

EPA & the Supermarket Industry: Partners in Ozone Layer Protection

GreenChill Projects 2008

- Best practices
 - **▶** Retrofit guidelines
 - Advanced refrigeration technology guidelines
- Reporting/partner goals/benchmarking
 - ► Supermarket emissions data
 - ► Equipment manufacturer leak tightness
 - ► HCFC-22 reclamation
- ► Research
 - ► Energy efficiency theoretical study
 - **▶** Pilot projects
- ▶ Marketing/Recruiting

Retrofit Best Practice Guidelines

- Retrofits = most widespread strategy to prepare for HCFC-22 phaseout in existing stores
- Opportunity to reduce leaks
- GreenChill Retrofit Best Practices Guidelines
 - **▶** Leak tightness improvements during retrofits
 - Conversion checklists
 - ▶ Best practices for handling recovered HCFC-22
 - ▶ Case studies

Best Practices Guidelines Advanced Refrigeration Technology

- Describes and explains alternatives to conventional DX systems
- ► Factors to consider when selecting an advanced refrigeration option
- Best practices to reduce refrigerant charge
- ▶ Best practices for leak tightness at production and installation
- Service and maintenance best practices for leak tightness
- Case studies

Benchmarking to Measure Progress

- Compare leak rates to previous years
- Compare leak rates to GreenChill average
- ► Compare leak rates to nationwide average

Equipment Manufacturing Partner Data Reporting

- ► Equipment leak tightness at production
- Equipment leak tightness at installation
- Shipments of DX systems vs. advanced refrigeration systems
- Refrigerant used in all refrigeration systems shipped

Chemical Manufacturing Partner Data Reporting

- Baseline year and annual reporting of supermarket HCFC-22 and HFC recovery and reclamation
- Annual goal to increase supermarket HCFC-22 and HFC recovery and reclamation
 - ► Best practices for recovery and reclamation
 - ► Chemical manufacturer "Corporate Recovery & Reclamation Plan"
 - ► HCFC-22 end-of-life guidelines
 - Safety information

HCFC-22 Reclamation

- ▶ Increase R-22 and HFC reclamation
- Best practices for recovery
- Best practices for reclamation
- ► Chemical manufacturer "corporate recovery & reclamation plan"
- R-22 end-of-life guidelines
- Safety information

Energy Efficiency Theoretical Study

- Hurdle: supermarket industry fears advanced refrigeration technology uses more energy
- ► EPA theoretical study compared energy consumption of advanced refrigeration technologies to baseline DX technology
- Draft to be peer reviewed
- ► Publication as EPA document later in 2008

Contact Information

▶ Keilly Witman

Stratospheric Protection Division, US EPA

Tel: (202) 343-9742

witman.keilly@epa.gov

