



Residential Wood Smoke Reduction Initiative

"Real air emission reductions for real people"

Residential Wood Smoke Workshop March 9, 2006

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What I will cover:

- Major Components
 - Focus: Great American Woodstove Changeout
- Progress to date



What Is EPA's Voluntary Residential Wood Smoke Reduction Initiative?

Major components

- Great American Woodstove Changeout Campaign (Main focus)
- "Burn Clean" National Education and Outreach Campaign
- Supporting Efforts to Address Emissions from Fireplaces and Outdoor Wood Boilers



What is a Woodstove Changeout Campaign?

 A voluntary, incentive-based (cash rebates) effort to encourage owners of old, inefficient woodstoves to replace or "changeout" their stove with a cleaner burning hearth appliance,

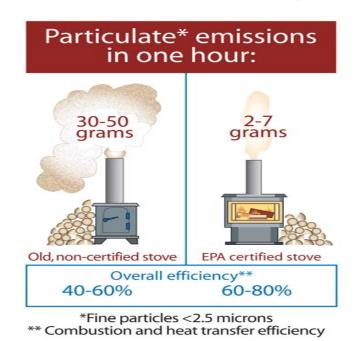
like:

- Gas stoves
- Wood pellet stoves
- EPA-Certified wood stoves



Woodstove Changeouts: The Opportunity...

- 10 million stoves in use, 7.5 million old stoves
- Cleaner burning, more efficient technologies available
- Can measure the benefits, <\$2,000/ton of PM2.5</p>



Graphic adapted from California EPA publication. *EPA is planning to conduct further research on pre-NSPS woodstove emission estimates. As such, these emission estimates may change.

Old New

Old "Conventional" Woodstove (built before 1990)



Advanced Woodstoves (EPA Certified – built after '90)





Slide from Wood Heat Organization Inc







4 Elements of the National Woodstove Changeout Campaign:

- Raise awareness/focusing national attention
 - Implementing Pilots (Libby, MT & SW PA)
- Develop partnerships/fostering collaboration
 - ALA, DOE, HUD, Chimney Sweeps, Home Inspectors
- Target specific areas/being opportunistic
 - PM2.5 non-attainment, funding availability
- Provide tools to help S/L/T begin programs
 - Outreach materials, funding options, health/cost benefits info



Libby, MT kick-off (June, 05)



- Goal: Replace 1200 stoves by 2007
- \$1 Million donated by industry, \$100K from EPA, \$50K state
- \$1 Million Congressional earmark
- Phase I, low-income ~150 stoves installed
- Phase II, 470 applications received to date

of the last

- SW Pa kick-off (Sept., 05)
 - \$100K EPA grant to help fund changeouts for low income
 - \$80K from Allegheny County
 - \$470M in health benefits if all 30,000 old stoves were changed out



Progress to date – Supplemental Environmental Projects

Several enforcement agreements negotiated to pay for clean stoves: Total ~ \$700K

2 in Washington State: Bellingham ~\$200K

2 in Ohio: Dayton ~\$75K, Marietta ~245K

■ 1 in VA: Christiansburg ~\$45K

1 in NM: Questa ~\$100K



Ongoing campaign or completed in 2005

- Libby, MT
- SW PA
- Washoe County, NV
- Butte County, CA
- Christiansburg, VA*
- Darrington, WA
- Whatcom/Island Co., WA*
- Swinomish Tribe, WA

- Questa, NM*
- Yakima, WA
- Delta County, CO*

^{*}Includes funding/stoves from settlement agreement



Woodstove Changeouts Are Happening!

Planning or expressed interest in 2006-07

- Greater Dayton, Ohio*
- Washington Co., OH*
- Sacramento, CA
- San Joaquin, CA
- Oakridge, OR
- Christiansburg, VA*
- Whatcom/Island Co., WA*
- Swinomish Tribe, WA
- Yakima, WA
- Libby, MT

- Greenville, SC
- Hagerstown, MD
- Central Washington
- Maine
- Rutland, VT
- New Jersey
- Minnesota
- Catawba Co., NC
- Oneida Nation, WI

Growing the Initiative: What is EPA doing?

Providing Tools for States/Local/Tribes:

- Wood Smoke Workshop/Training
- EPA Clean Burning Woodstove and Fireplace <u>Website</u>
- Woodstove Changeout "How to Guide" Website
- Woodstove Changeout Emissions Credit Guidance
- Options for Securing Funds
- Draft Woodstove Changeout SEP Handbook
 - PM 2.5 emission reduction benefits, cost effectiveness



EPA Demonstration Grants (FY 06):

 Hope to have funds available for demonstrations in 2-3 locations



- Enforcement Settlement Agreement Funds:
 - Marketing woodstove changeout as a cost effective tool for addressing PM2.5 and toxics emissions to regulators (6 settlements so far)
 - If we can demonstrate cost effectiveness and easy to do, potential for large \$
 - (e.g., Toyota \$20 million for diesel retrofits)

Growing the Initiative: What is EPA doing?

Develop new incentive ideas with stakeholders aimed at programmatic solutions for removing wood stoves.

- Home inspectors/realtors (safety)
- Utilities (Duke, Progress energy, Bonneville Power, TVA)
- HUD, Bureau of Indian Affairs and Tribes
- DOE Low-income Weatherization Program perfect fit for receiving settlement agreement and other funds



Residential Wood Smoke Reduction Initiative

Other components include:

- National Education and Outreach Campaign Partnership with HPBA, American Lung Association is critical
- Voluntary <u>Fireplace</u> Consensus Test Method and National Building Code
- Voluntary <u>Outdoor Wood-fired Hydronic Heaters</u> Consensus Test Method
- At this time we do not plan to revise the woodstove NSPS

Summary/Feedback

- There is a great deal of energy and support inside and outside EPA
- There are many facets and opportunities to the initiative
- We look forward in supporting and working with S/L/Ts in addressing wood smoke
- Questions, comments?

