart F) that field-charged the appliance, if applicable.
- For an existing appliance not previously inventoried, the UK supervisor or their appointee in charge of operating the equipment.
- The AQCS in charge of entering records into the SPHERA refrigerant inventory system.

Associated Standard Operating Procedure and Form

AQ-PROC-100 and AQ-FORM-101

Work Instructions

SECTION I – Technician Information – either the UK employee or the contractor/vendor installing the equipment. The installer may need to submit an amended form if the appliance isn't charged at the time of the installation. If the unit is charged through a different company, the installer must obtain the refrigerant details once the unit is charged.

SECTION II – Appliance Location – refers to the UK building nomenclature.

SECTION III – Appliance Details – manufacturer information and the details regarding the charge capacity. As previously noted, not all information may be available at the time of installation. When this is the case, the installer is to submit the form at the time of installation and submit an amendment when the equipment is charged.

Recordkeeping

- Form AQ-FORM-101 must be submitted to the AQCS.
- The AQCS enters new or existing appliance information into the University's refrigerant management system, SPHERA.
- The information on AQ-FORM-101 must be kept until five years after the appliance is retired.

University of Kentucky – Required Form for
Installation of Refrigerant-Containing Appliances (AQ-FORM-101)

SECTION I – Technician Information (EPA Certified Technician when charged)

UK Contact Name:	Position & Department:
Email:	Phone:
Installing Contractor/Vendor:	EPA Certified Technician Name/ID:
Email:	Phone:

SECTION II - Appliance Location

Building Address:	Building Name:
Building Number:	Specific Location (i.e., room #, roof, ground):

SECTION III - Appliance Details

Manufacturer:	Mfg. Date: ____/____/____
Model #:	Serial #:
Installed By:	Appliance Type (i.e., split system, chiller):
Date Installed: ____/____/____	Date Full Charge Established: ____/____/____
UK Refrigerant Cylinder ID (if applicable):	Refrigerant removed from cylinder (if applicable): _____lbs. _____oz.
Refrigerant Name(s):	Total Number of Refrigerant Circuits:
Individual Circuit Name, Number, or Description: (more than 3 circuits, use separate sheet)	
Refrigerant Full Charge per Circuit: Lbs and Oz	
Method Used to Determine Full Charge: (1) Manufacturer Data; (2) Calculated; (3) Measured; (4) Midpoint Range	
Is this a revision to the full charge: [Y / N] Date revision occurred: ____/____/____ Explain how the revision was determined:	
Monitored by an Automatic Leak Detection System [Y / N] Date system installed: ____/____/____ [] Directly detects refrigerant [] Indirectly detects refrigerant And [] Monitors entire appliance [] Monitors a portion of the appliance	

Submit completed form to Air Quality Compliance Specialist, Leo Smart, at leo.smart@uky.edu