The Great American Woodstove Changeout

Southwest PA Woodstove Changeout Program

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Southwest PA Woodstove Changeout Program

Who:

- **Southwest Pennsylvania Air Quality Partnership**
- **U.S. EPA**
- **Hearth Patio & Barbecue Association (HPBA)**
- **Allegheny County Health Department (ACHD)**
- **14 Woodstove Retailers**
- **PA Department Of Welfare and PA Department Of Health local WIC offices**

Southwest PA Woodstove Changeout Program

What:

- **EPA pilot project**
- **Changeout woodstoves or fireplace inserts. . .**
- **. . .to new cleaner woodstove, wood pellet, or natural gas**
- **Exchange only!**

Southwest PA Woodstove Changeout Program

Two track program:

- **Discount program for non-low income customers**

- **“Free” program for low income customers**
- **Focus of today’s discussion**

Southwest PA Woodstove Changeout Program

When:

- **Program kicked off September 29, 2005 with media event attended by EPA Regional Administrator**

- **Sept 29 through November 3, 2005**
  - **Discounts available**
  - **Applications for free stoves accepted**

Southwest PA Woodstove Changeout Program

Where:

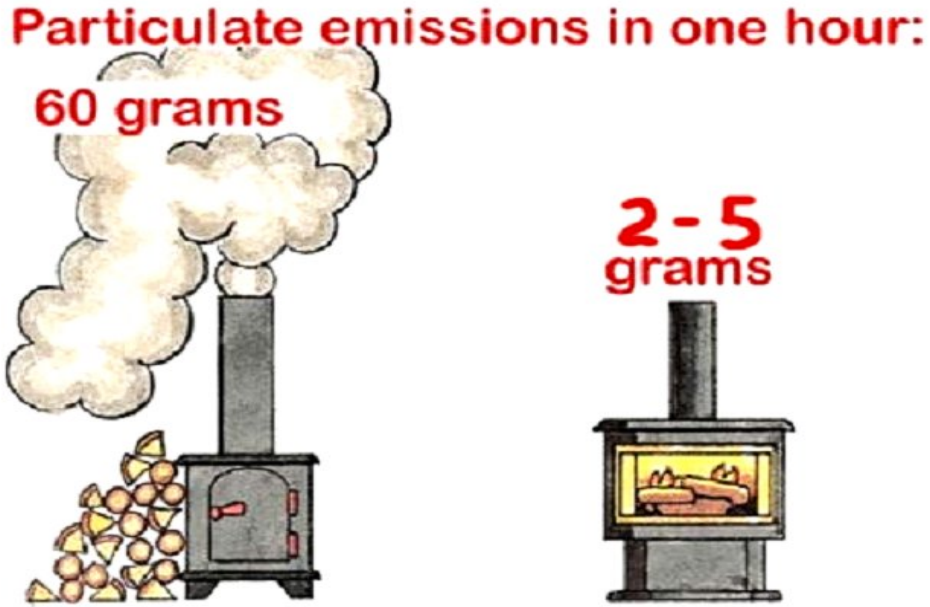
- **11 counties in SW Pennsylvania -**
- **Allegheny County (Pittsburgh) and 10 surrounding counties**
- **2.8 million people**
- **20,000 woodstoves & 20,000 fireplace inserts**
- **9000 homes use wood as primary heating fuel**

Why changeout

- **8-9 million old woodstoves in use nationwide**
- **80-90% are pre-NSPS (pre-1988)**
- **Wood smoke = 6% of total PM2.5 emissions**

Why changeout

- **Cleaner burning, more efficient technologies are available**
- **Changing out 20 old woodstoves will reduce 1 ton of PM2.5 per year**
- **New stoves use 1/3 less fire wood for same amount of heat**



Old New

Why changeout locally

- **Assist with EPA pilot study**
- **Wood smoke = 6% or 0.36µg/m3 of organic carbon in Pittsburgh (Carnegie Mellon study)**
- **PM2.5 non-attainment area – every little bit helps**

EPA Pilot Study

- Traditional changeout programs based on retailer rebate incentives and success limited by high cost of new stove

- **SW PA program to demonstrate a <u>new changeout model</u> for low income homeowners**

EPA Pilot Study

- SW PA to **leverage** $100,000 EPA grant to help purchase large number of new wood burning appliances for qualified low-income applicants

Goals

- **250 free woodstoves to low income applicants** ($500,000)

- 750 discounted woodstoves to others

Initial Financial Support

- **$100,000 EPA grant (intended to leverage additional local support)**
- **$80,000 local support through ACHD grant**
- **HPBA support through retailer discounts and manufacturer rebates (5-10%)**
- **In-kind support of ACHD, SW Air Quality Partnership and PA DEP.**

Low Income Program – Initial Challenges

- **Raising funds from foundations**
- **Identifying low income status**

Eventual Funding Realities

- No foundation funding acquired –
  - Started too late in year?
  - More interested if relate to children
- Allegheny County Health Dept. Clean Air Fund provides $80,000
- Initial government grants fund ~80 free woodstoves @ $2000 each

Low Income Determinations

- Applicants eligible if receiving assistance from any of four programs:
  - Food stamps
  - Medical assistance
  - LIHEAP
  - WIC
- PA Depts of Welfare & Health help with low income determinations

Kickoff Event

- Thursday, Sept 29, 2005 w/U.S. EPA Regional Administrator
- Working woodstoves displayed
- Media coverage – print, radio, TV

Public Response

- 3000 calls taken during 5 week program
- Calls overwhelm voice mail initially

Discount Program - Quick & Easy

- 5-10% discounts offered by retailers/manufacturers
- 95 woodstoves exchanged - most in October 2005, last one in Jan 2006
- Retailers shops were busy without the program
- Retailers suggested emphasizing the benefits of high efficiency stoves, i.e., less wood burned (saving money)

Low Income Program

- Remainder of today's presentation will cover low income "free" program

Low Income Program Mechanics

- Applicant visits welfare or WIC office to obtain ‘Certificate of Eligibility’
- Next visits participating retailer
- Retailer faxes certificate and copy of assistance program card (e.g. EBT or WIC card) to SPAQP (yours truly) to be put on list of applicants

Mechanics (continued)

- Retailer visits house to see existing stove and prepare estimate
- Retailer faxes estimate to SPAQP
- SPAQP authorizes job up to $2000
- Applicant decides whether to proceed including paying overage, if necessary

Low Income Program

- 137 low income applications received
- Installations proceeding - We are still addressing low income applicants
- Currently serving up to applicant number 128

Low Income Program

- Status through 128 applicants:
  - 75 ‘free’ woodstoves have been installed
  - 3 installations pending
  - 3 estimates from retailers pending
  - 47 applicants have dropped out of the program:

    21 declined to pay the overage

    18 did not have qualifying stove

    4 decided to keep existing stove

    6 could not be contacted or other reason

Litany of Program Difficulties

- Inability to develop any funding partners beyond EPA and ACHD, as discussed
- Higher than expected cost of woodstoves - $2000/stove did not cover entire cost of stove and installation

Difficulties (continued)

- Inadequate program public information
  - Some low income applicants did not understand the program required an “exchange”
  - Needed to emphasize $2000 limit per “free” stove
  - Needed to emphasize program applied to stoves and inserts only, not furnaces and heatilators
- Insufficient phone answering capacity and lack of pre-recorded message describing the program

Difficulties (continued) – Income Eligibility Determination

- Cumbersome low income eligibility determination
  - Applicants had to visit Welfare or WIC office to get “Certificate of Eligibility”
  - Some offices were not aware of the program or did not have forms
  - LIHEAP eligibility based on previous year
- Low income renters could acquire free stove for installation in non low income landlord’s property
- Retailers visiting houses report instances of conditions contradicting low income determination

Difficulties (continued)

- Difficult for retailers to determine if a “working” stove exists or just moved into the house to get a free unit

- Disputes w/applicants over definition of a qualifying stove. Should have pre-defined as-
  - Non-EPA certified, installed, working during last heating season, not a furnace, not a heatilator, not a coal stove
  - Not stoves in the garage or “gameroom”
  - Consider limiting eligibility to stoves that are the primary heat source
  - For stoves in mobile homes – retailers found stoves outside waiting to be moved inside for the winter, making it difficult to prove “existing” status

  Retailers sometimes put in difficult position of informing low income applicant that stove did not qualify

Difficulties (continued)

- Program required professional installation by retailer
- Installation costs could be up to $750
- Some low income applicants claimed the installation was simple enough for them to perform - frustrated and angered when they had to pay for overages large part resulting from installation fees

Difficulties (continued)

- Retailers sometimes found it impossible to stay under the $2000 allocation per stove – many applicants dropped out rather than pay overage
- Future programs need to define a “basic” low cost stove to meet the heating needs without any frills
- 50 – 75% of applicants needed new chimneys, ranging from $1000-$1500. Retailers needed more pricing flexibility to ensure safe installation.

Difficulties (continued)

- Program started in autumn when retailers were in their busy season
- 2005 –2006 Particularly busy year, stove shortages, long wait times for program customers

Difficulties (continued)

- Delay in availability of $80,000 in County funds caused 4 to 5 month delay in mid-2006
- When the program began installations again in autumn of 2006, many of the applicants contact information had changed
- Retailers began to drop out of the program in 2007 citing difficulty of meeting the $2000 allowance

Difficulties (continued)

- No revenue was generated from recycled stoves
- Not all recyclers were aware of the program

Recommendations

- Higher allowance per installation - $3000 instead of $2000
- Better means of income determination or more personnel to actually validate income eligibility
- Or a different approach using a trained cadre of installers providing a generic low cost stove.

Summary

- The complexity surrounding the actual installation of woodstoves and the care that must be exercised to ensure safe woodstoves installations, makes any woodstove exchange program more expensive than other types of exchange programs. Providing the exchanged woodstoves for “free” to low income applicants complicated this exchange program greatly and was very time consuming for the agency operating the program.

Contact Information

If you have any questions, please feel free to contact me.

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