

**Annexes Accompanying**

**Supporting Statement for**

**EPA Information Collection Request Number 2349.02**

**EPA's GreenChill Advance Refrigeration Partnership  
(Renewal)**

# Introduction to GreenChill Partnership - Corporate Emission Reduction Program [Informational/Instruction]

The screenshot shows a web browser window with the URL [http://www.epa.gov/greenschill/become-greenschill-partne](http://www.epa.gov/greenchill/become-greenschill-partne). The page content includes:

- Related Topics:** GreenChill
- Contact Us** and **Share** links.
- Become a GreenChill Partner** (Section Header)
- Who Can Join**
  - The GreenChill Partnership focuses on food retailers including supermarkets, grocery stores, supercenters, and wholesale clubs. To be eligible to join the partnership, a food retailer must:
    - Be willing to reduce company-wide refrigerant emissions
    - Have no current Clean Air Act enforcement issues
  - Refrigeration system manufacturers that promote the adoption of advanced refrigeration technologies, strategies, and practices are also eligible to join the partnership.
- How to Join**
  - To join GreenChill, an authorized representative of the prospective Partner Company must agree to and sign a GreenChill Partnership Agreement. The agreement outlines the Partnership's goals and the responsibilities that each partner must meet. Once EPA completes its enforcement screening and the Partnership Agreement is countersigned by an EPA representative, the new Partner is admitted into the Partnership.
  - For more information about joining the GreenChill Partnership and to receive a Standard Partnership Agreement, please contact [Tom Land](#) or call 202-343-9185.
- Attention component manufacturers and service technicians:**
  - Although the GreenChill Partnership is currently focusing on food retailers, GreenChill recognizes the critical part component manufacturers and service technicians play in the effort to reduce emissions of ozone depleting substances and greenhouse gases. For more information on how you can get involved in GreenChill:
    - [visit our component manufacturer and service technician page.](#)
- Footer:** [Contact Us](#) to ask a question, provide feedback, or report a problem.

The GreenChill logo is visible, featuring the text "GREENCHILL" in a stylized font with "U.S. ENVIRONMENTAL PROTECTION AGENCY" and "ADVANCED REFRIGERATION PARTNERSHIP" around it.

# GreenChill Advanced Refrigeration Partnership Agreement [Form]

## GREENCHILL ADVANCED REFRIGERATION PARTNERSHIP AGREEMENT FOR SUPERMARKET PARTNERS

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This is a voluntary agreement between [ ] (herein referred to as the "Partner") and the U.S. Environmental Protection Agency's (EPA) GreenChill Advanced Refrigeration Partnership (herein referred to as the "Program," "GreenChill Partnership," or "GreenChill"). The goal of the Program is to reduce refrigerant emissions from food retailers and decrease their impact on the ozone layer and climate change. This agreement takes effect when signed by both Parties. ***GreenChill is a non-regulatory initiative. It does not provide relief for any violations of the Clean Air Act and/or its Amendments.***

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### EPA'S RESPONSIBILITIES

- Track and report partners' annual corporate-wide refrigerant inventory and emissions.
  - Identify, research, compile and communicate news, successful strategies, and cost-saving opportunities for reducing refrigerant emissions in commercial refrigeration systems.
  - Sponsor research relating to such strategies and new technologies.
  - Benchmark Partner progress in reducing refrigerant emissions in commercial refrigeration, allowing the Partner to compare progress to others within the industry.
  - Identify an EPA representative responsible for assisting the Partner in implementing the Program and notify the Partner of any change in the designated liaison.
  - Provide Partner recognition for achievements through press releases, brochures, articles, and awards.
  - Protect all information and data submitted to EPA or its partners to the fullest extent of the law in accordance with EPA regulations at 40 CFR Part 2, including the provisions on protecting confidential business information (CBI). For information to be treated as CBI, it must be designated by the Partner as CBI at the time of submittal.
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### PARTNER RESPONSIBILITIES

- Establish a base year for annual corporate-wide (aggregated) reporting of the inventory of refrigerant stock and refrigerant emissions. The base year may be the year in which this agreement is signed or up to two years prior.
- Complete and submit annually to EPA a corporate-wide inventory of refrigerant stock and emissions (aggregate, not by facility).
- Develop and submit annually to EPA a Corporate Refrigerant Management Plan that sets a refrigerant emissions reduction goal (goal to be approved by EPA) and describes technologies, strategies, and practices that will be used to achieve that goal.
- Commit to using only non-ozone-depleting refrigerant substitutes found acceptable under EPA's Significant New Alternatives Policy (SNAP) Program in all commercial refrigeration applications in new construction and store remodels involving rack additions or replacements.
- Exchange information on Program development/implementation and best practices with other Program partners.
- Designate a GreenChill Partnership Representative and notify EPA of any change in the designated liaison.
- Communicate the Program to employees and cooperate with EPA efforts to publicize the Program.

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**GENERAL TERMS**

- As a general principle of the Program, each party to this agreement agrees to assume the good faith of the other party and to notify the other if any issues arise. Either party can terminate this agreement at any time without prior notification or penalties, with no further obligation. EPA will not comment publicly regarding withdrawal of Partners.
- Any violation of the Clean Air Act or its Amendments is grounds for EPA, at its discretion, to terminate this agreement with a partner and for removal from the GreenChill Partnership.
- The Partner agrees to cease, upon termination of this agreement, any written, electronic, or oral representation that could be reasonably construed to indicate continued participation in the Program, including the use of the GreenChill Partnership name and mark.
- The Partner agrees that it will adhere to the "Guidelines for Using the GreenChill Advanced Refrigeration Partnership Mark."
- The Partner agrees that the activities it undertakes connected with this agreement are not intended to provide services to the federal government and that the Partner will not submit a claim for compensation to any federal agency/department.
- The Partner agrees that it will not claim or imply that its participation in the Program constitutes EPA approval or endorsement of anything other than the commitment to the GreenChill Advanced Refrigeration Partnership.
- This agreement does not create any right or benefit, substantive or procedural, enforceable by law, and does not direct or apply to any person outside of the parties referenced in the agreement.

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The undersigned officials execute this partnership agreement on behalf of their Parties.

**EPA:** Cindy Newberg, Chief, Alternatives and Emissions Reduction Branch, Stratospheric Protection Division, U.S. EPA

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Authorized Partner Company Representative:**

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Partner's Designated GreenChill Representative:**

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

**Please sign the partnership agreement and send a scanned copy by email to: [land.tom@epa.gov](mailto:land.tom@epa.gov)**

The public reporting and recordkeeping burden for this collection of information is estimated to average 5.5 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

# Guidelines for Partner Annual Reporting [Informational/Instruction]

## Guidelines for Completing GreenChill Supermarket Partners' Annual Installed Refrigerant and Emissions Corporate Reports and Corporate Refrigerant Management Plans



### Section 1: General Partner Information

- The reporting year is the most recent calendar year (1/1 through 12/31).
- The number of stores you enter should be the number of stores at your selected “point in time” reporting date (see Section 2).
- The Partner’s base year will vary depending on when your company joined GreenChill. Partners must select a base year when they join the Partnership. Partners are permitted to select base years that pre-date their entry into the Partnership if they are able to provide installed refrigerant and emissions data for those years. Partners should ask EPA if they have questions about their base year.

### Section 2: Corporate-Wide Installed Refrigerant

- Use the blank reporting form provided by EPA. Do not change the order of the refrigerants listed in the blank report. Add information for refrigerants not listed in the form in the “INSERT OTHER” rows.
- Report aggregate installed refrigerant data for all retail stores.
- Each report on installed refrigerant should represent a “point in time.” This is because the amount of installed refrigerant changes over the course of the year (e.g., companies may have purchased, sold, closed, or remodeled stores throughout the year). Once a point-in-time is selected, Partners should use the same date every year. Many Partners choose December 31 of each year as the point-in-time on which their reports are based (i.e., “How much refrigerant was in every store owned on December 31, 2012?”)
- Reports should include the following:
  - Installed refrigerant for commercial refrigeration systems (required)
  - Installed refrigerant for smaller self-contained equipment and air conditioning systems (optional, but encouraged)
  - Installed refrigerant in offices, break-rooms, etc. located inside retail stores
  - Installed refrigerant for climate-friendly refrigerants. Reporting on these refrigerants has been required since the 2013 reporting year.
- Reports should omit the following:
  - Installed refrigerant in office buildings, distribution centers, warehouses, etc. that are separate from retail stores
  - Refrigerant stored in cylinders on- or off- site

### Section 3: Corporate-Wide Refrigerant Emissions

- Use the blank reporting form provided by EPA. Do not change the order of the refrigerants listed in the blank report. Add information for refrigerants not listed in the form in the “INSERT OTHER” rows.
- Report aggregate “emissions” information for all retail stores.
- Partners should report a running total of emissions for the entire period of January 1 through December 31 (i.e., “How much refrigerant was emitted to the atmosphere in 2012?”). This is different from Section 2, which requires a point-in-time installed refrigerant estimate.
- Reports should include the following:
  - Emissions for commercial refrigeration systems (required)
  - Emissions for smaller self-contained equipment and air conditioning systems (optional, but encouraged)
  - Emissions from offices, break-rooms, etc. located inside retail stores
  - Known emissions from retired systems
  - Emissions for climate-friendly refrigerants. Reporting on these refrigerants has been required since the 2013 reporting year.<sup>1</sup>
- Reports should omit the following:
  - Emissions from office buildings, distribution centers, warehouses, etc. that are separate from retail stores
  - Refrigerant recovered/recycled from retired systems
  - First-fill charging when installing new systems or after remodels

#### Final steps

- Verify that installed refrigerant and emissions are reported in pounds or kilograms consistently.
- Certify with signature that the data report uses best estimates and that it represents a good faith effort to obtain and report accurate information.
- Submit a signed copy using instructions on the form.

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1. **Although emissions of these refrigerants must be reported, they will not be factored into the calculations that are used to determine the annual best emissions rate award (i.e., total emissions from all sources as a percentage of installed refrigerant). The amount of these of these climate-friendly refrigerants that is installed (i.e., in charges) - on the other hand - will be factored into the calculations.** This approach is meant to ensure that Partners who use refrigerants that have very small impacts on climate change are not penalized. This approach is used only for determining the annual best emissions rate award.

## Guidelines for Completing *Corporate Refrigerant Management Plan*

- There is no standard form for refrigerant management plans. EPA provides an optional template that Partners can use.
- The plan must include the Partner's emissions rate goal for the current year.
  - The emissions rate goal is for commercial equipment with a charge size greater than 50 pounds.
  - Partners should set their emissions rate goal *lower* than their previous year's emissions rate (Partners can easily determine their previous year's emissions rate from the installed refrigerant and emissions reporting form). If Partners submit an emissions rate goal that is higher than their previous year's emissions rate, they will not be eligible for a GreenChill Goal Achievement Award next year.
- Partners are encouraged to also submit a stretch goal that is more aggressive than the required emissions rate goal. Partners can earn additional awards for achieving their stretch goals.
- The plan must include a qualitative description of how the Partner will reach the emissions rate goal identified. GreenChill uses this info "qualitatively" to help determine GreenChill projects for the coming year.
- Partners are not measured or tracked based on information in the Corporate Refrigerant Management Plan.

## GreenChill Contacts

Tom Land, EPA's GreenChill Program Manager

- 202-343-9185
- Land.tom@epa.gov

Joe Donahue, Abt Associates (EPA contractor)

- 202-657-6235
- Joe\_Donahue@abtassoc.com

For further guidance on a method for calculating installed refrigerant and refrigerant emissions please consult the document "Direct Fugitive Emissions from Refrigeration, Air Conditioning, Fire Suppression, and Industrial Gases," and refer in particular to *Method 2.3, Material Balance Method*. This document can be found at: <http://www.epa.gov/climateleadership/center-corporate-climate-leadership-direct-fugitive-emissions-refrigeration-air>

# Fictitious Model of a Refrigerant Management Plan [Informational/Instruction]

*Suggested Template - Partners Are Not Required to Complete This Document*

## -- EXAMPLE -- Corporate Refrigerant Management Plan GreenChill Partners

|             |                        |
|-------------|------------------------|
| Supermarket | Curly-Cue Supermarkets |
| Year        | 2015                   |

Each GreenChill Partner is required to submit an annual corporate refrigerant management plan. GreenChill uses the information “qualitatively” to help determine GreenChill projects for the coming year. Partners are not evaluated based on information in their plans. Although there is no standard form for the plan, this two-part template provides a suggested format Partners are welcome to use.

- Part 1: a suggested format for identifying emissions rate goal(s) for the present year. Partners are not required to use this format. They must provide an emissions rate goal.
- Part 2: a suggested format for the refrigerant management plan. Partners must describe their refrigerant management activities and how they plan to reach their emissions rate goal(s).

### Part 1. Emissions Rate Goals

Partners are required to submit an emissions rate goal for the present year, for commercial systems with 50 or more pounds of refrigerant. Partners are encouraged (but not required) to also set a more aggressive “stretch” goal, for which they can receive a second award. Table 1 presents a suggested format for identifying emissions rate goal(s).

**REMINDER: To be eligible for GreenChill goal achievement awards, Partners’ goal(s) for the present year must be lower than their emissions rate from the previous year.**

**Table 1. Past goals and emissions rates for commercial systems with more than 50 pounds of refrigerant.**

| Year                 | Goal (Required) | Stretch Goal (Optional) | Emissions Rate |
|----------------------|-----------------|-------------------------|----------------|
| 2008 (Baseline Year) | Not applicable  | Not applicable          | 16%            |
| 2009                 | 10%             | None identified         | 12%            |
| 2010                 | 10%             | None identified         | 10%            |
| 2011                 | 9.1%            | None identified         | 9%             |
| 2012                 | 8.5%            | None identified         | 8.5%           |
| 2013                 | 8.25%           | 8%                      | 8.2%           |
| 2014                 | 8%              | 7.5%                    | 8%             |
| 2015                 | 7.5%            | 7.25%                   | 7.25%*         |
| 2016                 | 7.0%            | 6.9%                    | **             |

\* The emissions rate for the most recent past year should be from the GreenChill data reporting form.  
\*\* The emissions rate for the present year will be calculated next year.



## Part 2. Corporate Refrigerant Management Plan

Partners are welcome to use the following structure to organize their refrigerant management plan for the present year.

**REMINDER: Partners do not need to address all the topics listed below; it is understood that not all topics will be relevant to each Partner.**

| A. Review of Previous Year's Goal(s) and Achievements (suggested topics, complete relevant ones)   |
|--|
| <b>What went well last year?</b>   |
| In 2014, we achieved our goal, but missed our stretch goal by 0.5%. Our achievement was a result of the acceleration of our "leak tightness" strategy to make up for our losses due to catastrophic equipment failures in previous years. All potentially faulty components were replaced in all our stores (not just the ones that failed), and as a result, we got back on track in 2015 and achieved our goal. As we continue to reduce our refrigerant emissions, we feel it is necessary to become more conservative in our goals. We hope to achieve a reduction in our emissions rate to 7.0% in 2016. Our stretch goal for 2016 is 6.9%. |
| <b>What did not go well last year? How will these challenges be addressed in the present year?</b>   |
|  |
| <b>What were the key factors that helped you meet (or prevented you from meeting) your goal(s) for the year?</b>   |
|  |
| <b>Other notes</b>   |
|  |

| B. Leak Prevention and Repair (suggested topics, complete relevant ones)  |
|---|
| <b>Installation of leak detection systems</b>   |
| We are installing better leak sensors in the machine rooms in an additional 600 stores (new leak detectors installed in 600 stores in every year from 2006-2015). |
| <b>Leak prevention or charge reducing system components</b>   |
|   |
| <b>Regular leak prevention maintenance program</b>  |
|   |
| <b>Use of GreenChill's Leak Prevention and Repair Guideline</b>   |
|   |
| <b>Use of GreenChill's Maintenance for Leak Prevention Fact Sheet</b>   |
|   |
| <b>Rapid leak response protocol</b>   |
| We have a rapid response system that ensures that a technician responds to a leak in any stores within 7 minutes of the notification.                             |
| <b>Leak repair verification requirements</b>  |
| We require verification from our service technicians that every leak was fixed and then require re-verification after 30 minutes of regular system operation.     |
| <b>Other notes</b>  |
|   |

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|---|
| <b>C. Store Remodels or Retrofits (suggested topics, complete relevant ones)</b>  |
| <b>Number of remodels or retrofits planned</b>  |
| Curly-Cue Supermarkets has discontinued our R-22 store retrofits to HFC refrigerants. All stores have been converted.   |
| <b>Refrigerants involved (e.g., retrofitted in and out)</b>   |
|   |
| <b>Systems involved (e.g., retrofitted in and out)</b>  |
|   |
| <b>Use of GreenChill's Installation Leak Tightness Guidelines <u>or</u> GreenChill's Retrofit Guidelines</b>  |
|   |
| <b>Remodeled or retrofitted system design features (e.g., for reduced charge and leak potential)</b>  |
|   |
| <b>Estimated charge size for remodeled or retrofitted systems</b>   |
|   |
| <b>Estimated leak rate for remodeled or retrofitted systems</b>   |
|   |
| <b>Other notes</b>  |
|   |
| <b>D. Newly Designed Stores (suggested topics, complete relevant ones)</b>  |
| <b>Number of new stores opening</b>   |
| We are opening 20 new stores throughout 2016. All new stores will use non-ODS refrigerants for A/C, commercial refrigeration, and self-contained equipment.   |
| <b>Refrigerants involved</b>  |
| We are considering adopting a policy of using only climate-friendly refrigerants in all new stores.   |
| <b>Refrigeration systems involved</b>   |
| <ul style="list-style-type: none"> <li>• Of the 20 new stores we are building in 2016, <b>16</b> of them will be standard DX refrigeration systems.</li> <li>• Of the 20 new stores we are building in 2016, <b>2</b> of them will be secondary loop stores.</li> <li>• Of the 20 new stores we are building in 2016, <b>2</b> of them will be distributed system stores.</li> </ul>  |
| <b>New system design features (e.g., for reduced charge and leak potential)</b>   |
| <p>We will achieve lower refrigerant charges by using:</p> <ul style="list-style-type: none"> <li>• Compressor type A instead of compressor type B</li> <li>• Piping configuration X</li> <li>• Receiver X</li> <li>• Sub-cooling</li> <li>• Line size diameters of y (used to be x)</li> </ul> <p>When building new stores, we ensure reduced leak potential by planning:</p> <ul style="list-style-type: none"> <li>• Less Pipe Surface area – x footage vs. y footage in a regular store</li> <li>• Less Pipe footage - x footage vs. y footage in a regular store</li> <li>• Fewer Solder Joints – 34 joints vs. 76 in other stores</li> <li>• Fewer components – reduces leaks by doing x</li> <li>• Better piping supports – we are using x brand piping supports, which do y.</li> </ul> |
| <b>Use of GreenChill's Installation Leak Tightness Guidelines</b>   |
| All new stores will GreenChill's installation leak tightness standards as described in the GreenChill Leak Tightness Installation Guideline. The refrigeration systems for all new DX stores are currently tested for leak tightness at installation. We have adopted GreenChill's Installation Leak Tightness Best Practices Guidelines as our company spec, and all service technicians are required to follow the Guidelines and have the results of the GreenChill Leak Tightness Testing verified by a Supervisory   |

|  |
|--|
| Maintenance Manager before declaring the work complete.  |
| <b>Estimated charge size for new systems</b>   |
| <p><u>New DX Stores</u><br/>Curly-Cue's goal is to reduce the refrigerant charge in all new DX stores from an average of 4500 lbs. of refrigerant to 3000 lbs of refrigerant.</p> <p><u>New Secondary Loop stores</u><br/>Our goal is to reduce our refrigerant charge in all new secondary loop stores down to an average of 1000 lbs. per store, vs. 3000-4500 lbs in our DX systems.</p> <p><u>New Distributed System stores</u><br/>The stores that use distributed systems will have a refrigerant charge of 2000 lbs., as opposed to our DX stores that have a charge that ranges from 3000-4500 lbs of refrigerant.</p> |
| <b>Estimated leak rate for new systems</b>   |
| <p><u>New DX Stores</u><br/>In the 800 new DX stores we built from 2006-2015 using these steps, we have consistently achieved and maintained annual leak rates below 10%.</p> <p><u>New Secondary Loop stores</u><br/>We estimate that our stores that use secondary loop systems will have leak rates of less than 5%.</p> <p><u>New Distributed System stores</u><br/>We estimate that our stores that use a distributed refrigeration system will have leak rates of less than 10%.</p>   |
| <b>Other notes</b>   |
|  |

|   |
|---|
| <b>E. GreenChill Certification (suggested topics, complete relevant ones)</b>   |
| <b>Plans for achieving certification or re-certification in existing stores</b> |
|   |
| <b>Plans for achieving certification in new/future stores</b>                   |
|   |
| <b>Other notes</b>  |
|   |

|   |
|---|
| <b>F. Store Turnover (suggested topics, complete relevant ones)</b> |
| <b>Number of stores to be <u>acquired</u></b>                       |
|   |
| <b>Refrigerants and systems used in stores to be acquired</b>       |
|   |
| <b>Number of stores to be <u>closed</u></b>                         |
|   |
| <b>Refrigerants and systems used in stores to be closed</b>         |

|                    |
|--------------------|
|                    |
| <b>Other notes</b> |
|                    |

|   |
|---|
| <b>G. Technician and Contractor Coordination (suggested topics, complete relevant ones)</b> |
| <b>Technician training on leak prevention and refrigerant management</b>                    |
|   |
| <b>Technician/contractor performance tracking and incentive programs</b>                    |
|   |
| <b>Contract specifications for GreenChill best practices</b>                                |
|   |
| <b>Other notes</b>  |
|   |

|   |
|---|
| <b>H. Refrigerant Use Tracking (suggested topics, complete relevant ones)</b> |
| <b>Refrigerant tracking tools/software</b>                                    |
|   |
| <b>Refrigerant banking</b>  |
|   |
| <b>Other notes</b>  |
|   |

|   |
|---|
| <b>I. Evaluation and Communications (suggested topics, complete relevant ones)</b>                    |
| <b>Estimating impacts of refrigerant leaks (e.g., using GreenChill's Financial Impact Calculator)</b> |
|   |
| <b>Communicating to management about importance of leak prevention and refrigerant management</b>     |
|   |
| <b>Other notes</b>  |
|   |

*GreenChill Supermarket Corporate Refrigerant Management Plan*





**GreenChill Installed Refrigerant and Emissions Corporate Report for Food Retail Partners**

| Corporate-Wide Refrigerant Emissions Rates |                          |                    |                  |
|--|--------------------------|--------------------|------------------|
| Refrigerant                                | Commercial Refrigeration |                    | Air-Conditioning |
|  | Charge > 50 Pounds       | Charge < 50 Pounds |                  |
|  | REQUIRED                 | OPTIONAL           | OPTIONAL         |
| EP-88                                      |                          |                    |                  |
| R-12                                       |                          |                    |                  |
| R-123                                      |                          |                    |                  |
| R-13                                       |                          |                    |                  |
| R-134a                                     |                          |                    |                  |
| R-143A                                     |                          |                    |                  |
| R-22                                       |                          |                    |                  |
| R-23                                       |                          |                    |                  |
| R-290 (Propane)                            |                          |                    |                  |
| R-401A (MP 39)                             |                          |                    |                  |
| R-401B (MP 66)                             |                          |                    |                  |
| R-402A (HP 80)                             |                          |                    |                  |
| R-402B (HP 81)                             |                          |                    |                  |
| R-404A (HP 62)                             |                          |                    |                  |
| R-407A (Klea 60)                           |                          |                    |                  |
| R-407C (Klea 66; Suva 9000)                |                          |                    |                  |
| R-407F (Gen. Performax LT)                 |                          |                    |                  |
| R-408A (FX-10)                             |                          |                    |                  |
| R-409A (FX-56)                             |                          |                    |                  |
| R-410A (AZ-20, Puron)                      |                          |                    |                  |
| R-414A (GHG-X4)                            |                          |                    |                  |
| R-414B (Hot Shot)                          |                          |                    |                  |
| R-416A (FR 12)                             |                          |                    |                  |
| R-417A (NU-22, Isceon MO29)                |                          |                    |                  |
| R-421A (Choice R421A)                      |                          |                    |                  |
| R-422A (Isceon 79)                         |                          |                    |                  |
| R-422B (XAC1)                              |                          |                    |                  |
| R-422C (XLT1)                              |                          |                    |                  |
| R-422D (Isceon MO29)                       |                          |                    |                  |
| R-427A (Forane 427A)                       |                          |                    |                  |
| R-437A (ISCEON MO49 Plus)                  |                          |                    |                  |
| R-441A (HC blend)                          |                          |                    |                  |
| R-448A (Solstice N-40)                     |                          |                    |                  |
| R-449A (Opteon XP 40)                      |                          |                    |                  |
| R-450A (Solstice N-13)                     |                          |                    |                  |
| R-502                                      |                          |                    |                  |
| R-507A (AZ-50)                             |                          |                    |                  |
| R-600a (Isobutane)                         |                          |                    |                  |
| R-600a (Isobutane)                         |                          |                    |                  |
| R-717 (NH3)                                |                          |                    |                  |
| R-744 (CO2)                                |                          |                    |                  |
| [INSERT OTHER]                             |                          |                    |                  |
| [INSERT OTHER]                             |                          |                    |                  |
| [INSERT OTHER]                             |                          |                    |                  |
| [INSERT OTHER]                             |                          |                    |                  |
| [INSERT OTHER]                             |                          |                    |                  |
| [INSERT OTHER]                             |                          |                    |                  |
| <b>Totals</b>                              |                          |                    |                  |

# Introduction to Store Certification Program [Instructional/Information]


<http://www.epa.gov/greenchill/greenchill-store-certificati...> One EPA Workplace Outlook.com - thomasland@... GreenChill Store Certificati...

File Edit View Favorites Tools Help

US EPA EZ Tech Hardware Refresh... AMP by Strathmore - Live... Sign In 7-Day Forecast for Latitud... GreenChill US EPA US EPA My Workplace Project Pa... US EPA EASY Lite DWCMS Log in US EPA Login

## GreenChill Store Certification Program

GreenChill's Store Certification Program for Food Retailers recognizes individual stores for using environmentally friendlier commercial refrigeration systems. A food retail store can achieve platinum-, gold-, or silver-level certification. Any food retail store in the United States, whether in the design phase, remodel phase, newly constructed, or fully operational, can apply for GreenChill's Store Certification Award. The process is free, quick, and easy.



[GreenChill Store Certification Program Fact Sheet](#)

### How to Certify your Store:

**Step 1: Select the appropriate application form for the store in question.**

If the store is not yet operational, or if it has been operational for less than 6 months, fill out the "Newly Constructed Stores" form. If the store has been in operation for at least 12 months, fill out the "Operational Stores" form. If the store has been in operation for 6-12 months, or if the store is a remodeled store, please contact [Tom Land](#) (202-343-9185) to determine which form needs to be filled out. For newly constructed stores, an installation leak tightness testing verification form, as provided below, must also be completed and signed.


- [GreenChill Certification Form: Newly Constructed Stores](#) (2 pp, 131 K)
- [Installation Leak Tightness Testing Verification Form \(Microsoft Word Document\)](#) (1 pg, 236 K)
- [GreenChill Certification Form: Operational Stores \(Microsoft Word Document\)](#) (2 pp, 222 K)
- [GreenChill Recertification Form \(Microsoft Word Document\)](#) (2 pp, 222 K)

**Step 2: Complete the Application Form**

The application form is only two sides and is quick and easy to complete. For guidance on completing the application, please refer to the materials listed below.

**Certified Stores**

[View a List of Currently Certified Stores](#)



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## Step 2: Complete the Application Form

The application form is only two sides and is quick and easy to complete. For guidance on completing the application, please refer to the materials listed below.

- [GreenChill Store Certification Criteria](#)
- [GreenChill Store Certification Program Guidance](#)
- [GreenChill Installation Leak Tightness Guidelines](#)
- [GreenChill Store Certification Protocol for Combined Systems](#)
- [GreenChill Store Certification Protocol for Separate Sub-Cooling Racks](#)
- [GreenChill Store Certification Protocol for Prep Room Refrigeration](#)
- [GreenChill Store Certification Protocol for a Refrigeration Rack with an AC Load](#)
- [GreenChill Store Certification Protocol for Condensing Units](#)

## Step 3: Send in your application.

The application and all required attachments should be sent to [Tom Land](#).

## Step 4: Await notification from EPA.

Once your application is received, EPA will send an email confirming receipt and will immediately begin the review process. Please let us know if receipt of our decision is time sensitive and we will do everything we can to adhere to your needs. After a decision is made, EPA will notify you via email. Please note that GreenChill reserves the right to deny store certification based on a company's Clean Air Act Title 6 enforcement issues.

*\* If you do not receive an email confirmation within 2 business days, please notify EPA.*

## Step 5: Your Store Certification

If your store achieves certification, you will receive a silver, gold, or platinum certificate from EPA, along with press release guidance and an order form for a plaque. You may purchase as many plaques as you wish. GreenChill Store Certification is valid for one year. After one year, stores must reapply to retain GreenChill Certification. *Note: When referring to any EPA Award, please include the year in which the award was received.*

Contact Us to ask a question, provide feedback, or report a problem.

100%





### GreenChill Store Certification Criteria

*The following document summarizes the requirements to achieve Platinum-, Gold- and Silver-Level Certification. Please see the [GreenChill Store Certification Program Guidance](#) for more information on each criterion.*

**Platinum-Level Store Certification:** To qualify for GreenChill's Platinum-Level Store Certification, a store must meet the requirements under either A or B:

A. HFC-Based Refrigeration Systems

- The store must only use refrigerants with zero ozone-depleting potential;
- The store must only use refrigerants that have been found acceptable by EPA's Significant New Alternatives Policy (SNAP) Program for use in retail food refrigeration end-uses;
- The store must achieve an average HFC refrigerant charge equal to or less than 0.5 lbs. of HFC refrigerant per MBTU/hr. total evaporator heat load;
- The store must achieve a store-wide annual HFC refrigerant emissions rate of 5% or less; and
- All newly constructed stores must also be leak tested at installation according to the standards in [GreenChill's Installation Leak Tightness Testing Guidelines](#).

B. Refrigeration Systems using Low-GWP Refrigerants

- The store must only use refrigerants with zero ozone-depleting potential;
- The store must only use refrigerants that have been found acceptable by EPA's SNAP Program for use in retail food refrigeration end-uses; and
- All refrigerants used in the store's commercial refrigeration system must have a global warming potential (GWP) lower than 150.

**Gold-Level Store Certification:** To qualify for GreenChill's Gold-Level Store Certification, a store must meet the following requirements:

- The store must only use refrigerants with zero ozone-depleting potential;
- The store must only use refrigerants that have been found acceptable by EPA's SNAP Program for use in retail food refrigeration end-uses;
- The store must achieve an average HFC refrigerant charge equal to or less than 1.25 lbs. of refrigerant per MBTU/hr. total evaporator heat load;

- The store must achieve a store-wide annual HFC refrigerant emissions rate of 15% or less; and
- All newly constructed stores must also be leak tested at installation according to the standards in [GreenChill's Installation Leak Tightness Testing Guidelines](#).

**Silver-Level Store Certification:** To qualify for GreenChill's Silver-Level Store Certification, a store must meet the following requirements:

- The store must only use refrigerants with zero ozone-depleting potential;
- The store must only use refrigerants that have been found acceptable by EPA's SNAP Program for use in retail food refrigeration end-uses;
- The store must achieve an average HFC refrigerant charge equal to or less than 1.75 lbs of refrigerant per MBTU/hr. total evaporator heat load; and
- The store must achieve a store-wide annual HFC refrigerant emissions rate of 15% or less.
- All newly constructed stores must also be leak tested at installation according to the standards in [GreenChill's Installation Leak Tightness Testing Guidelines](#).



### GreenChill Store Certification Program Guidance

*The following document provides guidance on meeting the GreenChill store certification requirements and completing either the [newly constructed store](#) or [operational store](#) application form.*

#### Guidance on the Certification Program:

1. GreenChill certification is valid for one year from the date of the certification award.
2. GreenChill certification may be re-earned annually, as long as a store meets the certification criteria on an annual basis. To apply for recertification, the [recertification application form](#) may be used. A store that achieves certification for several years may receive "continued excellence" awards.
3. A store that was previously certified but is unable to meet the certification criteria for a particular year will not be re-certified for that year. The store may reapply for certification at any time after its certification has expired and will be re-certified once the store is able to meet the certification criteria. The store can continue to be re-certified for all years that it is able to meet the criteria.
4. There is **no fee to apply** for GreenChill certification. The only cost associated with GreenChill certification is the cost to order the optional platinum-level, gold-level, or silver-level plaque award. Every store awarded certification automatically receives a GreenChill certificate.
5. GreenChill reserves the right to verify the information submitted by a store for certification, including, but not limited to, inspection of the store, requesting third party certification, and/or requesting copies of store records related to the certification criteria.

#### Guidance on the Certification Application Forms:

Three application forms are available for stores applying for GreenChill certification; **(1) the Newly Constructed Store form (2) the Operational Store form, and (3) the Recertification form.** Stores must submit the form that is appropriate to the condition of the store at the time of application. For store *remodel* projects, please contact Tom Land at [Land.Tom@epa.gov](mailto:Land.Tom@epa.gov) or 202-343-9185 to determine whether the newly constructed store form or the operational store form needs to be filled out.

## Guidance on Meeting the Certification Requirements:

1. **Certification Criteria:** GreenChill’s decision to award a store with certification is based on several criteria, which are listed in Table 1 below. Each criterion applies to and is based on different types of refrigerant-containing equipment. For instance, the refrigerant emissions rate criteria applies to and is based solely on the store’s remote commercial refrigeration equipment, while the requirement that refrigerants be non-ozone-depleting applies to and is based on all three types of refrigerant-containing equipment in the store.

**Table 1: Equipment Included in Each Certification Criterion**

| CERTIFICATION CRITERIA   | INCLUDED EQUIPMENT                                |   |                |
|--|---|---|----------------|
|  | Self contained commercial refrigeration equipment | Remote commercial refrigeration equipment | HVAC Equipment |
| Refrigerant charge (lbs.)  |   | ✓   |                |
| Total load (MBTU/Hr)   |   | ✓   |                |
| Refrigerant emissions rate (lbs.)  |   | ✓   |                |
| Non-ozone-depleting refrigerant  | ✓   | ✓   | ✓              |
| SNAP-approved refrigerant  | ✓   | ✓   | ✓              |
| GreenChill’s Installation leak Tightness standards (newly constructed stores only) |   | ✓   |                |

2. **Refrigerant Charge:** A store’s refrigerant charge is the total pounds of refrigerant that are charged into a store’s commercial refrigeration equipment.
3. **Combined Systems:** If your store’s remote commercial refrigeration system is combined with your stores air conditioning system, it will not be possible to separate air conditioning emissions from commercial refrigeration emissions. It similarly will be difficult to separate air conditioning charge from commercial refrigeration charge. Please refer to the [GreenChill Store Certification Protocol for Combined Refrigeration and Air Conditioning Systems](#) for more information on how to report data for combined systems.
4. **Total Load:** A store’s total load shall include all BTUs associated with refrigeration. This includes the BTU output of all remote commercial refrigeration equipment but **SHALL NOT** include the BTU output of all self-contained commercial refrigeration equipment (i.e. soda machines, vendor supplied coolers, ice machines, refrigerators in deli areas, etc.). The total load **ALSO SHALL NOT** include sub-cooling, heat of rejection, pump heat, or any BTUs associated with air conditioning loads. *Note: The total load is not the rack rating or compressor capacity, which is typically larger than the total load.*

5. **Prep Room Refrigeration:** Sometimes it can be unclear whether BTUs used for ‘prep room refrigeration’ should be considered air conditioning or refrigeration. Please refer to the [GreenChill Store Certification Protocol for Stores with Prep Room Refrigeration](#) for more information on how to report data associated with prep room refrigeration.
6. **Separate Racks for Sub-Cooling:** Sub-cooling racks may sometimes be separate from the racks containing the commercial refrigeration equipment. Please refer to the [GreenChill Store Certification Protocol for Sub-Cooling Contained on Racks Separate from Refrigeration Equipment](#) for more information on how to report data associated with sub-cooling.
7. **Refrigerant Charge/Total Load:** GreenChill uses the store’s refrigerant charge and the store’s total load to calculate the pounds of refrigerant per MBTU/hr. Pounds of refrigerant per MBTU/hr. is calculated as follows:

$$\frac{\text{Refrigerant Charge (lbs.)}}{\text{Total load (MBTU/hr.)}} = \text{lbs. of refrigerant per MBTU/hr.}$$

8. **Annual Emissions:** Each store applying for GreenChill gold-level or silver-level certification must achieve an annual emissions rate of no more than 15% of the commercial refrigeration system’s refrigerant charge. For platinum-level certification, stores must achieve an annual emissions rate of no more than 5% of the commercial refrigeration system’s refrigerant charge. The amount of refrigerant emitted over the period of one year is equal to the amount of refrigerant lost from the store’s commercial refrigeration equipment and systems. The emissions rate is calculated as follows:

$$\frac{\text{Amount of refrigerant emitted over the period of one year}}{\text{System Refrigerant Charge}} \times 100 = \text{Annual emissions rate (\%)}$$

9. **Ozone Depletion:** As indicated in Table 1 above, all refrigerants used in the store, including the refrigerants in all types of self-contained equipment (soda machine in the break rooms, ice machines, deli refrigerators, etc.), must be non-ozone-depleting refrigerants. The most common ozone-depleting refrigerant used in supermarkets is HCFC-22. For a list of all Class I and Class II ozone-depleting refrigerants, see <http://www.epa.gov/ozone/science/ods/classone.html>
10. **Non-Ozone Depleting Alternatives:** For the list of substitute refrigerants that EPA’s SNAP Program has found to be acceptable alternatives to ozone-depleting refrigerants in commercial refrigeration, see <http://www.epa.gov/ozone/snap/refrigerants/lists/foodref.html>
11. **Leak Testing:** All newly constructed store certification applications must include verification that the commercial refrigeration system was tested for leaks according to [GreenChill’s Installation Leak Tightness Testing Guidelines](#).

Please direct any questions to Tom Land at [Land.Tom@epa.gov](mailto:Land.Tom@epa.gov) or 202-343-9185.


# Store Certification Applications [Forms – Newly Constructed, Operational, and Recertification]

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FILE HOME INSERT DESIGN PAGE LAYOUT REFERENCES MAILINGS REVIEW VIEW DESIGN LAYOUT

Read Mode Print Layout Web Layout Views Outline Draft Ruler Gridlines Navigation Pane Show Zoom 100% One Page Multiple Pages Page Width New Window Arrange All Split Window Synchronous Scrolling Reset Window Position Switch Windows Macros

**The GreenChill Advanced Refrigeration Partnership**



**~Confidential Business Information~**  
**Newly Constructed Food-Retail Stores**

To qualify for GreenChill platinum-, gold-, or silver-level store certification, please answer the following questions about the store seeking certification.

**1. STORE NAME** (as you would like it to appear on the award certificate):

STORE #: DATE OF STORE OPENING:

STREET ADDRESS: CITY: STATE: ZIP:

**2. REFRIGERATION SYSTEM TYPE AND MANUFACTURER** (check one box for the medium temperature system and list the manufacture of that system, and check one box for the low temperature system and list the manufacturer of that system)

| SYSTEM TYPE                                 | MEDIUM-TEMPERATURE SYSTEM |              | LOW-TEMPERATURE SYSTEM   |              |
|---|---------------------------|--------------|--------------------------|--------------|
|   | TYPE                      | MANUFACTURER | TYPE                     | MANUFACTURER |
| Centralized Direct Expansion Parallel Racks | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| Distributed Direct Expansion                | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| Glycol Secondary Loop                       | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| CO <sub>2</sub> Secondary Loop              | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| CO <sub>2</sub> Cascade                     | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| CO <sub>2</sub> Transcritical               | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| Other (please specify):                     | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |

**3. REFRIGERANT TYPE AND CHARGE SIZE** (complete the table below)

| EQUIPMENT TYPE                     | REMOTE COMMERCIAL REFRIGERATION SYSTEM |                 | SELF-CONTAINED EQUIPMENT* | HVAC EQUIPMENT** |
|------------------------------------|--|-----------------|---------------------------|------------------|
|                                    | MEDIUM-TEMPERATURE                     | LOW-TEMPERATURE |                           |                  |
| Primary Refrigerant Type           |  |                 |                           |                  |
| Primary Refrigerant Charge (lbs)   |  |                 |                           |                  |
| Secondary Refrigerant Type         |  |                 |                           |                  |
| Secondary Refrigerant Charge (lbs) |  |                 |                           |                  |

\*Including soda machines, vendor-supplied coolers, ice machines, refrigerators in deli areas, etc.  
\*\*Including "personal" AC in staff offices

**4. PREDICTED HFC REFRIGERANT ANNUAL EMISSIONS (LBS)**

Annual emissions should be predicted for the HFC refrigerant in the remote commercial refrigeration equipment once the store is fully operational. If an HFC refrigerant is not used, this question may be left blank.

All information provided will be treated as confidential business information (CBI), as stipulated under Clean Air Act provisions, and will not be divulged either to other partners or publicly.

A newly constructed store is one that is applying for GreenChill certification before it opens to the public, so it does not have any actual refrigerant emissions data at the time of the certification application. Stores that have only been operational for a few months may also fit into this category.

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**5. TOTAL REMOTE COMMERCIAL REFRIGERATION LOAD (MBTU/HOUR)**

DO NOT include the load from the store's HVAC system (split systems or self-contained), self-contained refrigeration equipment, sub-cooling, heat of rejection, or pump heat.

**6. REQUIRED ATTACHMENTS CHECKLIST** (if an HFC refrigerant is not used, Attachments C, D, and E are not required)

- A. STORE REFRIGERATION SYSTEM LEGEND (SCHEDULE): A copy of the store's refrigeration system legend (schedule) that lists the BTU output of all remote commercial refrigeration equipment.
- B. SUPPORTING DOCUMENTATION FOR REFRIGERANT CHARGE: A letter, signed by an authorized installation company representative, detailing the amount of refrigerant (lbs.) the commercial refrigeration system holds when properly charged. Due to possible leaks, invoices are not sufficient for verifying a system's charge.
- C. LETTER STATING EQUIPMENT MANUFACTURER'S PREDICTED HFC ANNUAL EMISSIONS OR EMISSIONS RATE: A letter, signed by an authorized representative of each commercial refrigeration system manufacturer predicting this store's annual emissions (lbs.) or emissions rate (%) and the rationale for that prediction.
- D. SUPPORTING DOCUMENTATION FOR PREDICTED HFC ANNUAL EMISSIONS OR EMISSIONS RATE: Documentation supporting the predicted annual emissions (lbs.) or emissions rate (%). Documentation may include any or all of the following, or any other supporting evidence deemed helpful: a list of emissions or emissions rates from other stores using the same technology as the store seeking certification; a list of emissions or emissions rates from other stores serviced by the same service technicians installing equipment in the store seeking certification; a list of special features of the store seeking certification that lead to reduced emissions and emissions rates, etc.
- E. INSTALLATION LEAK TIGHTNESS TESTING VERIFICATION FORM: Please have an authorized installation company representative complete and sign the Installation Leak Tightness Testing Verification Form to verify that he/she tested the remote commercial refrigeration system per GreenChill's Best Practices Guideline for Leak Tightness at installation prior to the store's opening.

**7. SIGNATURE/CERTIFICATION BY AUTHORIZED COMPANY REPRESENTATIVE**

Please have an authorized representative of the store seeking certification sign this application to attest that all information contained is true and correct.

Name: Title:

Telephone: Email:

Signature: Date:

**8. CONTACT INFORMATION**

Please provide contact information for a technical contact regarding the store certification application.

Name: Title:

Street Address: City: State: Zip:

Telephone: Email:

For assistance on completing the form, please refer to the [GreenChill Store Certification Program Guidance](#). Please direct any questions and send completed forms and attachments to Tom Land ([Land.Tom@epa.gov](mailto:Land.Tom@epa.gov), 202-343-9185).

**GreenChill reserves the right to deny store certification based on a company's Clean Air Act Title 6 enforcement issues**

Note: When referring to any EPA Award, please include the year in which the award was received.

If you do not receive an email confirming receipt of your application within 2 business days, please notify EPA.

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**D. SUPPORTING DOCUMENTATION FOR PREDICTED HFC ANNUAL EMISSIONS OR EMISSIONS RATE:** *Documentation supporting the predicted annual emissions (lbs.) or emissions rate (%). Documentation may include any or all of the following, or any other supporting evidence deemed helpful: a list of emissions or emissions rates from other stores using the same technology as the store seeking certification; a list of emissions or emissions rates from other stores serviced by the same service technicians installing equipment in the store seeking certification; a list of special features of the store seeking certification that lead to reduced emissions and emissions rates, etc.*

**E. INSTALLATION LEAK TIGHTNESS TESTING VERIFICATION FORM:** *Please have an authorized installation company representative complete and sign the [Installation Leak Tightness Testing: Verification Form](#) to verify that he/she tested the remote commercial refrigeration system per GreenChill's Best Practices Guideline for Leak Tightness at Installation prior to the store's opening.*

## 7. SIGNATURE/CERTIFICATION BY AUTHORIZED COMPANY REPRESENTATIVE

Please have an authorized representative of the store seeking certification sign this application to attest that all information contained is true and correct.

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
 Telephone: \_\_\_\_\_ Email: \_\_\_\_\_  
 Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## 8. CONTACT INFORMATION

Please provide contact information for a technical contact regarding the store certification application.

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
 Street Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

For assistance on completing the form, please refer to the [GreenChill Store Certification Program Guidance](#). Please direct any questions and send completed forms and attachments to Tom Land ([Land.Tom@epa.gov](mailto:Land.Tom@epa.gov), 202-343-9185).<sup>3</sup>

**GreenChill reserves the right to deny store certification based on a company's Clean Air Act Title 6 enforcement issues**

*Note: When referring to any EPA Award, please include the year in which the award was received.*

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<sup>3</sup> If you do not receive an email confirming receipt of your application within 2 business days, please notify EPA.

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~Confidential-Business-Information~  
Fully-Operational Food-Retail Stores

To qualify for GreenChill platinum-, gold-, or silver-level store certification, please answer the following questions about the store seeking certification.

1. STORE NAME (as you would like it to appear on the award certificate):

STORE #B STREET ADDRESS: CITY: STATE: ZIP:

2. REFRIGERATION SYSTEM TYPE AND MANUFACTURER (check one box for the medium-temperature system and list the manufacture of that system, and check one box for the low-temperature system and list the manufacturer of that system)

| SYSTEM TYPE                                | MEDIUM-TEMPERATURE SYSTEM |              | LOW-TEMPERATURE SYSTEM   |              |
|--|---------------------------|--------------|--------------------------|--------------|
|  | TYPE                      | MANUFACTURER | TYPE                     | MANUFACTURER |
| Centralized Direct-Expansion Parallel Rack | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| Distributed Direct-Expansion               | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| Glycol-Secondary-Loop                      | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| CO <sub>2</sub> Secondary-Loop             | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| CO <sub>2</sub> Cascade                    | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| CO <sub>2</sub> Transcritical              | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| Other (please specify):                    | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |

3. REFRIGERANT TYPE AND CHARGE SIZE (complete the table below)

| EQUIPMENT TYPE                     | REMOTE-COMMERCIAL REFRIGERATION SYSTEM |                 | SELF-CONTAINED EQUIPMENT | HVAC-EQUIPMENT |
|------------------------------------|--|-----------------|--------------------------|----------------|
|                                    | MEDIUM-TEMPERATURE                     | LOW-TEMPERATURE |                          |                |
| Primary Refrigerant Type           |  |                 |                          |                |
| Primary Refrigerant Charge (lbs)   |  |                 |                          |                |
| Secondary Refrigerant Type         |  |                 |                          |                |
| Secondary Refrigerant Charge (lbs) |  |                 |                          |                |

\*Including soda machines, vendor-supplied coolers, ice machines, refrigerators in deli areas, etc.

All information provided will be treated as confidential business information (CBI), as stipulated under Clean Air Act provisions, and will not be divulged either to other partners or publicly.

Fully operational requires that a store can provide actual emissions data for ideally 12 months.

\*\*Including "personal" AC in staff offices

4. TOTAL REMOTE-COMMERCIAL REFRIGERATION LOAD (MBTUS/HOUR):

DO NOT include the store's HVAC system (split systems or self-contained), self-contained refrigeration equipment, sub-cooling, heat-of-rejection, or pump heat.

5. AMOUNT OF HFC REFRIGERANT (LBS) EMITTED OVER THE LAST 12 MONTHS:

DO NOT include emissions from HVAC equipment or self-contained refrigeration equipment. If an HFC refrigerant is not used, this question may be left blank.

6. REQUIRED ATTACHMENTS CHECKLIST (if an HFC refrigerant is not used, Attachment C is not required)

- A. STORE'S REFRIGERATION SYSTEM LEGEND (SCHEDULE): A copy of the store's current refrigeration system legend (schedule) that lists the BTU output of all remote commercial refrigeration equipment.
- B. SUPPORTING DOCUMENTATION FOR REFRIGERANT CHARGE: A letter, signed by an authorized installation company representative, detailing the amount of refrigerant (lbs.) the commercial refrigeration system holds when properly charged. Due to possible leaks, invoices are not sufficient for verifying a system's charge.
- C. SUPPORTING DOCUMENTATION FOR HFC ANNUAL EMISSIONS OR EMISSIONS RATE: Documentation may include an emissions report from a store's leak tracking software.

7. SIGNATURE/CERTIFICATION BY AUTHORIZED COMPANY REPRESENTATIVE

Please have an authorized representative of the store seeking certification sign this application to attest that all information contained is true and correct.

Name: Title:

Telephone: Email:

Signature: Date:

8. CONTACT INFORMATION

Please provide contact information for a technical contact regarding the store certification application.

Name: Title:

Street Address:

City: State: Zip:

Telephone: Email:

For assistance on completing the form, please refer to the [GreenChill Store Certification Program Guidance](#). Please direct any questions and send completed forms and attachments to Tom Land ([Land.Tom@epa.gov](mailto:Land.Tom@epa.gov), 202-343-9185).

GreenChill reserves the right to deny store certification based on a company's Clean Air Act Title 6 enforcement issues.

If you do not receive an email confirming receipt of your application within 2 business days, please notify EPA.



## 7. SIGNATURE/CERTIFICATION BY AUTHORIZED COMPANY REPRESENTATIVE

Please have an authorized representative of the store seeking certification sign this application to attest that all information contained is true and correct.

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Email: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## 8. CONTACT INFORMATION

Please provide contact information for a technical contact regarding the store certification application.

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

For assistance on completing the form, please refer to the [GreenChill Store Certification Program Guidance](#). Please direct any questions and send completed forms and attachments to Tom Land ([Land.Tom@epa.gov](mailto:Land.Tom@epa.gov), 202-343-9185).<sup>3</sup>

***GreenChill reserves the right to deny store certification based on a company's Clean Air Act Title 6 enforcement issues***

*Note: When referring to any EPA Award, please include the year in which the award was received.*

End of document ■

<sup>3</sup> If you do not receive an email confirming receipt of your application within 2 business days, please notify EPA.



## ~Confidential Business Information~<sup>1</sup> Recertification of Food Retail Stores

GreenChill's Store Certification is valid for one year. At the end of your store's certification period, you may apply to have your store re-certified for an additional year. If your store is applying to re-qualify for GreenChill platinum-, gold-, or silver-level store certification, please answer the following questions about the store seeking re-certification.

**1. STORE NAME** (as you would like it to appear on the award certificate): \_\_\_\_\_  
 STORE #: \_\_\_\_\_ STREET ADDRESS: \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

**2. REFRIGERATION SYSTEM TYPE AND MANUFACTURER** (check one box for the medium temperature system and list the manufacture of that system, and check one box for the low temperature system and list the manufacturer of that system)

| SYSTEM TYPE                                | MEDIUM TEMPERATURE SYSTEM |              | LOW TEMPERATURE SYSTEM   |              |
|--|---------------------------|--------------|--------------------------|--------------|
|  | TYPE                      | MANUFACTURER | TYPE                     | MANUFACTURER |
| Centralized Direct Expansion Parallel Rack | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| Distributed Direct Expansion               | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| Glycol Secondary Loop                      | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| CO <sub>2</sub> Secondary Loop             | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| CO <sub>2</sub> Cascade                    | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| CO <sub>2</sub> Transcritical              | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |
| Other (please specify): _____              | <input type="checkbox"/>  |              | <input type="checkbox"/> |              |

<sup>1</sup> All information provided will be treated as confidential business information (CBI), as stipulated under Clean Air Act provisions, and will not be divulged either to other partners or publicly.

**3. REFRIGERANT TYPE AND CHARGE SIZE** (complete the table below)

| EQUIPMENT TYPE                     | REMOTE COMMERCIAL REFRIGERATION SYSTEM |                 | SELF-CONTAINED EQUIPMENT* | HVAC EQUIPMENT** |
|------------------------------------|--|-----------------|---------------------------|------------------|
|                                    | MEDIUM TEMPERATURE                     | LOW TEMPERATURE |                           |                  |
| Primary Refrigerant Type           |  |                 |                           |                  |
| Primary Refrigerant Charge (lbs)   |  |                 |                           |                  |
| Secondary Refrigerant Type         |  |                 |                           |                  |
| Secondary Refrigerant Charge (lbs) |  |                 |                           |                  |

\*Including soda machines, vendor supplied coolers, ice machines, refrigerators in deli areas, etc.  
 \*\*Including "personal" AC in staff offices

**4. CHANGE IN TOTAL REMOTE COMMERCIAL REFRIGERATION LOAD (MBTUS/HOUR) SINCE THE STORE'S LAST GREENCHILL CERTIFICATION?** NO  YES

If **YES**, record the store's total remote commercial refrigeration load (MBTUs/hour) below and attach a copy of the store's current refrigeration system legend (schedule) that lists the BTU output of all remote commercial refrigeration equipment.

TOTAL REMOTE COMMERCIAL REFRIGERATION LOAD (MBTUS/HOUR): \_\_\_\_\_

**DO NOT** include the store's HVAC system (split systems or self contained), self-contained refrigeration equipment, sub-cooling, heat of rejection, or pump heat.

**5. AMOUNT OF HFC REFRIGERANT (LBS) EMITTED OVER THE LAST 12 MONTHS:** \_\_\_\_\_

**DO NOT** include emissions from HVAC equipment or self-contained refrigeration equipment. If an HFC refrigerant is not used, this question may be left blank.

**SUPPORTING DOCUMENTATION FOR HFC ANNUAL EMISSIONS:** Documentation may include an emissions report generated from your store's leak tracking software, a refrigeration system status report, or a signed letter from your store's servicing/maintenance contractor confirming the quantity of refrigerant added to the system over the past year. If there have been zero leaks, a signed letter by the person/contractor responsible for tracking leaks is also acceptable. (If an HFC refrigerant is not used, supporting documentation for annual emissions is not required).

## 6. SIGNATURE/CERTIFICATION BY AUTHORIZED COMPANY REPRESENTATIVE

Please have an authorized representative of the store seeking certification sign this application to attest that all information contained is true and correct.

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Email: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## 7. CONTACT INFORMATION

Please provide contact information for a technical contact regarding the store certification application.

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

For assistance on completing the form, please refer to the [GreenChill Store Certification Program Guidance](#). Please direct any questions and send completed forms and attachments to Tom Land ([Land.Tom@epa.gov](mailto:Land.Tom@epa.gov), 202-343-9185).<sup>2</sup>

***GreenChill reserves the right to deny store certification based on a company's Clean Air Act Title 6 enforcement issues***

*Note: When referring to any EPA Award, please include the year in which the award was received.*

End of document ■

<sup>2</sup> If you do not receive an email confirming receipt of your application within 2 business days, please notify EPA.