GreenChill Store Certification Program Protocol for Combined Refrigeration and Air Conditioning Systems

The following document describes the protocol used to determine the total load, refrigerant charge, and refrigerant emissions of stores that use a combined refrigeration and air conditioning (A/C) system.

How to Report Your Store's Total Load (MBTU/Hr):

As described in the GreenChill Store Certification Program Guidance, a store's total load shall include all BTUs associated with refrigeration. It **SHALL NOT** include sub-cooling, heat of rejection, pump heat, or any BTUs associated with air conditioning loads.

How to Report your System's Refrigeration Emissions:

Since it is not possible to separate air conditioning emissions from commercial refrigeration emissions in a combined system, stores with combined systems must report the total amount of refrigerant emitted from their combined systems.

How to Adjust the Refrigerant Charge:

If your store's remote commercial refrigeration system is combined with your store's air conditioning system, you are allowed to adjust your reported refrigeration charge in order to subtract the refrigerant associated with air conditioning. To adjust your refrigeration charge, please use the following equation:

Total pounds of refrigerant that are charged into the store's combined system ***X*** ***87%***[1] **=** ***Refrigerant charge used for commercial refrigeration***

Please direct any questions to Keilly Witman at witman.keilly@epa.gov or 202-343-9742.

[1] The percentage above was calculated using compiled data reported by supermarket partners for the 2011 reporting period. This percentage represents the portion of refrigerant stock used in Partners' commercial refrigeration equipment relative to the total Partner refrigerant stock. This percentage is calculated using Partner data from the most recent reporting period and therefore will be updated on an annual basis.