
SUBJECT:	Refrigerant	Number:	EHS-011
CATEGORY:	Air Resources-Emissions Management	Origin Date:	02-21-2017
ISSUING OFFICE:	Environmental Health & Safety (EHS) Office	Revision Date:	NEW

Guidelines on Reporting Stationary Refrigeration Systems

DESCRIPTION

In 2017, the EHS Office gathered that the District has stationary refrigeration system and falls under the California Air Resource Board (ARB)'s facility and system category as a **“small facility”** for using refrigerant system containing *greater than 50, but less than 200 pounds* of high-Global Warming Potential (GWP) refrigerants, which are known potent agents of climate change. These high-GWP refrigerants include chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs) such as R-12, R-22, R-404A, R-407A, R-507 to name a few (Figure 1).

LEGAL BASIS

This guideline has been established and maintained within the District for all employees to comply with requirements set forth in Sections 95380 to 95398 of the California Code of Regulations, Title 17, known and cited as Management of High Global Warming Potential Refrigerants for Stationary Sources; U.S. EPA under Title VI of the US Clean Air Act; and South Coast Air Quality Management District (SCAQMD) Rule 1415 known as Reduction of Refrigerant Emissions from Stationary Air Conditioning Systems.

DETERMINATION OF A SYSTEM'S REFRIGERANT CHARGE SIZE

Since the ARB's Reduction Management Program (RMP) requirements for a given facility varies by facility category, it is important to confirm the full refrigerant charge of the largest system.

Full charge weight of a system can be determined by checking the equipment plate, reviewing the service records, contacting your service provider or manufacturer, or using the [charge calculator](#) (Microsoft Excel file) to calculate the charge from the size components in the system.

REGISTRATION AND REPORTING

If there is a change in full refrigerant charge, the District must register with the ARB by providing the registration information requirements via web-based tool called [Refrigerant, Registration and Reporting System \(R3\)](#). If the District intends to operate its refrigeration system as a **“small facility”** year round, it is not required to submit annual reports.

LEAK INSPECTION FREQUENCY

If the District intends to operate its refrigeration system as a “**small facility**” year round, then schedule inspection annually or every 365 days or less. A video shows how to conduct a basic leak inspection: <https://youtu.be/eD5Cr3jx6G0>

The leak inspection must be conducted using a calibrated refrigerant lead detection device, a bubble test, or observation of oil residue. However, a leak inspection of the refrigeration system is not required if an automatic leak detection system is used to monitor the refrigeration system.

LEAK REPAIR

- Fix all leaks within 14 days of detection
- Refer to special repair provisions if leaks cannot be fixed within 14 days
- Check system for leaks after repair
- Use only U.S. EPA-certified technicians
- If leak repair fails, a Retrofit and Retirement Plan is required unless an exemption is granted

RECORDKEEPING

- Maintain records on site about refrigeration system in operation for a minimum of 5 years that includes all service records on site for each refrigeration unit, and those concerning:
 - Registration information
 - Leak inspections and repairs
 - Invoices of refrigerant purchases
 - Installation, calibration and annual audits of leak detection systems
 - Shipment of refrigerants for reclamation or destruction
 - Calculations, data and assumptions used to determine the refrigerant capacity (full charge)
 - Retrofit or retirement plans

Figure 1



If you have questions or comments about these guidelines, please contact
Environmental Health & Safety (EHS) Office

(858) 627-7174 San Diego Unified School District reserves the right to make exceptions to, modify or eliminate this guideline and or its content. This document supersedes all previous guidelines relative to this subject.