

## SUMMARY OF PUBLIC CONSULTATION

## VM0001 Infrared Automatic Refrigerant Leak Detection Efficiency Project Methodology, v1.2

A draft of VM0001 Infrared Automatic Refrigerant Leak Detection Efficiency Project Methodology, v1.2 was open for public consultation between February 5, 2024, to March 8, 2024. This document includes a list of all comments received and the developer's response.

## GENERAL FEEDBACK

## **General Comments**

General Comments				
#	Organization	Comment	Developer's Response	
1	Hussmann	Real-time leak detection definition shouldn't limit to "readings back to central monitoring center". Automatic leak detection systems can be automated through central software solution and/or be integrated with FMS, such that leaks can be auto-detected and work orders auto-created, without ever engaging a monitoring center.	Yes, this is a good point. We suggest removing this requirement.	
2	Hussmann	Large, centralized refrigeration systems do not have a singular "total charge" value (nameplate value, initial charge, summer charge, winter charge, etc). Should a more precise definition for determining total charge be provided (even if copied from ODS methodologies) for {Cx,s, Cy,s}? The variation	It is true that large centralized systems do not have a nameplate charge. However, operators tend to have an idea of how much refrigerant their system needs in order to maintain temperature setpoint. Additionally, due to updates in refrigeration technology, most operators do not have to adjust charge for the winter or summer seasons.	



General	Comments
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		can be several hundred pounds and have a material impact on BLRy & PLRy calculations.			
3	Hussmann	Recommend clarifying ERy and GWPt unit as metric ton, to disambiguate for global application.	Agreed.		
4	Hussmann	Leaks that are detected early via indirect leak detectors may be undercounted, as these often do not require refrigerant addition.	This comment actually speaks directly to our desire to include non IR (Indirect) detection systems in this methodology. Indirect systems are capable of earlier detection and if a grocer is reactive to these systems often times they can fix the leak before the need to add refrigerant. The result of which is a lower leak rate for that owner and therefore more credits generated.		
5	Hussmann	Centralized refrigeration systems are frequently overfilled post-repair, out of convenience or misunderstanding by the technician. This can have a non-trivial impact on leak rate calculations and will not reflect actual leak rate. Has a provision been considered to account for / adjust for differing 'fully charged' levels? (Education may also be required going forward)	This point is related to row 9 above but in general, if a system is indeed overfilled during the crediting period then this would lower the amount of credits generated. At the end of the day, the emission reductions calculation boils down to added refrigerant and charge size only comes into play to gain a general sense that the system is not leaking more then average in the baseline scenario. For the most part, retail grocers are concerned with one thing: keeping their product at the appropriate temperature. Refrigerant is added to these systems only to achieve this and if too much refrigerant is added, it could compromise food quality.		