



Regulatory Updates: Alternatives and Emissions Reductions



**ATMOSphere America Conference
June 19, 2013**

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Regulatory Update:

- HCFC Phaseout regulations
- Labeling requirements
- Venting prohibition
- SNAP

HCFC Phaseout



- Goal = gradually transition away from HCFCs
 - Predominant HCFC being phased out is HCFC-22
- HCFC-22 Phaseout Schedule:
 - Jan. 1, 2010: Decreased allowed amount produced or imported for domestic use; banned installation of new systems and manufacture of pre-charged units and components
 - Recent rule reduced 2012-2014 allocation by 30% compared to earlier rule that was partially vacated by courts
 - Jan. 1, 2015: Allowed production & import will be at least 45% below 2010 level
 - Proposed rule for 2015-2019 currently under development
 - Jan. 1, 2020: Phaseout of all production and import of HCFC-22
 - Virgin material imported or produced domestically before Jan. 1, 2020 can still be used until 2030
 - Used, recovered and recycled material can still be used

HCFC Product Labeling



- As of Jan. 1, 2015, any product manufactured with or containing an HCFC must be labeled:
 - WARNING: [Contains / Manufactured with] [name of HCFC], a substance which harms public health and environment by destroying ozone in the upper atmosphere
- Affects imported as well as domestically-produced products
 - Examples of “products containing” an HCFC include:
 - Products containing closed cell foam blown with an HCFC
 - Technical aerosol sprays
 - Fire extinguishers
 - Examples of “products manufactured with” an HCFC include:
 - Products cleaned with an HCFC-based solvent
 - Products sterilized with an HCFC-based sterilant

608 Venting Prohibition



- EPA proposed to exempt from the “no venting” prohibition:
 - isobutane (R–600a) and R–441A, which were listed as acceptable subject to use conditions in household refrigerators, freezers, and combination refrigerators and freezers, and
 - propane (R–290), which was listed as acceptable, subject to use conditions, as a refrigerant substitute in retail food refrigerators and freezers (stand-alone units only)
- Comment period closed last week
 - EPA evaluating comments

Identifying Safer Alternatives



- U.S. EPA evaluates substitutes that reduce **overall** risk to human health & environment
- Significant New Alternatives Policy (SNAP) Program
400+ substitute alternatives with lower overall risks considering:
 - ODP & GWP, flammability, toxicity, local air quality, aquatic effects, worker/consumer health & safety
 - Next generation alternatives for ODS & HFCs



Listing New Alternatives:

- June 2012: R-744 for MVACs acceptable with use conditions
- August 2012: CO2 for vending machines, Solstice - 1233zd for foams, chillers; HFO-1234ze for chillers for foams, chillers
- December 2012: two fire suppression alternatives
- February 2013: third fire suppression alternative
- March 2013: listed additional substitutes for solvent cleaning, adhesives, coatings, fire suppression, spray and XPS foams, retrofit refrigerant

Other SNAP Activities



- Initiated SNAP/Vintaging Model Stakeholder meetings
 - Aerosols April 2013
 - Foams May 2013
 - Scheduling commercial/industrial air-conditioning, household appliances, commercial refrigeration between July and October 2013
- 15-20 active submissions under review
 - Fluorinated and non-fluorinated alternatives
 - Many are new molecules
 - Lower GWP foam blowing agents, refrigerants, solvents

Final Thoughts



- U.S. Approach Combines:
 - Robust licensing system
 - Prohibitions on certain uses
 - Refrigerant Management: recover, recycle or reclaim, and reuse
 - Identifying Alternatives
 - Work collaboratively with Partners

For Additional Information



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