

1 EPA's Office of Air Quality Planning and Standards Efforts being Considered for EPA Residential Wood Smoke Emissions Reduction Initiative

Background: The EPA's Office of Air Quality Planning and Standards (OAQPS) has recently begun a voluntary initiative to reduce emission from residential wood combustion (e.g., wood stoves, fireplaces and outdoor wood boilers). Major components of this voluntary initiative include:

- woodstove changeouts or retrofits
- fireplace upgrades or retrofits
- supporting the effort to develop a new ASTM standard that would encourage the use of more efficient fireplaces in new construction, and
- researching air quality impacts from and possibly developing strategies to address outdoor wood boilers/furnaces.

Our primary effort, particularly in our first phase, is to focus on facilitating the change out of old, dirty, "conventional" (pre-NSPS) wood stoves to new EPA certified stoves.

Wood Stove Change-out Campaigns - We plan to conduct model wood stove changeout campaigns in the greater Dayton and Pittsburgh areas in FY 05 and then grow the campaign in FY 06 and beyond, similar to the diesel retrofit program. We are also currently supporting a changeout campaign in Libby, MT where EPA Region 8 is the lead. We will likely continue to target our efforts in PM2.5 nonattainment areas, locations where there are short terms PM2.5 spikes due to wood burning, and in community-based air toxics program locations.

The EPA-certified wood stoves can emit 50-70% less pollution than old conventional wood stoves. We estimate that replacing 20 old wood stoves with 20 more energy efficient, less polluting EPA-certified stoves reduces PM2.5 by 1 ton and we get toxics (PAHs) benefits too. We believe there are approximately 10 million wood stoves in use at this time, and 90 percent of those are pre-NSPS stoves. The cost of one new stove, including installation can range a great deal. However, a basic model can be purchased and installed for approximately \$1000 - \$2000.

Contact: Larry Brockman, brockman.larry@epa.gov, 919-541-5398.

Fireplace / Wood Stove Website - This EPA site will provide consumers with information on health effects of wood smoke, benefits of using EPA-certified wood stoves, how to efficiently burn wood, safety issues related to operating hearth products in the home, etc. Additionally, the site will include information (e.g., how to implement a wood stove change-out campaign) for State, local, and tribal agencies and other organizations interested in reducing residential smoke. The website will include links to other useful existing websites and outreach materials. Contact: Maryann Warner, warner.maryann@epa.gov, 919-541-1192.

1 Wood Stove / Fireplace Community-Based Air Toxic Fact sheet – We are presently developing a one-page fact sheet for consumers that provides info on cleaner burning alternatives (e.g., EPA-certified stove), fuel use, and safety. We are also developing a

more detailed 4-5 page fact sheet geared toward State, local, and tribal agencies and other organizations interested in developing campaigns to reduce wood stove / fireplace emissions. Contact: Amanda Aldridge, aldridge.amanda@epa.gov, 919-541-5268.

Ready-to-go Media Outreach Package - The Media Package will likely include fact sheets, brochures, Frequently Asked Questions, radio PSAs, etc. EPA would distribute this information to State, local, and tribal communications officials and/or directly to the media for pre-wood stove / fireplace wood-burning seasons and pre/post-storm news. Contact: Larry Brockman, brockman.larry@epa.gov, 919-541-5398.

Fireplace Consensus Test Method - EPA, the HPBA, individual fireplace and wood stoves manufacturers, NSPS-accredited wood stoves testing laboratories, and others are participating via an ASTM (American Society for Testing and Materials) committee to develop a consensus test method for testing fireplace emissions. This effort was requested by the HPBA. EPA foresees that this effort would allow the potential development of a consensus emission standard and/or a National building code for fireplaces. EPA hopes that this ~3-year potential effort will eventually lead to significantly lower outdoor emissions, better indoor air quality, less energy consumption, and safer homes. Contact: Mike Toney, toney.mike@epa.gov, 919-541-5247.

Outdoor Wood Boilers/Furnaces – based on recommendations from EPA’s Office of Enforcement and Compliance Assurance, numerous states and NESCAUM we plan to look further into the magnitude of outdoor wood boiler (OWB) emissions. EPA Region 1 has recently issued a Section 114 letter regarding OWB, sales emissions, which should provide information to help determine next steps. The OAQPS and ORD are also participating in a new ASTM committee that is working to develop a consensus test method and potentially a consensus emission standard. Contact: Gil Wood, wood.gil@epa.gov, 919-541-5272.

"Green" Stoves Labeling Program - EPA is evaluating the feasibility and interest in developing a “green” wood stoves and/or outdoor wood furnace labeling program. We are communicating with various hearth products manufacturers and testing laboratories to determine how such a program could work. We have identified energy efficiency and emissions as two criteria to consider in developing such a campaign. This program would likely take several years to implement, if we move forward. Contact: Gil Wood, wood.gil@epa.gov, 919-541-5272.

Feedback – please feel free to contact the individual listed under various task with comments, questions or suggestions. If you have general questions or would like to like to act as a resource or participate in this effort contact Larry Brockman, the overall lead for this initiative.