

Public Informational Meeting

Proposed Regulation 6-3 Wood-burning Devices

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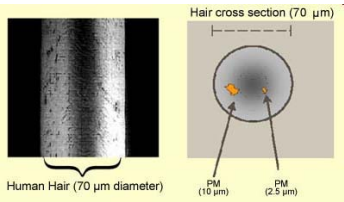
Overview

- Particulate Matter Air Pollution & Wood Smoke
- Air District Wood Smoke Reduction Efforts
 - Outreach & Spare the Air Tonight
 - Financial Incentives
 - Regulation
- Proposed Regulation 6-3 Wood-burning Devices
- Next Steps
- Questions and Answers

Slide 2

What is Particulate Matter?

- Particulate Matter (PM) is very small liquid and solid particles suspended in the air
- Small Particles are inhaled deep into the lungs



Human Hair (70 μm diameter)

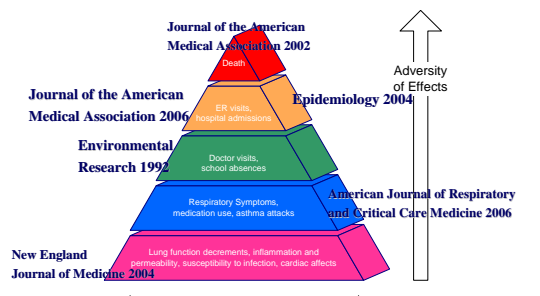
Hair cross section (70 μm)

PM (10 μm)

PM (2.5 μm)

Slide 3

Particulate Matter Pyramid of Health Effects



Journal of the American Medical Association 2002

Journal of the American Medical Association 2006

Environmental Research 1992

New England Journal of Medicine 2004

Epidemiology 2004

American Journal of Respiratory and Critical Care Medicine 2006

Adversity of Effects

Proportion of Population Affected

Slide 4


Wood Smoke Background

- Fine PM in the Bay Area is a serious Public Health concern
- New National Ambient Air Quality Standard for fine particulate $\text{PM}_{2.5}$ (65 $\mu\text{g}/\text{m}^3$ to 35 $\mu\text{g}/\text{m}^3$)
- The Bay Area exceeds that standard
 - Winter 2006: 20 days
 - Winter 2007: 7 days
- The largest contributor to Wintertime PM is Wood Smoke

Slide 5

Ambient $\text{PM}_{2.5}$

National 24-hr Standard 35 $\mu\text{g}/\text{m}^3$



Concord Dec '06

Slide 6

Locations over the EPA Standard

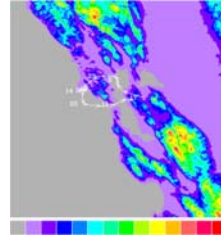
Station Location	Maximum 24-hr ($\mu\text{g}/\text{m}^3$)	Days over National Standard
NORTH COUNTIES		
Napa	43	6
Vallejo	44	16
COAST & CENTRAL BAY		
San Francisco	51	4
EASTERN DISTRICT		
Livermore	52	9
SOUTH CENTRAL BAY		
Redwood City	75	7
SANTA CLARA VALLEY		
San Jose	62	12
TOTAL DAYS		27

National Standard – 35 $\mu\text{g}/\text{m}^3$

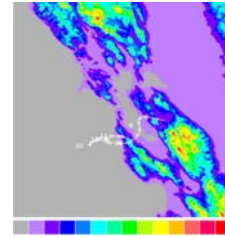
Slide 7

PM_{2.5} is a Regional Pollutant

48 Hr Reverse Trajectory Modeling Results* – Concord 1/25/07 5:00 PM

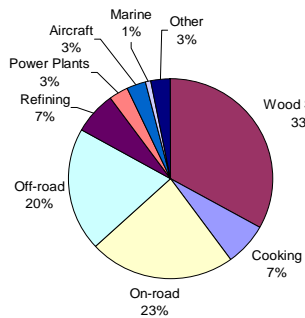


48 Hr Reverse Trajectory Modeling Results* – Livermore 1/25/07 5:00 PM



Slide 8

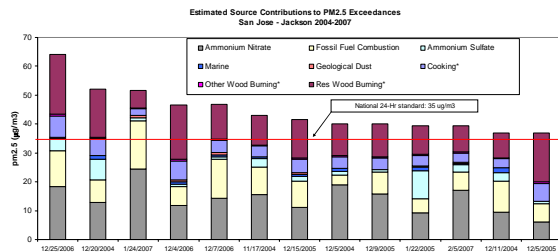
Wood Smoke and Winter PM_{2.5}



Wood Smoke is the Largest Contributor of Winter PM_{2.5}

Slide 9

Contributors to PM_{2.5} Excesses



*7 Highest Days, Distributions estimated from CMB & C-14, Wood Burning & Cooking adjusted by emission inventory estimates.

Slide 10

Wood Smoke Reduction Efforts

“Wood Smoke Reduction is as much about Outreach as it is a Regulatory Program”

- Outreach & Spare the Air Tonight
- Financial Incentives
- Regulation

Slide 11

Spare the Air Tonight

- Voluntary Program since 1991.
- On nights where air quality is unhealthy residents should limit burning.
- The Air District uses an educational program to inform public about health effects of wood smoke and how to reduce particulate pollution.

Slide 12

How can you find out if it's a Spare the Air Tonight?

- Listen to local radio & TV for notifications
- Call 1-800 HELP-AIR
- Sign up for AirAlerts to receive an e-mail or a cell phone text message
- Visit sparetheair.org and www.baaqmd.gov
- Please remember to:

Check Before You Burn

Slide 13

Financial Incentives

- Encourage bay area residents to switch to Cleaner Burning Technology.
- Targets fireplaces and older wood stoves and inserts (Non-EPA Certified) that are the dirtiest for switch to natural gas.
- Half a Million dollars given out by the Air District in two phases this winter.
- Will improve the program for next year.

Slide 14

Proposed Regulation

- Prohibit burning on nights with unhealthy air quality
- Limit smoke opacity from burning
- Require cleaner burning technology for new sale and resale
- Require cleaner burning technology in new construction
- Prohibit burning garbage in Wood-burning Devices
- Require labels on seasoned wood and solid fuel

Slide 15

How is the Air District going to Enforce this Regulation?

- Educate the Public of the Adverse Health Effects of Wood Smoke & the Rule
- Air District: Sole Enforcement Responsibility
- Warning Letter
 - Information on Adverse Health Effects
 - How to Avoid a Violation
- Citation for Repeat Violation

Slide 16

Rule Development Process

- 1st Draft Regulation & Public Workshops to receive public input November 2007
- Received comments
- Environmental Impact Report
- Revised draft Regulation & public meetings
- Prepare socio-economic analysis
- Prepare staff report and proposed regulation for adoption

Slide 17

Comments Received

- EPA-certified devices and pellet stoves should be allowed to burn during curtailments.
- Regional curtailment areas within the District.
- How is the District going to enforce a curtailment?
- How will the public know of a mandatory curtailment?

Slide 18

Response to Comments

- Added and clarified exemptions to focus on essential burning for space heating.
- Clarified a curtailment threshold/trigger.
- Clarified the requirements for seasoned wood.
- Removed masonry heaters as allowed devices.
- Clarified solid fuel labeling requirements.

Slide 19

Next Steps

- Informational Meetings through April
- Complete Environmental Impact Report
- Public Comment
 - EIR: Late April
 - Rule: 30-days before Public Hearing
- Public Hearing for adoption in mid 2008

Slide 20

Questions ?

Slide 21