



# *Current and Emerging Topics in US MAC Policy*

Karen Thundiyil

United States Environmental Protection Agency  
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# *Agenda*

**1. SNAP Review of Alternatives**

**2. Alternative Refrigerant Servicing**

**3. Section 609 Update**

**4. On the Horizon**



## *SNAP Review of Alternatives*

- Await final decision on CO<sub>2</sub> and HFC-152a
- Published proposal in 2006
- Received comment during public comment period



# *SNAP HFC-152a & CO<sub>2</sub> Proposal*

- New HFC-152a MAC systems acceptable with the use condition that systems are designed to avoid occupant exposure to concentrations above 3.7% for more than 15 seconds in the passenger cabin free space
- New CO<sub>2</sub> MAC systems acceptable with the use condition that systems are designed to avoid occupant exposure to concentrations above the CO<sub>2</sub> short term exposure limit (STEL) of 3% averaged over 15 minutes in the passenger cabin free space



## *Public Comment on Proposal*

- Use conditions
  - Free space vs. driver breathing zone
  - Ignition on/off?
- CFD modeling
- New SAE standards
- Risk mitigation strategies
- Final rule: under review at White House/Office of Management and Budget



## *SNAP Review of Alternatives*

- Have not received a complete submission for a low GWP refrigerant
- New chemical alternatives must undergo review under both section 612 and section 5 of Toxic Substances Control Act (TSCA) – Premanufacture Notice (PMN) Program



## *SNAP Review of Alternatives*

- Once a complete submission is received, SNAP has 90 days to make a determination
- As with HFC-152a, approval of any flammable substitute requires a rulemaking because all flammable substitutes are prohibited in new & retrofit MACs



## *Provisions for Servicing of Alternatives*

- Intend to reference SAE service standards that are currently under development
  - CO<sub>2</sub> charging
  - HFC-152a recycling and recovery
- Venting of CO<sub>2</sub>
- Expect to reference appropriate SAE standards



## *Section 609 Update*

- Updated reference to Section 609 approved refrigerant handling machines
- New machines provide 10 – 30% improvement in refrigerant recovery
- Grandfathered previously certified machines
- Old machines can be sold, as long as manufactured before January 1, 2008
- HFC-134a recovery only – on the way



## *Section 609 Activities*

- Coordination with California on *Early Action* HFC activities
- RIA Update
  - Reviewing impact of current regulatory requirements and any future updates
  - Updating assumptions to best available information, particularly the SAE I-MAC CRP



# *On the Horizon*

- Review of SNAP MVAC acceptable list
- Update Section 609 technician training & testing
- Provisions for new low GWP refrigerant servicing



*Thank you!*

For further information:

Karen Thundiyil  
[thundiyil.karen@epa.gov](mailto:thundiyil.karen@epa.gov)