

EPA & the Supermarket Industry: Partners in Ozone Layer Protection

EPA Partnership Programs

- More than 80 environmental partnership programs
- Voluntary participation
- **▶** No membership fee
- ▶ Non-regulatory
- ► Gives you a friendly face at the EPA
- ► True partnership attitude bundling?

Supermarket Refrigeration

- ► R-22 is primary refrigerant
 - ► Harms the ozone layer (ODP of .055)
 - ► Contributes to climate change (GWP of 1500)
 - ► Phase-out in 2010 of R-22 production for new equipment; Limited production allowed until 2020 to service existing refrigeration equipment
- DX systems are the dominant technology
 - ► Lg. refrigerant charges (ave. spmkt. = 4000 lbs.)
 - ► High leak rates (ave. 20-25% = about 1000 lbs. of refrigerant emitted PER SUPERMARKET per year)

GreenChill Advanced Refrigeration Partnership

- ► An EPA cooperative alliance with the supermarket industry
- Promotes the adoption of advanced refrigeration technologies, strategies, and practices
- Reduce charges & emissions of ozonedepleting substances (potent greenhouse gases)
- Help protect the ozone layer and protect against global warming

GreenChill Priorities

- Shift from DX systems to advanced refrigeration systems
- ► Shift from HCFC-22 to substitute refrigerants
- ▶ Promote reduced refrigerant charges
- Promote equipment leak tightness
 - ▶ At production
 - **▶** At installation
 - **▶** Preventative maintenance

Why advanced refrigeration technology?

- Montreal Protocol's goal is ozone layer recovery – reduces ozone-depleting substances (CFCs & HCFCs)
- Substitute refrigerants (HFCs) are ozonesafe, but they are greenhouse gases
- Leaking 1000 pounds of greenhouse gas instead of 1000 pounds of ozone-depleting gas is substituting one environmental disaster for another

GreenChill Supermarket Partners























bigg's.















GreenChill Supermarket Partners

- Acme Markets
- Albertsons Intermountain West
- Albertsons/Lucky Southern California
- bigg's
- Cub Foods
- Farm Fresh Food & Pharmacy
- Food Lion
- Giant Eagle
- **▶** Hannaford

- ▶ Harris Teeter
- Hornbacher's
- Jewel/Osco
- Price Chopper
- ► Publix
- Shaw's/Star Markets
- Shop 'n Save, St. Louis
- Shoppers Food & Pharmacy
- Supervalu Inc.
- Whole Foods

Advanced Refrigeration Systems <u>Manufacturers</u>

HUSSMANN®







A DOVER COMPANY

Chemical Manufacturing Partners

INEOS Fluor









Benefits of Joining GreenChill

- Benchmarking to evaluate progress
- Recognition for actions beyond regulatory requirements
- Build brand equity
- ► Tools to attain corporate environmental stewardship and sustainability goals
- Prepare for HCFC phaseout and other deadlines
- Access to latest information on state-of-the-art refrigeration technologies, alternative refrigerants, and best practices
- Networking & information sharing among partners

Supermarket Partner Responsibilities

- Commit to using only non-ozone-depleting refrigerants in both newly constructed stores and major remodels
- Report a baseline of corporate-wide refrigerant stocks and emissions
- Commit to an annual emissions reduction goal
- Develop a corporate Refrigerant Management Plan and emissions reduction strategy
- Report annual aggregate corporate-wide refrigerant stock and emissions

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