# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WOODSTOVE EMISSIONS CERTIFICATION PROGRAM REVIEW

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# USEPA Woodstove Testing and Certification Program IS ALIVE AND WELL!!

# ELEMENTS OF THE EPA PROGRAM

### **TEST METHODS**

- Test Method for determining particulate emissions
- Method for classifying performance considering homeowner use patterns

### **CERTIFICATION PROGRAM**

- Mechanisms for assuring model line integrity
  - Manufacturers are required to maintain on-going QA/QC programs
  - EPA OVERSIGHT!!
  - Civil penalties for violations

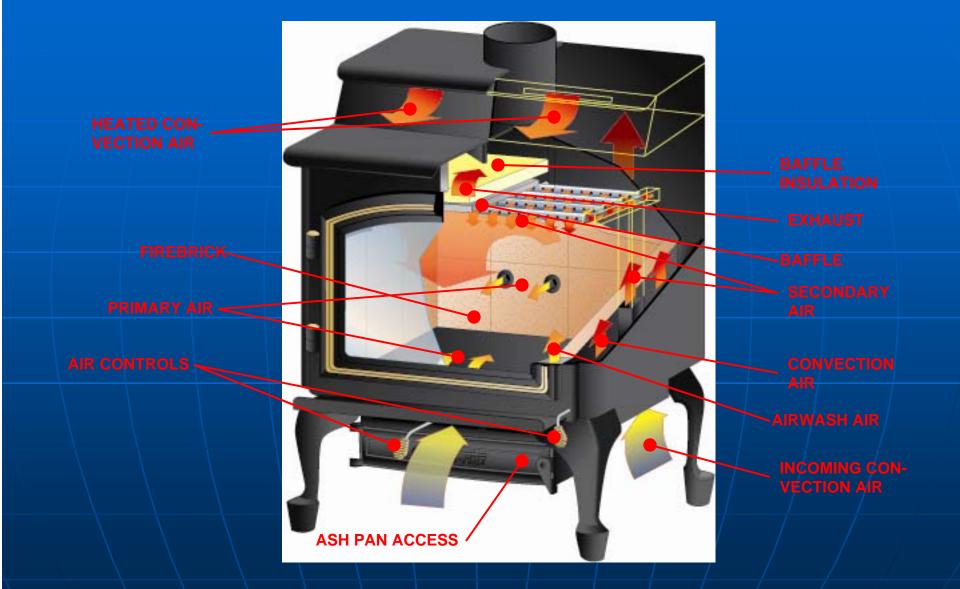
### BEST DEMONSTRATED TECHNOLOGY

- EPA Standard is based on two emission control technologies for cordwood stoves
  - Catalytic
  - Double-burn (Non-Cat)

 THERE ARE STILL TWO EMISSION CONTROL TECHNOLOGIES

- What has changed?
  - Manufacturers have learned how to optimize the technology
    - For example, approximately 2/3 of all currently certified double-burn (non-cat) stoves are below 4.5 g/hour
      - The average performance of those is ~ 3.4 g/hour
    - EPA estimates that 80% or more of non-cat stoves sold are below 4.5 g/hour
    - Virtually all the major stove models being sold today have been certified after 2000

### TYPICAL DOUBLE BURN (NON-CAT) STOVE



## CONCLUSIONS

- The EPA Wood Heater Certification Program is actively being used to regulate wood-burning products
- Woodstove technology has continuously improved and the emission performance of most stoves being sold is well below the current NSPS limits