



2012 Air Quality Management Plan



**RANDALL PASEK, PH.D.
PLANNING AND RULES MANAGER
SOUTH COAST AQMD**

**BOYLE HEIGHTS CLEAN COMMUNITIES
WORKING GROUP
LOS ANGELES, CALIFORNIA
JULY 17, 2012**

Cleaning The Air That We Breathe...

Clean Air Act Requirements

- U.S. EPA sets National Ambient Air Quality Standards (NAAQS)
- Areas designated attainment or non-attainment
- If non-attainment, state submits State Implementation Plan (SIP) to demonstrate how and when NAAQS will be achieved, maintained and enforced



Air Quality Management Plan



- 1990 Federal Clean Air Act
- California Health & Safety Code requires AQMP since 1979
- Blueprint for how to meet and maintain state and federal air quality standards
- SIP for South Coast
- 2012 AQMP will be SCAQMD's 10th



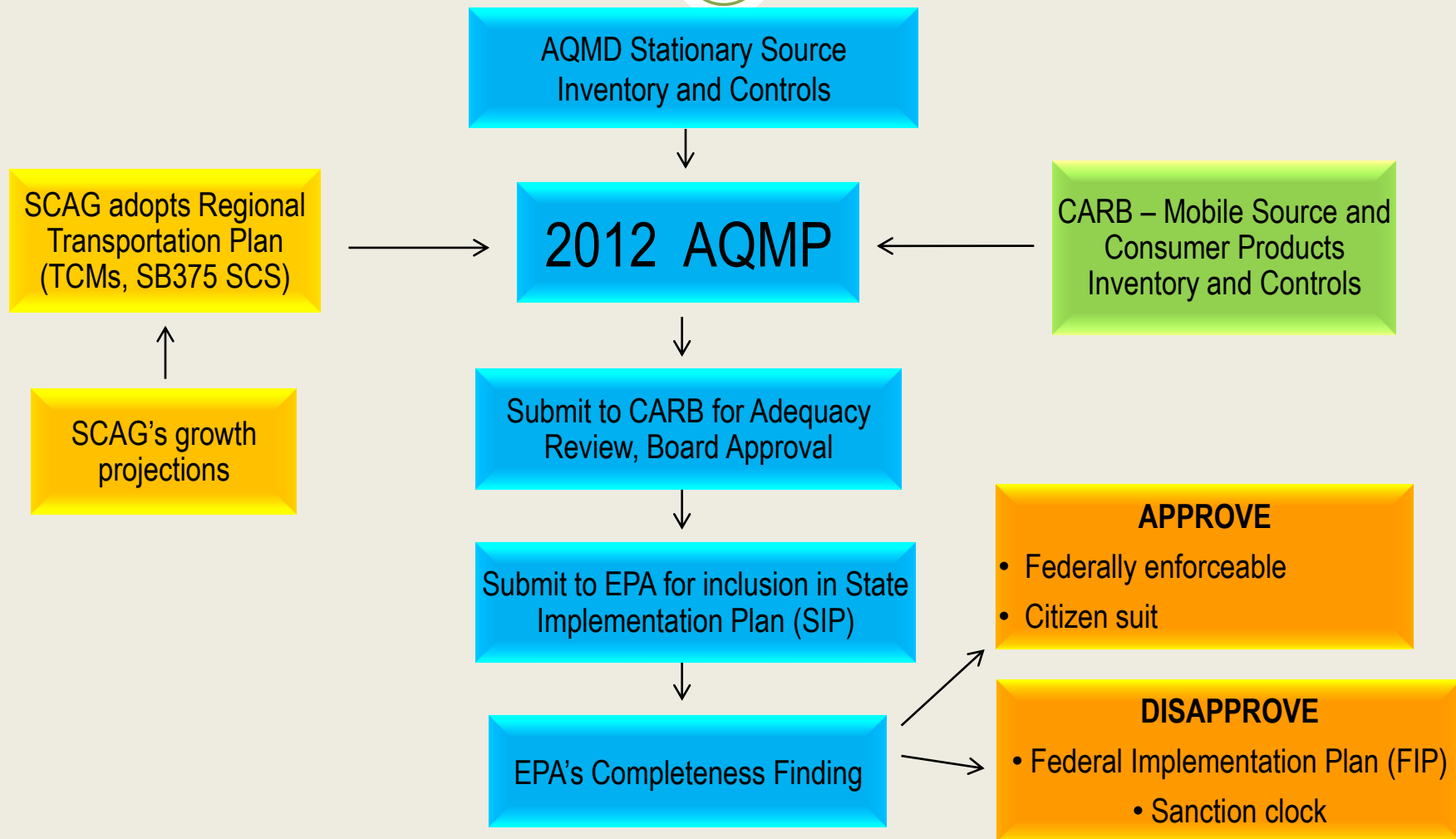
SCAQMD Board Directive



- AQMP Design Principles
 - ❑ Most Efficient Path to Clean Air
 - ❑ Minimize Socioeconomic Impacts
 - ❑ All Feasible Measures and Promote Fair Share Responsibility
 - ❑ Maximize Private/Public Partnership
 - ❑ Equitable and Expeditious Progress



2012 AQMP Development



Integrated AQMP

6

**Climate
Change**

**Air Quality
Improvement
Needs**

Transportation

**Energy
Reliability**



Key Elements

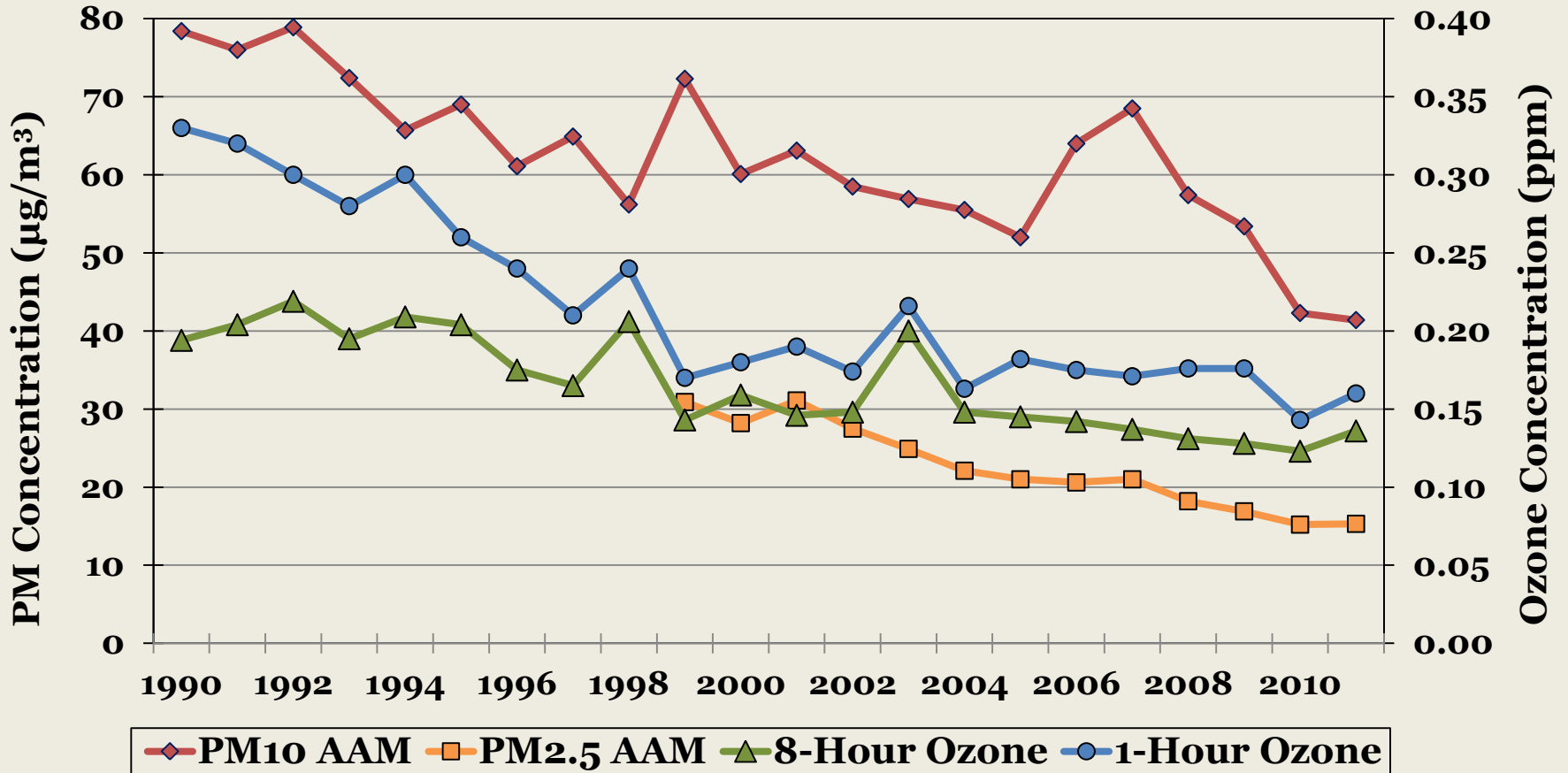


- 24-Hr PM2.5
 - Attainment demonstration
 - ✦ Earliest date with feasible controls
 - ✦ Maximize co-benefits
 - Contingency requirements
- Ozone
 - Further implement ozone plan [(182(e)(5))]
 - Integrated approach to maximize co-benefits

Baseline Demographics in the 2012 AQMP

	2008	2023 (% growth)	2030 (% growth)
Population (Millions)	15.6	17.3 (11%)	18.1 (16%)
Housing Units (Millions)	5.1	5.7 (12%)	6.0 (18%)
Total Employment (Millions)	7.0	7.7 (10%)	8.1 (16%)
Daily VMT (Millions)	379	396 (4%)	421 (11%)

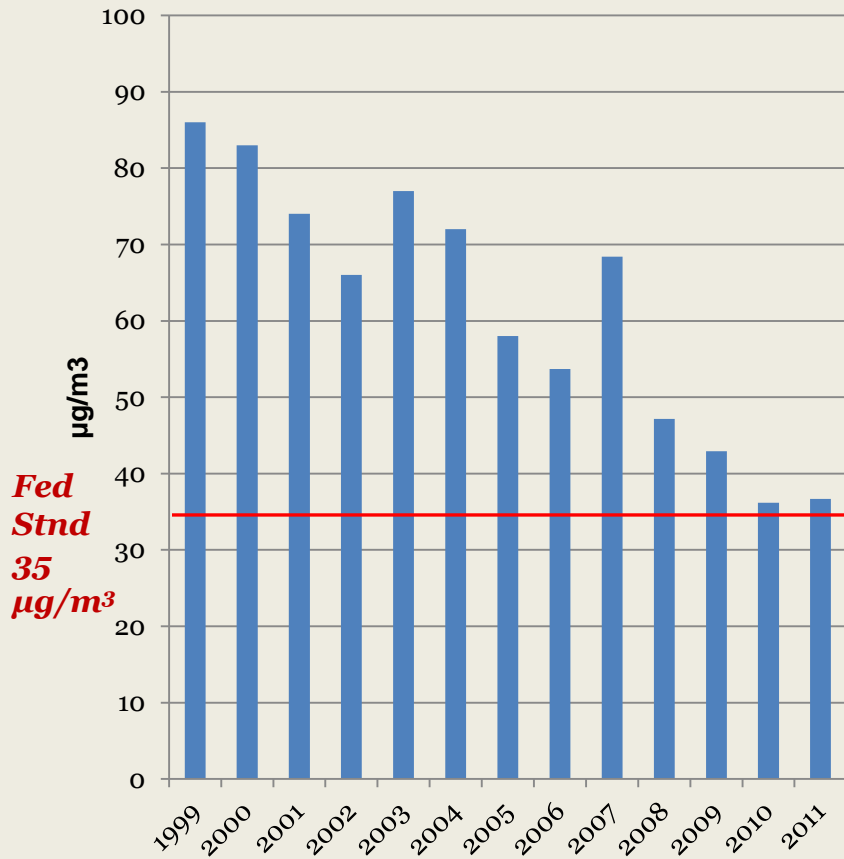
Basin Air Quality Trends



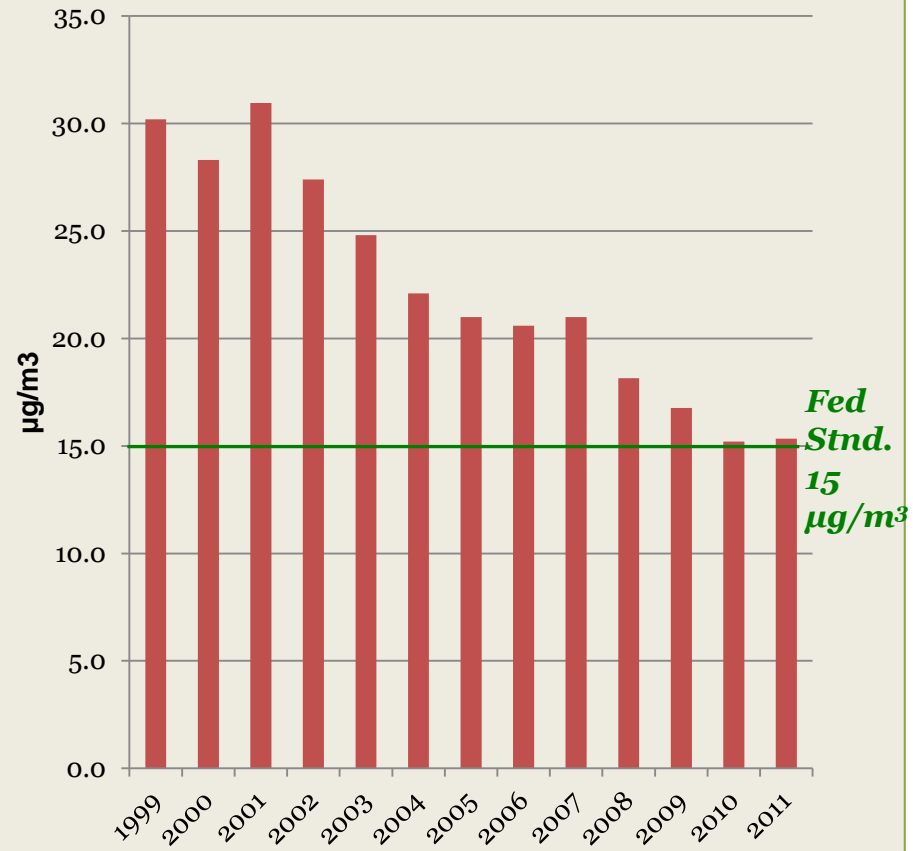
PM2.5 Air Quality



PM2.5 24-hour 98th Percentile



PM2.5 Annual Average



PM2.5 Strategy Approach



- Maximize NOx reductions where possible; needed for ozone anyway
 - Avoid stranded compliance costs/ technologies
- Directly emitted PM2.5
 - Traditional controls
 - Episodic controls
 - Contingency measures

Proposed PM2.5 Control Measures

- **Measures to Achieve Attainment by 2014:**
 - Reductions from NOx RECLAIM (Phase I)
 - Episodic residential wood burning curtailment
 - Episodic open burning curtailment
 - **Reductions: 2 tpd (NOx); 12 tpd (PM2.5)**



SCAB Ozone Attainment Preliminary Basin NOX Reductions Needed

Year	Federal Standard (PPB)	Percent Reduction of NOX Emissions from 2023 Baseline	Carrying Capacity (tpd)
2023	80	65	115
2032	75	75	80

Ozone Strategy Approach



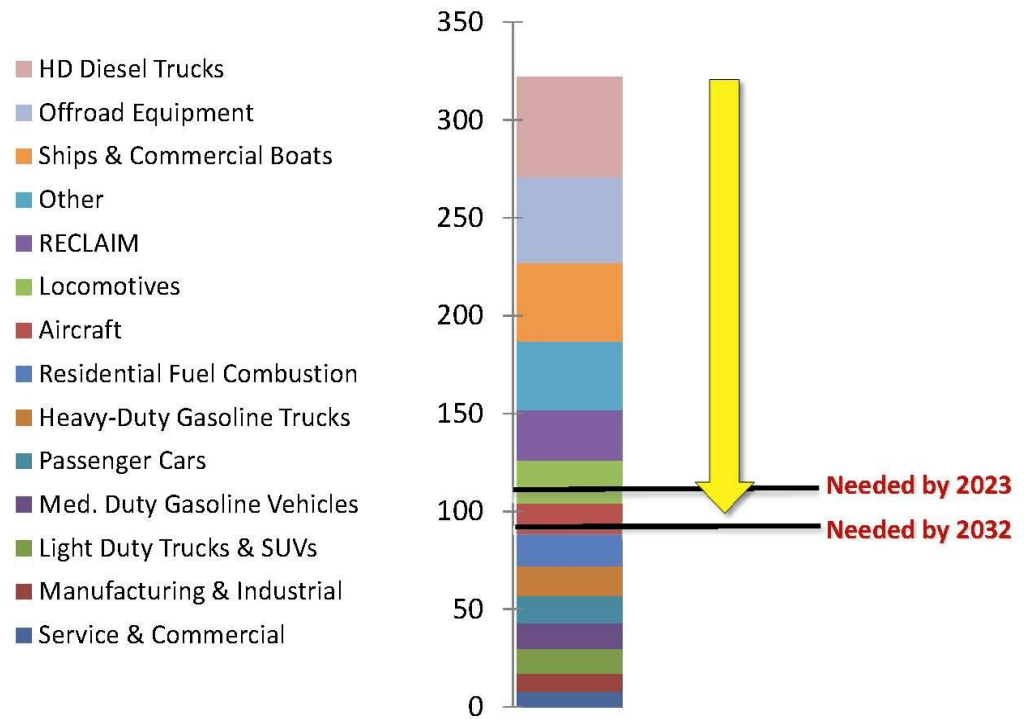
- 8-hr ozone standards (*80 ppb by 2023; 75 ppb by 2032*)
 - NOx heavy strategy needed to meet standard
 - Provide actions to be taken in next 2-3 years
 - Mostly mobile source measures
- “Vision” document to maximize co-benefits



Emissions Reductions to Meet the Ozone Standards

Nitrogen Oxides Emissions in 2023 with Adopted Standards

Additional Needed Emission Reductions



* Source: Ambient ozone modeling conducted by SCAQMD, 2012; draft data

Section 182(e)(5) Ozone Measures

- **Stationary Source Measures:**

- ❑ Coatings, solvents, lubricants, adhesives
- ❑ Mold release products
- ❑ Landfill flares, commercial space heating
- ❑ Truck venting, propane gas refueling
- ❑ Leak detection and repair programs
- ❑ Greenwaste processing (chipping and grinding)
- ❑ Improve start-up, shutdown procedures
- ❑ Incentives, educational programs

- **Reductions: ~6 tpd VOC; ~1 tpd NOx**



Section 182(e)(5) Ozone Measures



- **Mobile On-Road:**

- Accelerated penetration of zero and near-zero emission vehicles
- Early retirement of older vehicles
- Reduce emissions from near-dock railyards



- **Mobile Off-Road:**

- Extension of SOON provision
- Regulation to reduce emissions from locomotives
- Incentives to reduce emissions from marine vessels

- **Action for Advanced Control Technologies:**

- research & development, demonstrations, incentives

- **Reductions: ~21 tpd NOx**

Funding



- Minimum Funding Needed to Implement Proposed Mobile Source Measures
 - ❑ On-Road - \$85 M/yr
 - ❑ Off-Road Construction/Industrial Equipment - \$30M/yr
 - ❑ Locomotives, Marine Vessels – Not Estimated
- Existing Funding Programs
 - ❑ SB1107 & AB923 - ~\$57 M/yr (AB 923 Sunset – Dec. 2014)
 - ❑ Prop 1B – up to \$125M/yr (Sunset – Dec. 2013)
 - ❑ AB118 AQIP – up to \$16M/yr (Sunset – Dec. 2015)
 - ❑ MSRC - ~\$14M/yr
- Need to Seek Additional Funding

Outreach



The Road Ahead



- July 2012 release
 - Draft AQMP
 - Draft EIR
 - Socioeconomic report
- Four-county public workshops/CEQA scoping (July 10, 11, 12, 24 & Aug 9)
- Regional hearings (Sept.)
- Adoption hearing on October 5, 2012
- Submit to CARB for approval
- SIP submittal to EPA
 - December 2012 deadline