

REFRIGERANT EQUIPMENT REGULATION

The U. S. EPA regulates refrigeration equipment that contains freon or substitutes, for commercial, industrial and household use. This includes any air conditioner, refrigeration, chiller, freezer, dehumidifier, ice machine, vending machine, drinking water cooler, food cold storage, and customized equipment in chemical and manufacturing industries. The regulations vary based on how much refrigerant charge and the type of use for the equipment. Auto air conditioners are separately regulated.

Recently, the EPA has stepped up enforcement of these requirements and issued steep fines, especially for equipment with more than 50 pounds of refrigerant charge.

For all refrigeration equipment:

- All servicing must be done by certified technicians.
- The service technician must follow specific procedures for repair, evacuation of the refrigerant, and reclamation of the refrigerant. The recovery and recycling equipment they use must be certified.
- Disposal or dismantlement must be done in compliance with applicable requirements and documented to ensure recovery and recycle of the refrigerant.
- Specific records must be kept.
- Knowingly venting the refrigerant to the atmosphere is prohibited.

For equipment with a refrigerant charge of more than 50 pounds:

- Service records must be maintained detailing the date, type of service and amount of refrigerant added to the equipment. The records must be kept for a minimum of three years. Your service company should provide you with these records.
- **Each time refrigerant is added, a current leak rate must be calculated, using one of two EPA formulas.** The two formulas give different results, so it is important to figure out which one to use consistently. Specific actions must be taken if the current leak rate exceeds the following trigger leak rates:
 - Industrial Process Refrigeration - 35% over a year
 - Commercial Refrigeration - 35% over a year
 - Comfort Cooling and All Other Appliances - 15% over a year
- If equipment is leaking above the trigger leak rate, leak repairs are required within 30 days of discovery and must bring the current leak rate below the trigger rate.
- An alternative to repairing leaks is to develop (within 30 days), implement, and complete a 12-month retrofit or retirement plan for the leaking equipment.
- For industrial process refrigeration systems, initial and follow-up verification tests are required for each repair.

Please contact **Admiral Environmental Services Inc.** to review the rules as they apply to your facility.

Stephen B. Anderson, P.E. CHMM