

BAY AREA AIR QUALITY MANAGEMENT DISTRICT



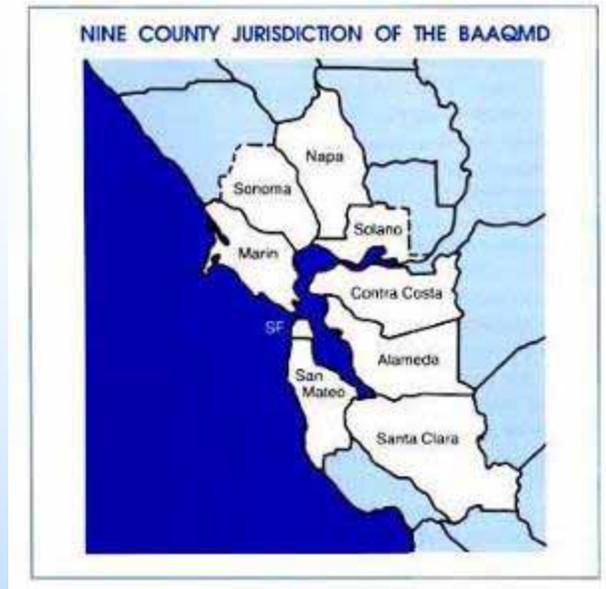
Public Workshops

September 2 & 3, 2009



Workshop Objectives

- Review purpose of 2009 CAP
- Recent progress on CAP
- Provide summary of control measure review process
- Present draft Control Strategy
- Future steps and timeline
- NOP/Initial Study for CEQA (separate presentation to follow)





Purpose of 2009 Clean Air Plan

Develop integrated *multi-pollutant* plan to:

- **Improve air quality**
- **Protect public health**
- **Protect our climate & ecosystems**



Pollutants Addressed

CAP will address 4 categories of pollutants:

- Ozone: ROG & NO_x
- Particulate Matter: direct & indirect
- Key Air Toxics
 - diesel PM
 - benzene, 1-3 butadiene
 - acetaldehyde , formaldehyde
- Key Greenhouse Gases (Kyoto 6)



Improve Air Quality

- Reduce emissions & ambient concentrations of key pollutants & precursors
- Comply w Health & Safety Code requirements:
 - Update 2005 Ozone Strategy
 - Include all feasible measures to reduce ozone precursors
 - Reduce transport to neighboring air basins



Protect Public Health

- Make protecting health a key objective
- Reduce population exposure at regional level & in impacted communities; reinforce CARE (Community Air Risk Evaluation) & Clean Air Communities Initiative
- Perform analysis to determine which pollutants pose greatest health risk
- Develop method to estimate health benefits of control measures (Multi-Pollutant Evaluation Method - MPEM)
- Develop control measures to help reduce exposure



Protect our Climate

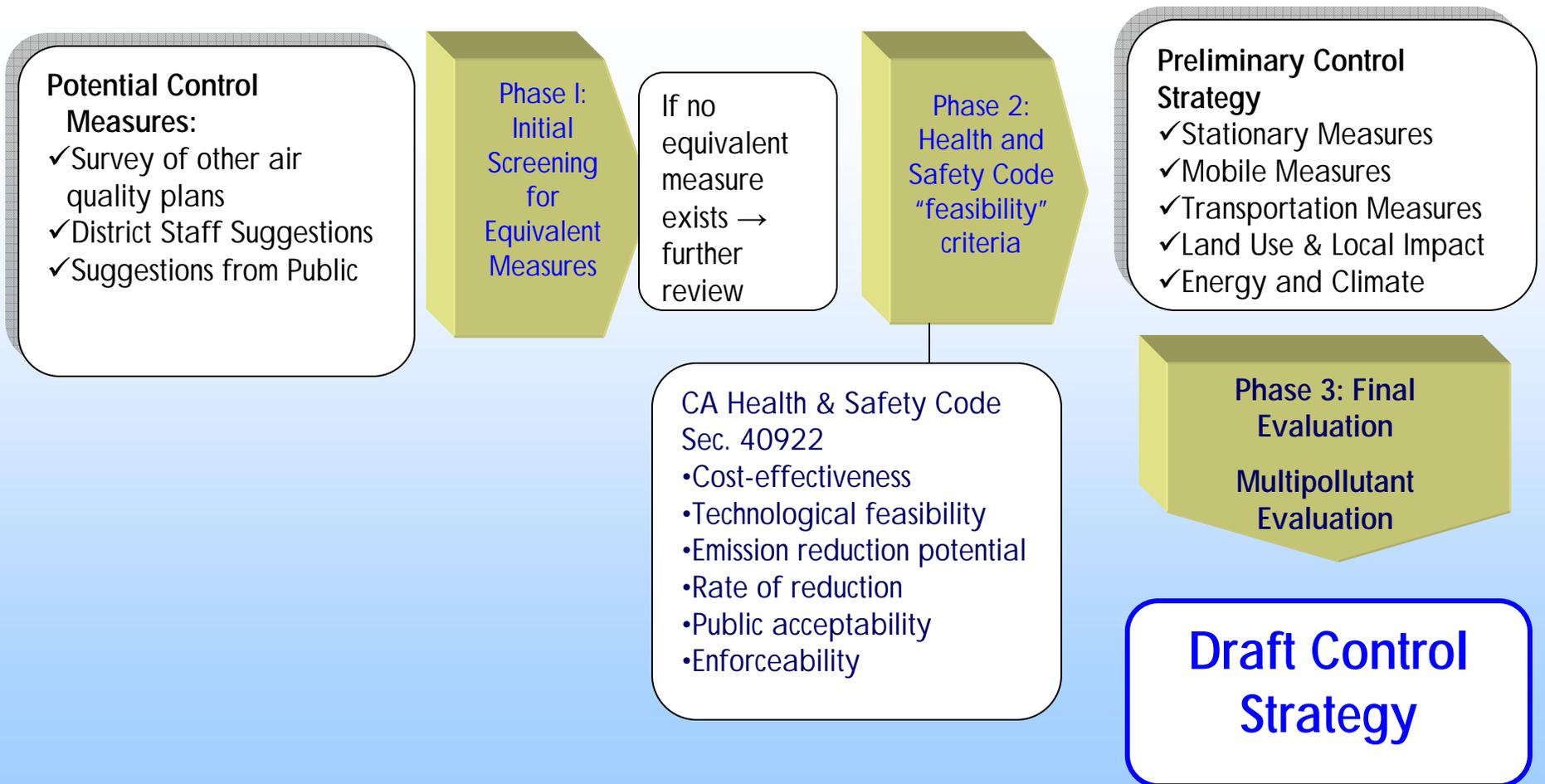
- Include State's GHG targets in CAP objectives
- Explain how criteria pollutants & GHGs are related and interact
 - how higher temperatures will worsen pollution
- Include GHGs in MPEM
- Devise new Energy & Climate measures to reduce GHGs and effects of climate change



Recent Progress on CAP

- Completed Multi-Pollutant Evaluation Method
 - Public Workshop on June 11
- Presentations:
 - MTC Planning Committee: 5/9/09 & 7/10/09
 - BAAQMD Executive Committee: 6/29/09
 - US EPA Office of AQ Planning & Stds: 7/23/09
- Completed review of potential control measures
- Issued draft control strategy for public review
- Estimating emission reduction & C-E for measures

Control Measure Review





Outcome of CM Review

<i>Category</i>	<i># of Measures</i>
Already Implemented by Air District	219
Already Implemented by Another Agency	116
Measure deemed not feasible:	111
De minimis emission reduction:	(62)
Other:	(49)
Incorporated into Draft Control Strategy:	347
Included in Draft Further Study Measures	39
Included in Leadership Platform	12
Total	844



Questions / Comments re: first segment?



Overview of Control Strategy

- 57 control measures:
 - 19 stationary sources measures
 - 10 mobile sources measures
 - 18 transportation control measures
 - 6 land use & local impacts measures
 - 4 energy & climate measures
- 14 further study measures
- Leadership Platform



Stationary Source Measures

19 SSMs proposed

- Industrial & commercial sources
 - e.g. foundries, composting
- Energy production
 - e.g. natural gas production
- Combustion processes
 - e.g. open burning, NO_x rules
- CARE Area New/Existing Sources





Stationary Source Measures

SSM 1: Foundries and Metal Melting (*PM, odor, TAC*)

SSM 2: Composting (*PM, ROG, GHG*)

SSM 3: Digital Printing (*ROG*)

SSM 4: General Particulate Matter (*PM*)

SSM 5: GHG in Permits – Energy Efficiency (*GHG*)

SSM 6: Livestock Waste (*PM, ROG, GHG*)

SSM 7: Nat. Gas Process & Dist. (*ROG, GHG*)

SSM 8: Vacuum Trucks (*ROG*)

SSM 9: Cement Kilns (*NO_x, SO_x*)



Stationary Source Measures

SSM 10: Coke Calcining (*SO_x*)

SSM 11: Open Burning (*PM*)

SSM 12: Refinery Heaters (*NO_x*)

SSM 13: Residential Furnaces (*NO_x*)

SSM 14: Space Heating (*NO_x*)

SSM 15: Dryers, Ovens, Kilns (*NO_x*)

SSM 16: Glass Furnaces (*NO_x*)

SSM 17, 18: NSR and Toxics NSR/CARE (*all, TAC*)

SSM 19: Air Toxics Hot Spots/CARE (*TAC*)



Questions / Comments re: SSMs?



Mobile Source Measures

10 MSMs proposed to:

- Promote clean vehicles & fuels
- Replace or repair high-emitters
- Reduce emissions in advance of regulations

Via incentives & partnerships

MSM A-1: Fuel Efficient Vehicles

MSM A-2: ZEV & Plug-in Hybrids

MSM A-3: Promote Green Fleets

MSM A-4: Reduce High-Emitters





Mobile Source Measures

MSM B-1: Heavy-Duty Fleet Modernization

MSM B-2: Low NOx Software & Controls

MSM B-3: Efficient Drive Trains

MSM C-1: Construction & Farming Equipment

MSM C-2: Lawn & Garden Equipment

MSM C-3: Recreational Watercraft



Questions / Comments re: MSMs ?

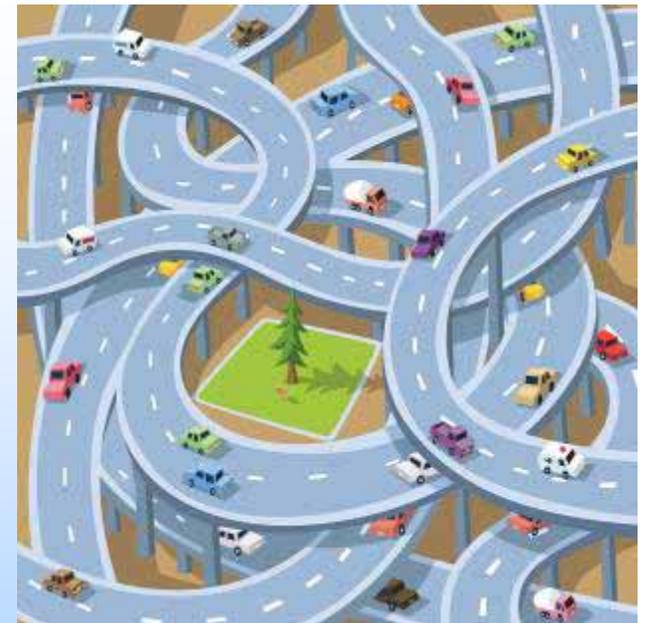


Transportation Control Measures

Reduce vehicle travel & emissions

TCMs grouped into 5 categories:

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





Transportation Control Measures

Improve Transit Services:

- TCM A-1: Improve Local & Area-wide Bus Service
- TCM A-2: Improve Local & Regional Rail Service
- TCM A-3: Improve Ferry Service



Transportation Control Measures

Improve System Efficiency

- TCM B-1: Freeway & Arterial Operations Strategies
- TCM B-2: Improve Transit Efficiency & Use
- TCM B-3: Bay Area Express Lane Network
- TCM B-4: Goods Movement Improvements & Emissions Reduction Strategies



Transportation Control Measures

Encourage Sustainable Travel:

- TCM C-1: Voluntary Employer Trip Reduction
- TCM C-2: Implement Safe Routes to School & Safe Routes to Transit
- TCM C-3: Promote Rideshare Services
- TCM C-4: Conduct Public Outreach & Education
- TCM C-5: Promote Smart Driving & Speed Moderation



Transportation Control Measures

Support Focused Growth:

- TCM D-1: Improve Bicycle Access & Facilities
- TCM D-2: Improve Pedestrian Access & Facilities
- TCM D-3: Support Focused Land Use Strategies



Transportation Control Measures

Implement Pricing Strategies:

TCM E-1: Value Pricing Strategies

TCM E-2: Parking Pricing & Management Strategies

TCM E-3: Implement Transportation Pricing Reform



Questions / Comments re: TCMs?



Land Use & Local Impacts

Promote focused growth

Protect public health

- LUM 1: Goods Movement
 - policies & strategies to reduce emissions from goods movement
- LUM 2: Indirect Source Review Rule:
 - reduce emissions from new development
- LUM 3: Enhanced CEQA Program:
 - new CEQA guidelines
 - more review of CEQA docs





Land Use & Local Impacts

- LUM 4: Land Use Guidelines
 - provide guidelines for local plans
- LUM 5: Reduce Risk from Stationary Sources in Impacted Communities
 - Track & reduce cumulative risk in impacted communities:
 - Permitting: see SSMs 17, 18, 19
- LUM 6: Enhanced AQ monitoring



Questions / Comments re: LUMs?



Energy & Climate Measures

- ECM 1: Energy Efficiency
 - promote green building codes & practices
- ECM 2: Renewable Energy
 - promote solar power & other renewables
- ECM 3: Urban heat islands
 - cool roofs & cool paving
- ECM 4: Tree-Planting
 - promote planting of low VOC emitting trees





Questions / Comments re: ECMs ?



Emission Reductions, Costs & Benefits

- Working to complete emission reduction and cost estimates for all measures
- Calculating C-E based upon ozone precursors
- Estimating health & climate benefits via MPEM
- Comparing ratio of benefits to costs
- Considering how to estimate C-E on MP basis:
\$\$ per weighted ton of emissions reduced ?



Further Study Measures

FSM 1: Adhesives & Sealants

FSM 2: Reactivity in Coatings & Solvents

FSM 3: Solvent Cleaning & Degreasing

FSM 4: Cooling Towers

FSM 5: Equipment Leaks

FSM 6: Waste Water from Coke-Cutting

FSM 7: SO₂ from Refinery Processes



Further Study Measures

FSM 8: LPG, Propane, and Butane

FSM 9: GHGs in Permitting - BACT

FSM 10: Commercial Cooking

FSM 11: Magnet Source Rule

FSM 12: Wood Smoke

FSM 13: Energy Efficiency & Renewables

FSM 14: Lubricants



Leadership Platform

Pursue via advocacy & legislation policies re:

- Cleaner vehicles & equipment
- Land Use & Building Standards
- Transportation Pricing / Tax Policy
- Trip Reduction / Alternative Travel Modes
- Other



Next Steps

Comments on draft Control Strategy: by Sept 11

Future milestones & target dates:

- Issue draft CAP & DEIR by early October
 - public workshops
- Issue draft Socio-Economic Analysis
- Adoption of CAP by BAAQMD Board: Dec. 2009



Questions / Comments?

Bay Area 2009 Clean Air Plan website:

<http://www.baaqmd.gov/Divisions/Planning-and-Research/Plans/Clean-Air-Plans.aspx>

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