

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

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

- 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

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

- Existing approach: address each pollutant separately
- CAP: tackle multiple pollutants in one integrated plan
 - **Ozone precursors**
 - **Particulate Matter (PM)**
 - **Air Toxics**
 - **Greenhouse gases: CO₂, methane, etc.**
- Many measures reduce multiple pollutants
 - maximize co-benefits
 - identify and minimize trade-offs

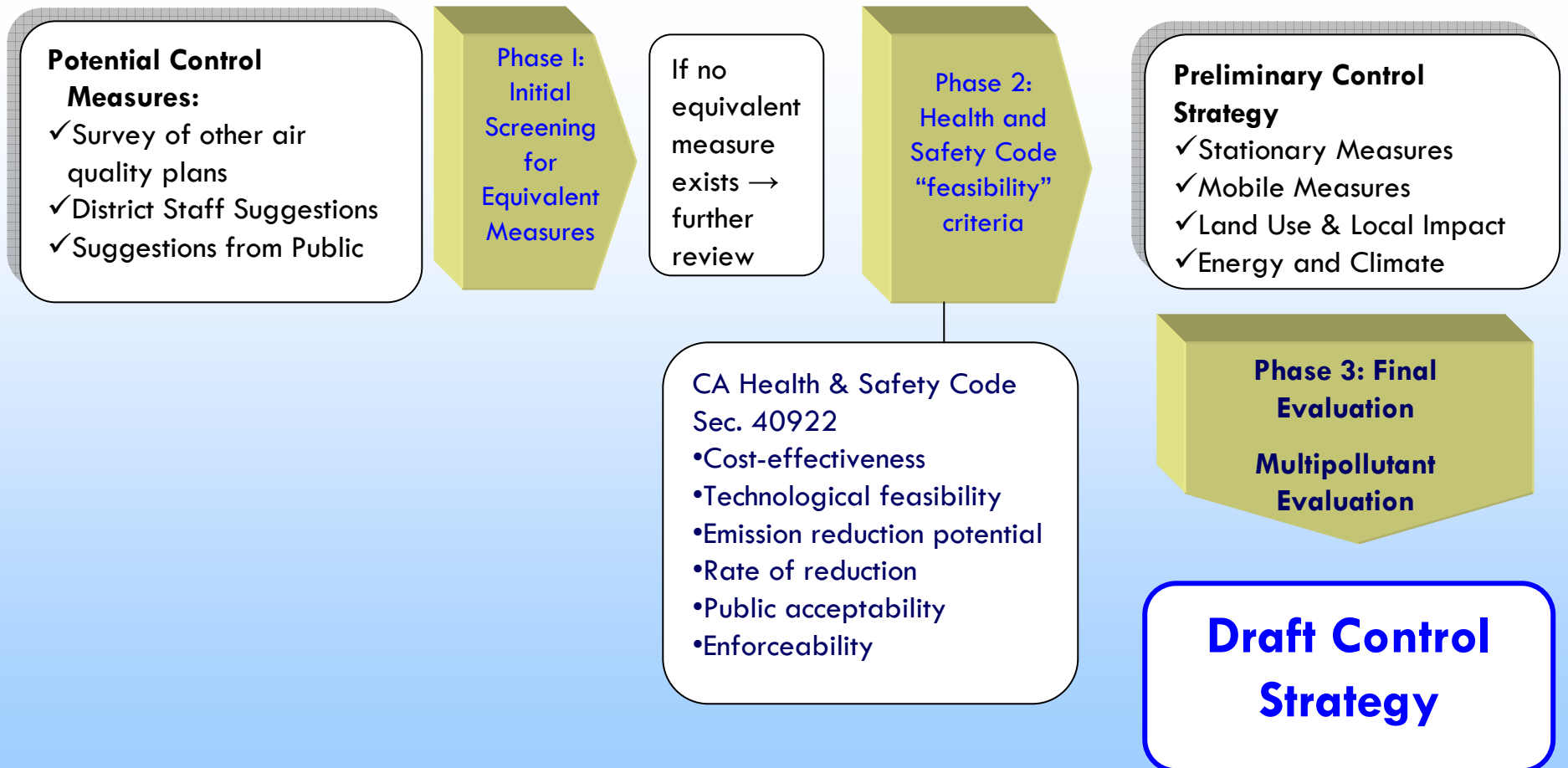


Control Measure Review

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

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

- **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

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



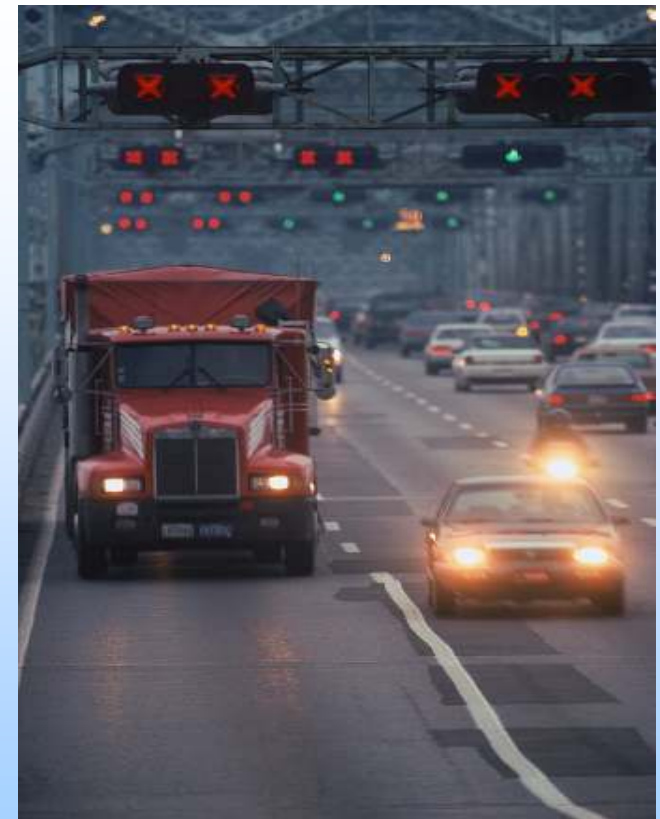


Mobile Source Measures

- 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

- 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

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





MP Evaluation Method

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

- 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



Questions / Comments?

Bay Area 2009 Clean Air Plan website:

http://www.baaqmd.gov/pln/plans/ozone/2009_strategy/index.htm

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