Use Existing Regulatory Tools

• Opacity standards - Several states have been enforcing state opacity standards, primarily for commercial applications

• Pre-existing regulations
  – Washington state regulates solid fuel heater less than one million btu’s = emission <4.5 g/hr
  – Maryland – illegal to use solid fuel units for heating <17 million btu’s
  – New Jersey – no VE for indirect heating units
Setback and Stack Height Regulations

• Several states have instituted setback and stack height requirements
• Rules have not been effective at addressing the issue and are resource intensive to implement and enforce
• Issues with uniformly requiring increased stack heights.
Emission Standards

• Vermont finalized rule
  – 0.44 lb/mmBtu effective March 31, 2008
  – Directs promulgation of 0.32 lb/mmBtu heat output by April 2008

• Maine legislature approved regulatory authority – draft regulation proposed

• Many municipalities in the Northeast have banned/regulated the use of OWBs.
  – http://www.generalcode.com/Samples/06Spr_1.html
NESCAUM Model Rule

• Model rule broad document but identified key areas where states should strive to maintain consistency

• Critical elements include:
  – Critical Definitions – what type of units to include
  – Emission limits – move toward the Phase II goal of 0.32 lb/mmBTU heat output
  – Test method procedure – common EPA referenced test method to determine emission rates. EPA has been posted method and validating this spring
  – Certification process – EPA leveraging ETV program to verify independent lab test results
  – Labeling requirements – common requirements for hangtags & labeling
Goal of NESCAUM Model Rule

- Adoption of common emissions standards/regulatory elements will push manufacturers to make cleaner units and ease compliance burden

- Place compliance burden on distributors and manufacturers rather than homeowners

- Likely that some manufacturers may challenge states regulations

- If states do not adopt emission standards likely that current generation of units will continue to be sold and may result in enforcement issues related to transport of units across state lines
Phase I Emission Limit

• 0.44 lb/mmBtu heat input
  - Same emission standard for residential and commercial units
• 500 foot setback and stack height requirements
• March 31, 2008 Compliance date
• Technical basis – technology transfer standard – this is the same lb/mmbtu rate that 85% of the current generation RWD meets.
• Modeling indicates that Phase I emission standard will cause exceedences locally*
• Several units commercially available likely to meet this standard

*modeling could not model worst case terrain condition = valley, slow wind speed, elevated receptors
Phase II Emission Limit

- Residential emission limit:
  - 0.32 lb/mmBtu heat output with no individual test run shall exceed 15 grams per hour.
  - No setback requirement
- Commercial emission limit
  - 0.32 lb/mmBtu heat output with no individual test run shall exceed 20 grams per hour.
  - Setback requirement: 300 feet or more from a property line and stack 5 feet higher than the peak of any structure within 150 feet
- Compliance date – March 31, 2010
- Technical basis – local compliance with NAAQS - technology forcing standard
- Modeling indicates that Phase II will not cause exceedences locally* = max impact 30 ug/m3
- One unit commercially available can meet this standard

*could not model worst case terrain condition = valley, slow wind speed, elevated receptors
Existing Units

- **Option 1 - Option A - Time Limit Removal Program**
  - Requires removal or rendering inoperable all non-certified outdoor hydronic heaters within the State by a certain date.

- **Option 2 - Prior Sale or Transfer of Real Property**
  - Prior to the completion or consummation of a sale or transfer of any real property, all existing non-certified outdoor hydronic heaters must be replaced, removed, or rendered permanently inoperable.

- **Option 3 – Setback and Stack Height Requirement for Installed Units**
  - All non-certified outdoor hydronic heaters within the State must be located more than 500 ft from the property line and have a stack 5 ft taller than any structure within 150 ft of the unit or be removed by a certain date.

- **Option 4 – Do Nothing**