#### The GreenChill Advanced Refrigeration Partnership



# **GreenChill Store Certification Protocol for Stores Using Self- Contained Refrigerated Cases as a Primary Refrigeration System**

The following document describes the eligibility criteria and protocol used to determine the refrigerant charge and total load of stores that use self-contained (S/C) refrigerated cases as a primary means of refrigeration (i.e., >5% of the total store refrigeration load).

## **Eligibility for GreenChill Certification:**

In addition to the standard <u>GreenChill Store Certification Criteria</u>, stores using S/C refrigerated display cases as a primary means of refrigeration are only eligible for GreenChill certification if the cases use a cooling media to transfer the refrigeration total heat of rejection to the outside environment, <u>unless</u> there is an environmental justification for the store to reject its heat within the store. When applying for certification, stores with S/C refrigerated display cases that reject its heat within the store **must provide a letter**, signed by an authorized installation company representative, describing the environmental benefit(s) of allowing heat of rejection inside the store (e.g., heat reclaim, humidity control, and energy savings).

### How to Report Your Store's Total Refrigerant Charge:

A store's refrigerant charge is the total amount of refrigerant that is charged into a store's commercial refrigeration equipment. If S/C refrigerated cases are used as a primary means of refrigeration, the refrigerant charge contained within each S/C unit **SHALL** be included in the store's total refrigerant charge.

### How to Report Your Store's Total Load (MBTU/hr.):

As described in the <u>GreenChill Store Certification Program Guidance</u>, a store's total load shall include all BTUs associated with refrigeration. Therefore, the total load associated with S/C cases **SHALL BE included** in the store's total load. (*Note: The total load is <u>not</u> the S/C unit capacity, which is typically larger than the total load*).

Any load associated with S/C cases **SHALL BE converted** to a 24-hour parallel system rating using the same formula as used in the GreenChill Store Certification Protocol for Condensing Units.

### **Leak Tightness Testing at Installation:**

S/C units are not considered a type of remote commercial refrigeration equipment. Therefore, newly constructed store certification applications <u>do not</u> need to include an <u>installation leak tightness testing verification form</u>.

Please direct any questions to GreenChill@epa.gov.