



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

# Wood Smoke Reduction Strategy: Proposed Amendments to Regulation 6, Rule 3: Wood Burning Devices & Heating Device Upgrade Incentive Program

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Board of Directors Update

September 2, 2015



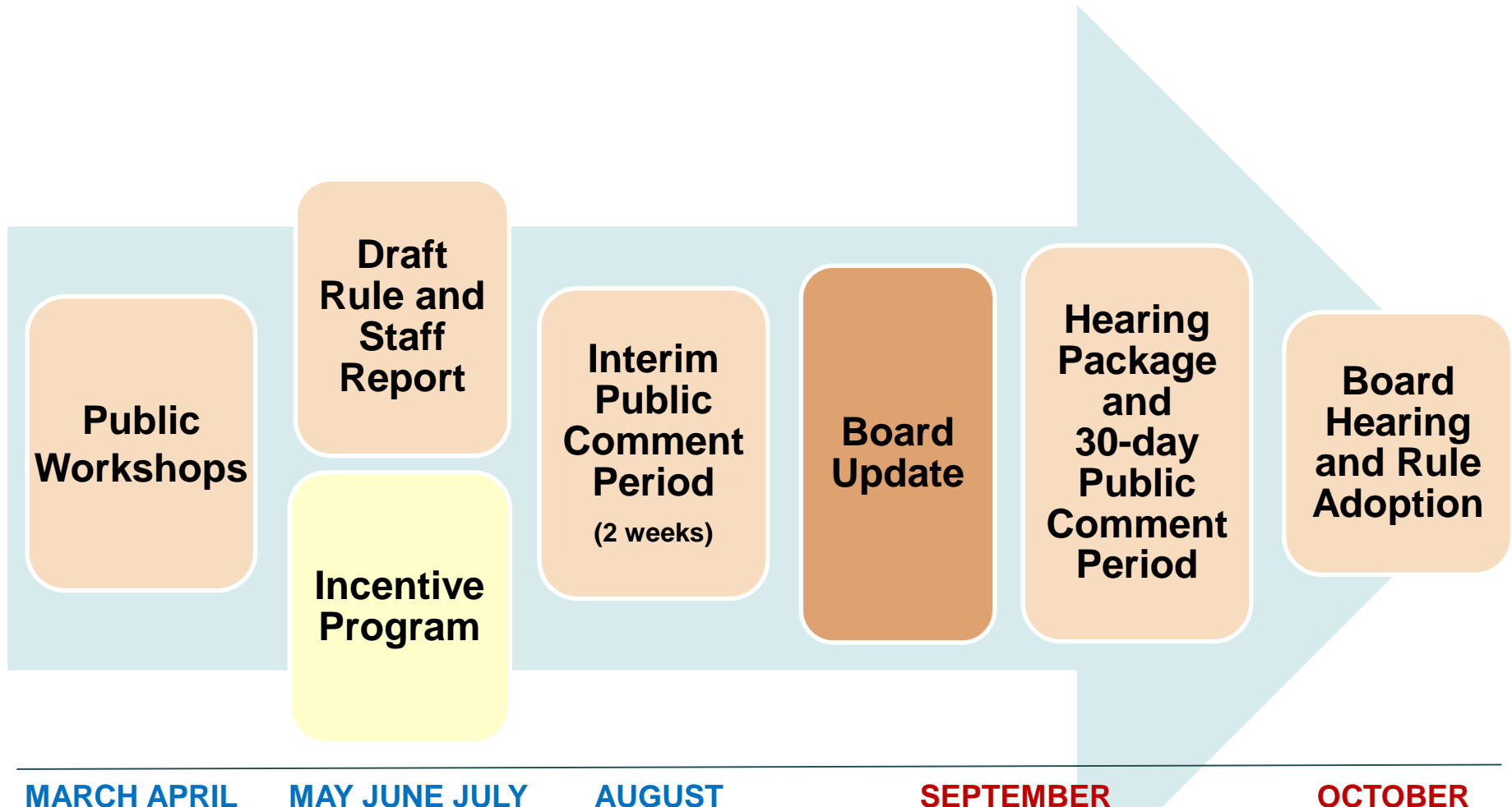
Wayne Kino, Director of Compliance & Enforcement  
Tracy Lee, Air Quality Specialist

# Regulation 6, Rule 3 Update



- Rule Amendment Timeline
- Wood Smoke Reduction Strategies
- Estimated PM2.5 Emission Reductions
- Summary of Proposed Amendments
- Incentive Program Overview
- Request Authorization for a Transfer of \$3 million

# Regulation 6, Rule 3 Rule Amendment Timeline





# Regulation 6, Rule 3 Wood Smoke Reduction Strategies

Regional  
Air  
Quality

Wood Smoke  
Reduction  
Strategies  
and Climate  
Impacts

Local  
Air  
Quality



# Regulation 6, Rule 3 Estimated $PM_{2.5}$ Emission Reductions

**$PM_{2.5}$  emissions  
reduced since 2008  
rule adoption:**

**~2660 tpy (+59%)**

**Projected  $PM_{2.5}$   
emission reductions  
with rule  
amendments:**

**~375 tpy\***

A background image showing the San Francisco skyline at night, with the city lights reflecting on the water. The title text is overlaid on the right side of the image.

# Regulation 6, Rule 3 Purpose of Amendments

- Clarify and strengthen requirements for claiming exemptions
- Update existing requirements and incorporate new regulatory standards
- Transition to cleaner and more efficient heaters



# Regulation 6, Rule 3 Strengthening Standards

- **New EPA Emission Standards for Wood Heaters**
  - Emission standards apply to wood heater manufacturers and retailers
- **Visible Emissions Limitation**
  - Standard consistent with Regulation 6, Rule 1: General Requirements for Sources of Particulate Matter
- **New Building Construction**
  - No solid fuel or wood-burning devices



# Regulation 6, Rule 3 Strengthening Standards Cont'd

- **Real Estate and Rental Disclosures**
  - Documents to disclose health hazards of PM<sub>2.5</sub>
- **Fireplace or Chimney Remodel**
  - A remodel costing > \$15,000 and requires a local building permit
  - Requires a replacement to an EPA certified, gas-fueled or electric heating device
- **Rental Properties in Natural Gas Service Areas**
  - Requires installation of an alternate form of heat that does not burn wood





# Regulation 6, Rule 3 Narrowing Exemptions

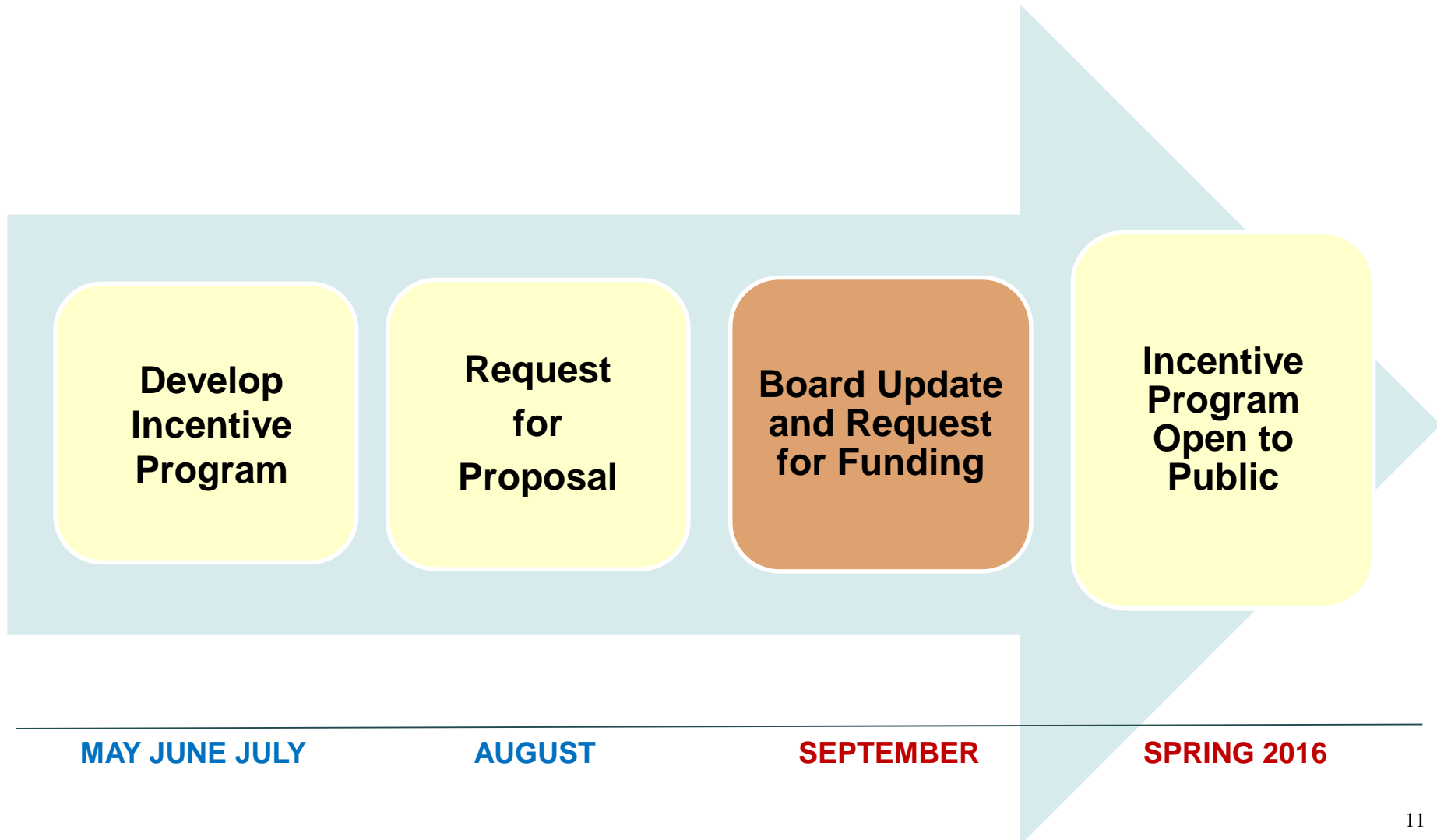
- **Non-functional, Permanently-Installed Heater**
  - Temporary 30-day exemption
  - Repair requirement
- **Loss of Natural Gas and/or Electric Power**
  - Natural disasters or utility service maintenance activities
- **Sole Source of Heat \* (310 tpy)**
  - Households with no alternate form of heat (i.e. no permanently-installed gas-fueled or electric heaters)
  - Must be an EPA certified device & registered with District



# Regulation 6, Rule 3 Proposed Effective Dates

Proposed Amendment	Proposed Effective Date
Exemption - Sole Source of Heat	Nov. 1, 2016
Exemption - Non-functional, Permanently Installed Heater	Nov. 1, 2015
Exemption - Loss of Natural Gas and/or Electric Power	Nov. 1, 2015
New EPA Emission Standards for Wood Heaters	2015 & 2020 (per NSPS requirements)
Visible Emissions Limitation	Nov. 1, 2015
Real Estate and Rental Disclosure	Nov. 1, 2015
Fireplace or Chimney Remodel	Nov. 1, 2016
New Building Construction	Nov. 1, 2016
Rental Properties in Natural Gas Service Areas	Nov. 1, 2018

# Regulation 6, Rule 3 Incentive Program Timeline



# Overview of Incentive Program



- \$3M commitment to cleaner, efficient heating devices
- Assistance for up to 1,600 households
- Incentive Program Design
  - Baseline Funding
  - Enhanced Funding



# Incentive Program Funding

## **\$3 Million Program Funding**

- Device Type Allocation (60%)
  - Heat Pump
  - Natural Gas/ Propane Device
  - EPA Certified Wood-burning Device
- Enhanced Funding Allocation (27%)
  - Low-Income Household
  - Sole Source of Heat Household
  - High Wood Smoke Impacted Area
- Program Administration (13%)

# Gas-fueled and Electric Heating Devices



# Wood-Burning Devices





# Incentive Program Funding Categories

<b>Device</b>	<b>Estimated Cost</b>	<b>Incentive</b>
Heat Pump	\$4,000-12,000	\$2,500 - \$3,500
Gas Furnace	\$4,500-10,000	\$2,000 - \$3,000
Gas-fueled Stove/Insert (Natural Gas or Propane)	\$3,500-5,000	\$500 - \$1,000
EPA Certified Wood-burning	\$2,500-5,500	\$0 - \$500

## **Enhanced Funding for Selected Groups**

Low-Income Household	\$2,500 - \$3,500
Sole Source of Heat Household	\$1,000 - \$1,500
High Wood Smoke Area	\$1,000 - \$1,500



# Program Administration



- Request for Proposals (RFP)
- 2 Qualified Bidders
- Cost limited to less than 13% of available program funds



# Wood Smoke Reduction Strategy Discussion Items

- 1) General Direction on Wood Smoke Strategy
- 2) Strategy on Sole Source of Heat Exemption
- 3) Strategy on “High Wood Smoke Impact Areas”



# Wood Smoke Reduction Strategy Discussion Items

## 1) General Direction on Wood Smoke Strategy

- Incentive program funding (\$3 million)
  - Request authorization of a transfer of \$3 million from reserves to Program 402, Professional Services
- Outsource Incentive Program administration
- Balance between proposed rule amendments and Incentive Program



# Wood Smoke Reduction Strategy Discussion Items

## 2) Strategy on Sole Source of Heat Exemption (Estimated PM<sub>2.5</sub> Emission Reduction – 310 Tons/Year)

### Regulatory Program

- Do not require EPA-certified wood burning devices
- Require EPA-certified wood burning devices
- Require EPA-certified wood burning devices that meet the year 2020 standard

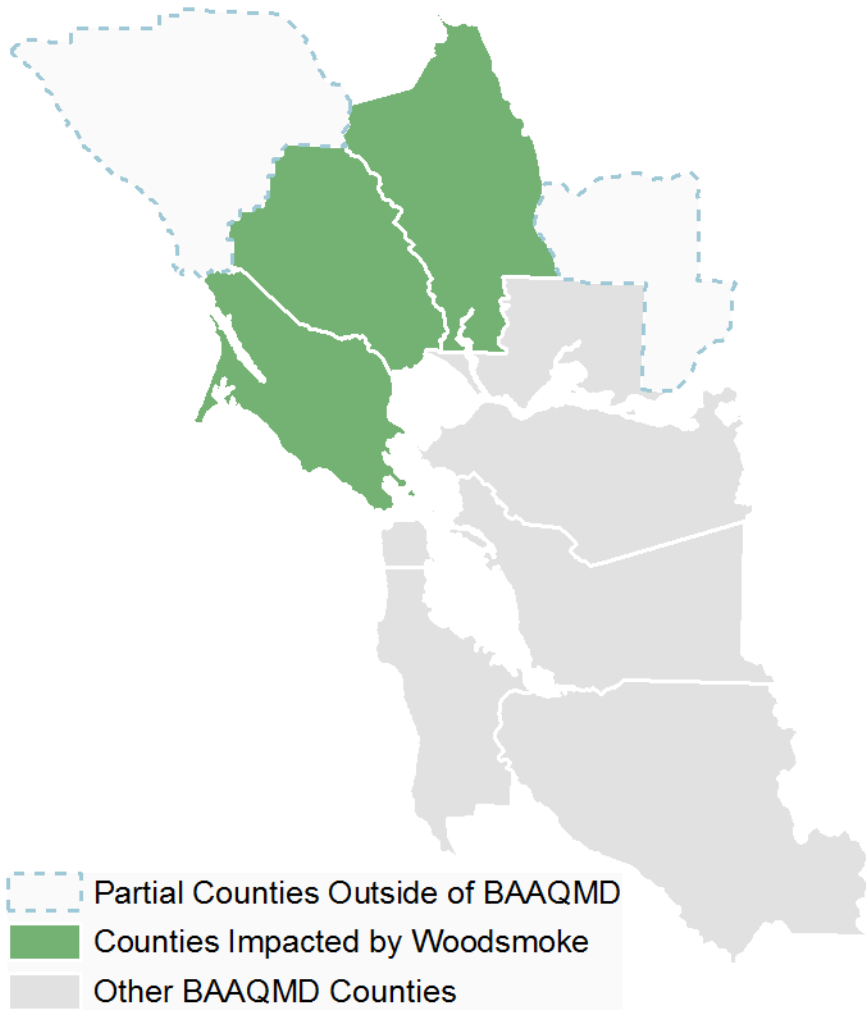
### Incentive Program

- Provide incentives to change out uncertified wood-burning devices to EPA-certified wood burning devices
- No incentives to change out wood-burning devices



# Strategy on High Wood Smoke Impact Areas

## Discussion Items



### 3) High Wood Smoke Impact Areas

- Require EPA Certified Wood-Burning Devices
- Require EPA Certified Wood Burning Devices with Incentives
- Only Provide Incentives and No Requirements to Replace Device