

BAY AREA AIR QUALITY MANAGEMENT DISTRICT



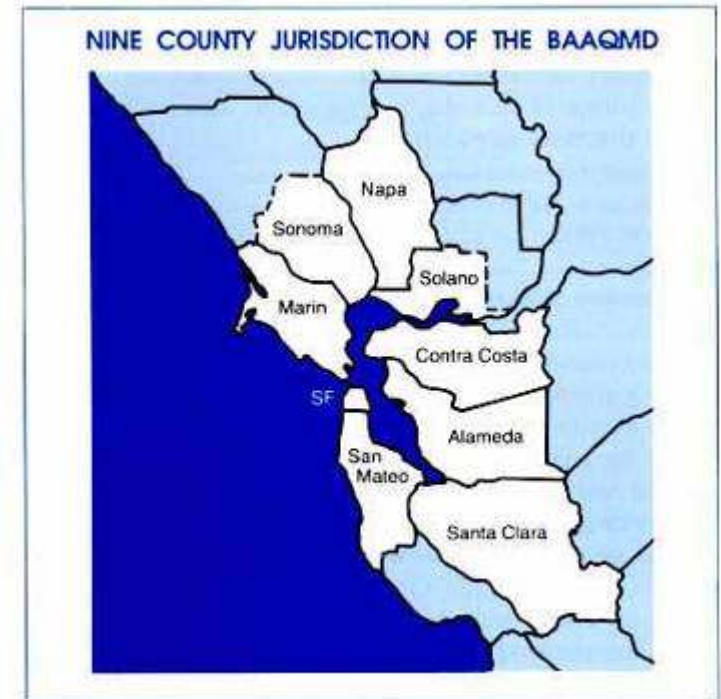
Public Workshop

April 2009



# Workshop Objectives

- Report on implementation of 2005 Ozone Strategy
- Provide update re: control measure review process
- Introduce draft 2009 Clean Air Plan framework
- Discuss preliminary control measures identified to date
- Get feedback and suggestions
- Future steps and timeline





## Implementation of 2005 Ozone Strategy

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38 control measures:

- 15 Stationary Sources Measures
- 4 Mobile Source Measures
- 19 Transportation Control Measures

plus

- 20 Further Study Measures

See implementation progress handout



# 2005 Strategy Implementation Highlights

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- Action taken on each of the 58 measures in the 2005 Ozone Strategy
- Measures in the 2005 plan have either been:
  - Adopted (13)
  - In development / under review (including FSMs) (14)
  - Rejected (4)
  - Addressed through implementation of programs & incentive funding to projects completed or ongoing (27)
- BAAQMD also pursued actions not listed in the plan; e.g. adoption of wood smoke rule (July 2008)



## Purpose of 2009 Clean Air Plan

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Develop integrated **multi-pollutant** plan to:

- **Improve air quality**
- **Protect public health**
- **Protect our climate & ecosystems**
- Update 2005 Ozone Strategy per state law
- Reduce transport to neighboring air basins



# Multi-Pollutant Scope

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- Existing approach: address each pollutant separately
- CAP: tackle multiple pollutants in one integrated plan
  - Ozone precursors
  - Particulate Matter (PM)
  - Air Toxics
  - Greenhouse gases: CO<sub>2</sub>, methane, etc.
- Many measures reduce multiple pollutants
  - maximize co-benefits
  - identify and minimize trade-offs



# Control Measure Review

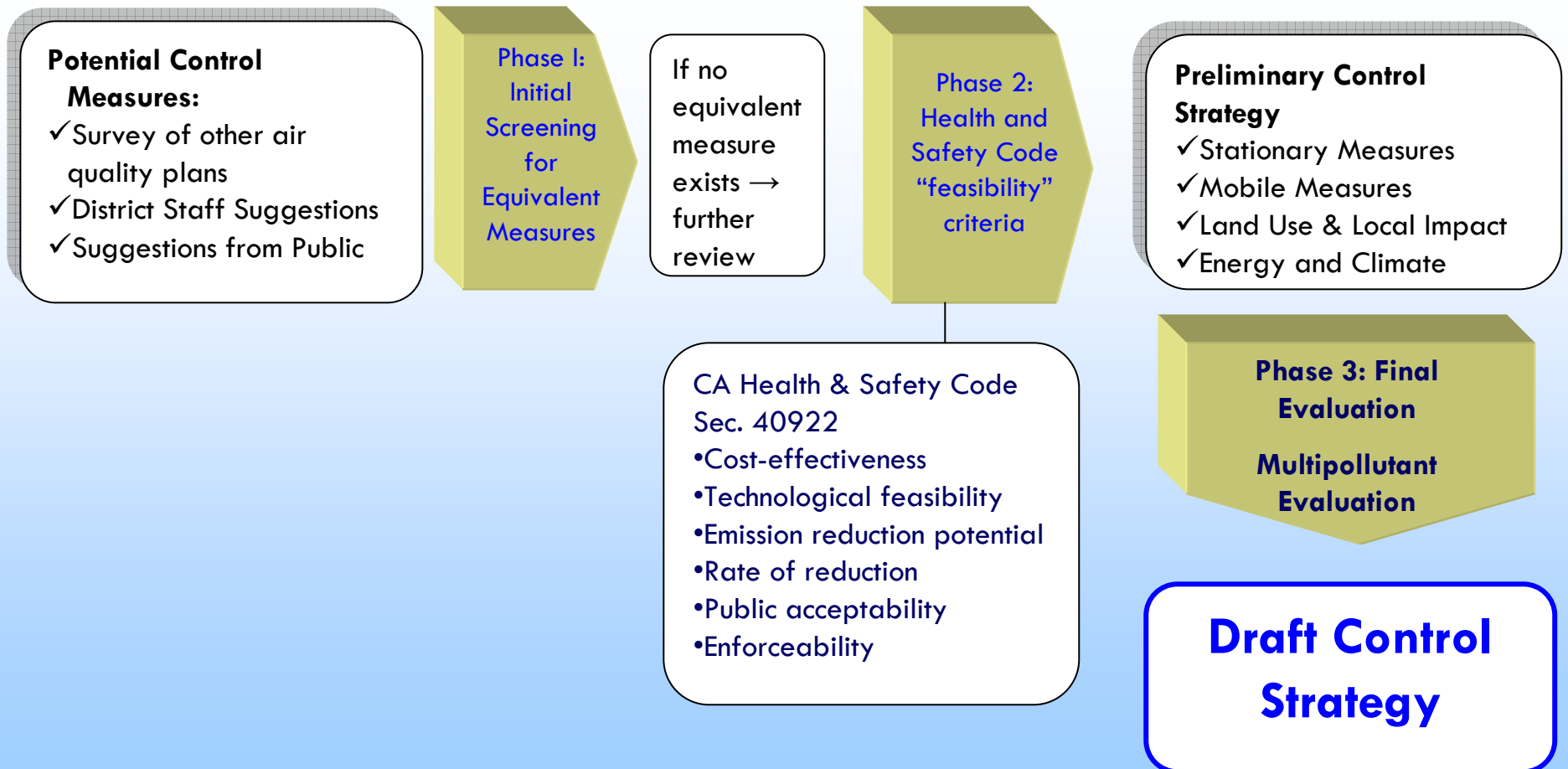
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## Key steps:

- Identify & categorize potential control measures
- Compare to existing rules & programs
- Analyze emissions inventory
- Look for measures to reduce ozone, PM, toxics, and/or greenhouse gases
- Evaluate per Health & Safety Code criteria

# Control Measure Review







# Control Measure Review

Table 1 - Measures Reviewed & Rejected

<i>Category</i>	<i># of Measures</i>
Equivalent measure already exists	341
Measure under jurisdiction of another agency	56
Emissions are de minimus or no source category exists in Bay Area	97
Measure deemed not cost-effective	6
Total	500



# Control Measure Review

Table 2 - Summary of preliminary outcomes

<i>Potentially Viable Measures Category</i>	<i>Measures still under Evaluation</i>	<i>Measures Recommended for Incorporation into Preliminary Control Measures</i>	<i>Preliminary Control Measures</i>
Stationary/Area Sources	62	68	15 (+ 10 FSMs)
Mobile Source	32	70	4 MSMs 17 TCMs
Land Use/Local Impacts	0	28	7
Energy/Climate	0	12	3
Potentially Viable Other Measures	8	0	0



## ***Questions / Public Comment***



# Control Strategy Principles

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Key principles as we develop control strategy:

- Resourceful: use all available tools & resources (toolbox approach)
- Strategic: look for opportunities where we can add value, fill gaps
- Coherent: craft integrated & comprehensive control strategy



# Bay Area 2009 Clean Air Plan

## Draft Plan Framework

### Vision:

- Attain air quality standards
- Protect public health in all communities
- Protect climate and ecosystems

### Performance Objectives:

- Reduce PM2.5 exposure by 10% by 2015.
- Reduce diesel PM exposure by 85% by 2020.
- Reduce GHG emissions to 1990 level by 2020 and 40% below 1990 by 2035.

### Control Strategy

#### Stationary Sources

- Industrial/Commercial
- Energy Production
- Combustion Processes

#### Mobile Sources

- Mobile Source Measures
- Transportation Control Measures

#### Land Use & Local Impacts

- Clean Air Communities Initiative
- Indirect Source Review
- CEQA Guidelines

#### Energy & Climate

- Urban Heat Islands
- Energy Measures

### Toolkit

- Rule-making
- Permitting
- Enhanced Monitoring
- Enhanced Enforcement
- Policies and Practices
- Grants
- Partnerships
- Public Outreach
- Operational Refinements
- Advocacy

### Special Topics

- Impacted Communities
- Climate Protection
- Best Local Planning Practices
- Advocacy Platform



# Elements of Control Strategy

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- **Stationary Source Control Measures:** regulations to control factories, refineries, dry cleaners, etc.
- **Mobile Source Measures:** promote use of cleaner vehicles & fuels through incentives, grants, etc.
- **Transportation Control Measures:** reduce vehicle travel and emissions – with partner agencies
- **Land Use and Local Impacts:** promote focused growth and reduce population exposure
- **Energy and Climate Measures:** promote energy efficiency, mitigate impacts of climate change



# Stationary Source Measures

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- Industrial & commercial sources
  - e.g. coating & solvents
- Energy production
  - e.g. natural gas production
- Combustion processes
  - e.g. coke calcining, cement plants





# Mobile Source Measures

- Promote clean vehicles & fuels
- Accelerate retirement of high-emitters

Four broad mobile source measures:

- On-road:
  - Light-duty
  - Heavy-duty
- On-road:
  - Light-duty
  - Heavy-duty







# Transportation Control Measures

Group TCMs into 5 categories:

- Improve transit services
- Improve system efficiency
- Encourage sustainable travel behavior
- Support focused growth
- Implement pricing strategies





# Land Use / Local Exposure

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- Clean Air Communities Initiative
- Indirect Source Regulation
- New CEQA guidelines; enhanced CEQA review
- Land use guidelines to reduce population exposure
- Enhanced AQ monitoring
- Enhanced enforcement of ARB diesel rules
- Target grants to impacted communities





# Energy & Climate Measures

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- Urban heat island mitigation
  - cool roofs / green roofs
  - cool paving
  - tree-planting
  - ventilation
- Energy efficiency & conservation
- Alternative energy





# MP Evaluation Method

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Multi-pollutant evaluation method (MPEM) to estimate value of emission reductions

- Draft methodology under review
- Preparing template to perform calculations
- Developing examples for specific measures
- MPEM available for public review by early June
- Hold public workshop on MPEM in June (?)
- Apply MPEM to control measures following workshop



## Next Steps

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- Complete control measure development
- Apply MPEM to analyze cost/benefit on multi-pollutant basis
- Issue draft control strategy: by end of July
  - public workshops
- Issue draft CAP: by Sept – public workshops
- Adoption of CAP: fall 2009



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## **Questions / Comments?**

**Bay Area 2009 Clean Air Plan website:**

**[http://www.baaqmd.gov/pln/plans/ozone/2009\\_strategy/index.htm](http://www.baaqmd.gov/pln/plans/ozone/2009_strategy/index.htm)**

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