**Refrigerant Management Program – Overview for Certified Technicians**

The Penn State Refrigeration Program has been established to ensure the safe and compliant handling of refrigerants and refrigerant-containing appliances. No person maintaining, servicing, repairing, or disposing of an appliance or industrial process refrigeration may knowingly vent or otherwise release into the environment any refrigerant from such appliances. This overview is intended to provide a synopsis of the requirements for certified technicians – more detailed information is given in the Refrigerant Management Program document.

*Technician Certification:*

All technicians that perform maintenance, service, or repair that could reasonably be expected to release refrigerant charge from appliances into the atmosphere must be certified. Activities reasonably expected to violate the integrity of the refrigerant circuit include, but are not limited to: attaching or detaching hoses and gauges from the appliance; adding or removing refrigerant; adding or removing components; and cutting the refrigerant line. The technician’s certification type must correspond to the type of service that they perform.

*Safe Handling Practices:*

* Use all required PPE and follow standard operating procedures as developed by their work group.
* Store refrigerant in the appropriate cylinder for the refrigerant and ensure that the cylinder is in good condition and not overfilled.
* Be aware of the hazards of the refrigerants and take appropriate actions in the event of an emergency.
* Ensure all work spaces are properly ventilated and that handheld meters are used in the event of a leak/release to ensure that work area is safe.
* Do not enter a mechanical room where there is a concentration of refrigerant that triggers an emergency response as defined in the Program, or where there is an oxygen deficient environment (<19.5% oxygen). In these cases only emergency response personnel with appropriate respiratory protection can respond to the emergency.

*Maintenance and Repair of Appliances:*

* Ensure that the proper recovery and/or recycling equipment is used for the type of refrigerant.
* Ensure that appliances are properly evacuated of refrigerant before initiating any work that could result in as loss of refrigerant.
* Track all refrigerant under your purview in accordance with work group procedures.
* Fill out and submit service records for every appliance with 50 pounds or more of refrigerant in a circuit. The records shall include the following information:
* The identity and location of the appliance;
* The date of the maintenance, service, repair, or disposal performed;
* The part of the appliance being maintained, serviced, repaired, or disposed;
* The type of maintenance, service, repair, or disposal performed for each part;
* The name of the certified technician performing the maintenance, service, repair, or disposal; and
* The amount and type of refrigerant added to, or in the case of disposal, removed from the appliance.
* If notified by the appliance owner that the leak rate has exceeded the applicable trigger rate, then initial and follow-up verification tests must be made to ensure that the repair is complete. The records for these tests shall include the following information:
* Date of test;
* Location of appliance;
* Location(s) of all repaired leaks that were tested;
* Type of verification test performed; and
* Results of the test.
* Perform leak inspections for each appliance with 50 pounds or more refrigerant if appliances exceed the applicable trigger leak rate in accordance with the Program requirements and provide to the appliance owner the following:
* The date of the inspection;
* The method used to conduct the inspection;
* A list of the location of each leak that was identified; and
* A certification that all visible and accessible parts of the appliance were inspected.
* Ensure that all refrigerant oil and filters that are removed from any appliance are properly disposed of as hazardous waste following university procedures.
* For equipment to be disposed of, evacuate the refrigerant following the program requirements, ensure that the removed refrigerant is tracked, remove all oil from the appliance, and affix the “Certificate of Removal” label to the appliance.