Wood Stove Changeouts and SIPs

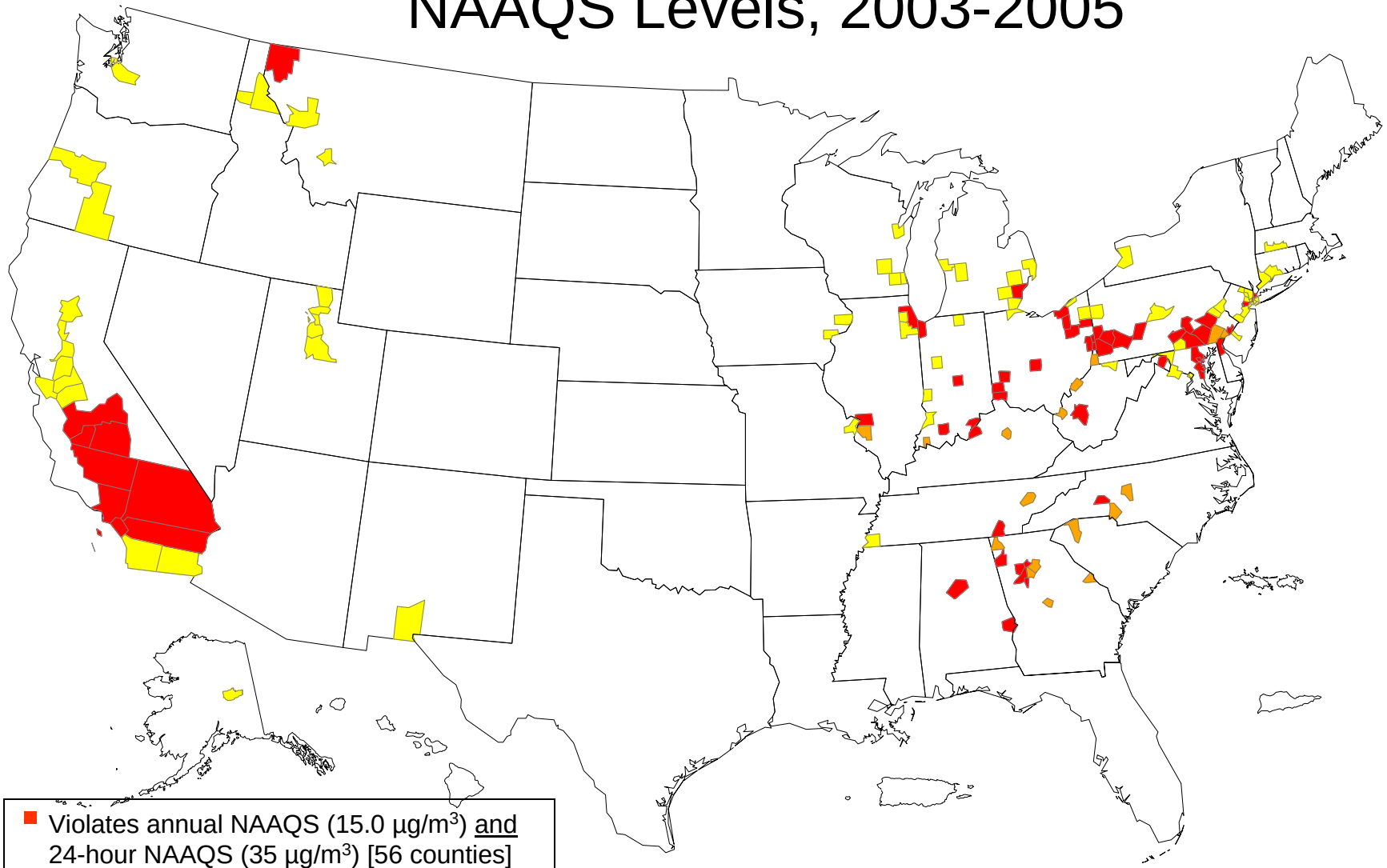
U.S. Environmental Protection Agency

Office of Air Quality Planning and Standards

Research Triangle Park, NC

www.epa.gov/woodstoves

Counties Exceeding New 24-hour NAAQS Levels, 2003-2005



- Violates annual NAAQS (15.0 µg/m^3) and 24-hour NAAQS (35 µg/m^3) [56 counties]
- Violates only 24-hour NAAQS (35 µg/m^3) [70 counties]
- Violates only annual NAAQS (15.0 µg/m^3) [17 counties]

- Data from AQS 7/10/2006
- Completeness criteria: 2006 CFR or 11+ samples per quarter

To Use Wood Smoke Emission Reductions in SIPs, they must be:

- **Quantifiable**
  - reliable, replicable measurement
- **Surplus**
  - not needed to meet other CAA air quality requirements and in the current inventory)
- **Federally Enforceable**
- **Permanent**
  - for the duration of your SIP

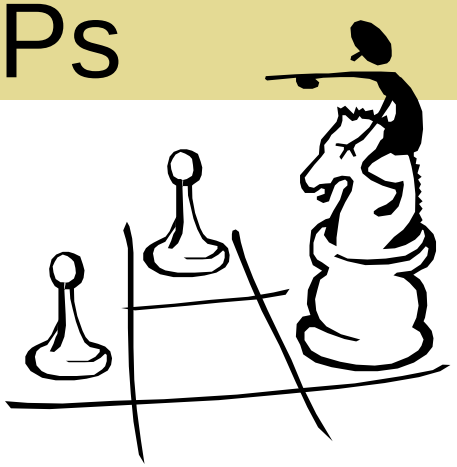
Other Considerations for the SIP

- Ensure EPA-certified stoves are professionally installed
  - Safe, efficient operation
  - Get the emission reduction desired
- Adequate, up-to-date emissions inventory of wood stove emissions
- Federally enforceable requirements for
  - State monitoring and recordkeeping
  - Remedy of emission shortfalls
- Meet all other SIP revision requirements of the CAA (sections 110, 172)

Monitoring/Recordkeeping must document:

- # of uncertified stoves surrendered
- Demonstration that stoves were either:
  - Located in the nonattainment/maintenance area
  - Contributed to nonattainment or adversely affected maintenance in that area
- Estimated emissions from:
  - uncertified stoves
  - clean-burning stoves that replaced the old stoves

Including Wood Stove Changeout Campaigns in SIPs

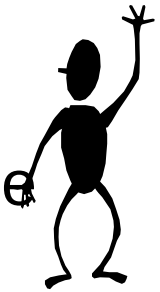


- Define your campaign
  - Location
  - Timing (period, # of years)
  - Objectives (emission reduction, # of stoves)
- Quantification of emission reductions
  - Approach outlined in EPA guidance
  - May use your own method*

EPA's Emerging & Voluntary Measures Policy (9/04)

Emerging Measures

- Emission reductions harder to quantify
- Allows trial of new approaches – w/ provisions to ensure attainment



Voluntary Measures

- Not directly enforceable against the source

For Both Types of Measures -

- State must evaluate to ensure reductions occur, and address shortfalls
- Reductions under this policy 'limited' to 6% of total reductions needed for attainment

Emerging & Voluntary Measures Policy May Not Apply to Changeouts

- Not emerging measure – emission quantification more certain
- Use of tax credits/rebates make program a "financial mechanism"
- Some changeouts add enforcable requirement (e.g., requiring stove replacement by statute)

For more information . . .

Guidance for Quantifying and Using Emission Reductions from Voluntary Woodstove Changeout Programs in State Implementation Plans (EPA-456/B-06-001, January 2006)

Download from:
http://www.epa.gov/woodstoves/pdfs/guidance_quantfying_jan.pdf

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