



AQMD

AQMP Advisory Group Meeting

March 14, 2007

Progress Since Release of Draft Plan

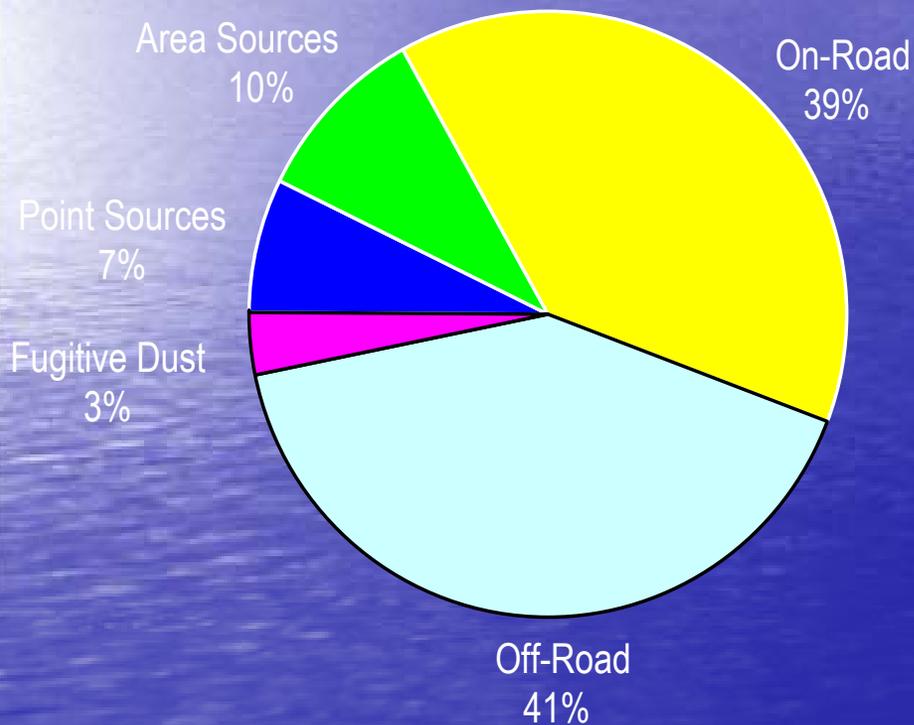
- 9 Public Workshops
- 100+ Stakeholder Briefings
- 41 Comment Letters, 430 Comments
- CARB's Release of Revised Mobile Source Inventory (Nov 06) & State Strategy (Jan 07)
- Modifications to Draft Plan and Draft CEQA Document Released Feb 23, 2007

Proposed Modifications to Draft 2007 AQMP

- Emissions Inventory
- Attainment Demonstration
 - PM2.5 Standard
 - 8-Hour Ozone Standard
- Control Strategy

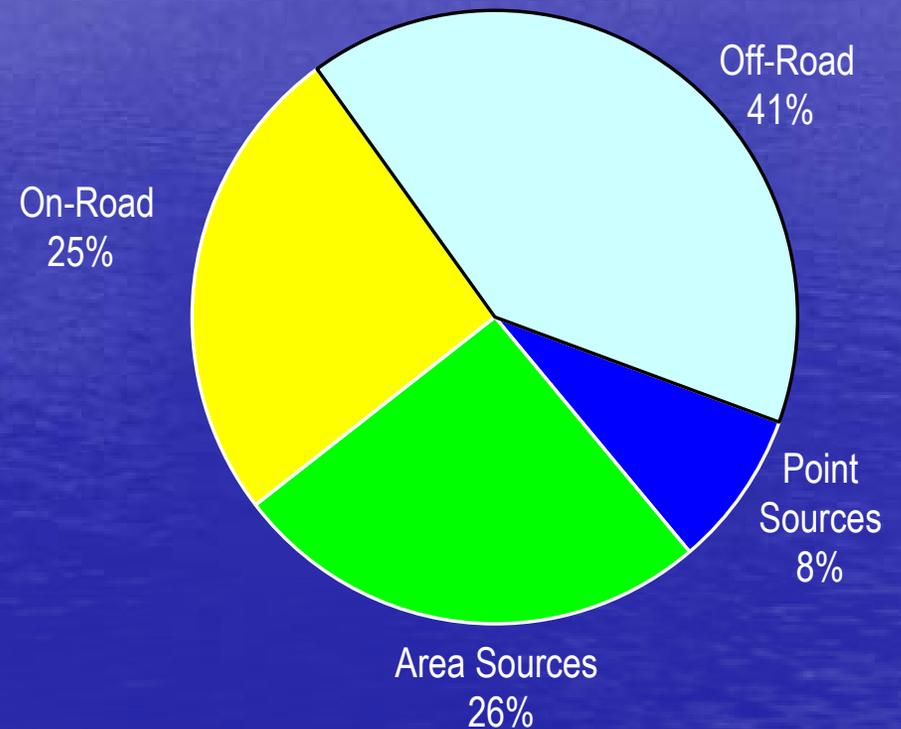
Emissions by Major Category

PM2.5, 2014



(NO_x, SO_x, PM_{2.5})

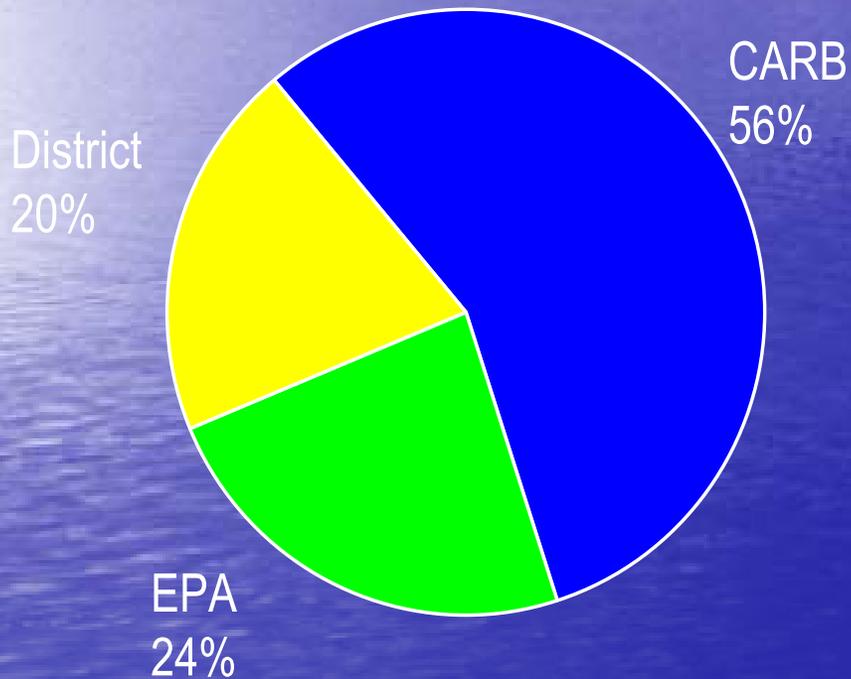
8-Hr Ozone, 2023



(VOC, NO_x)

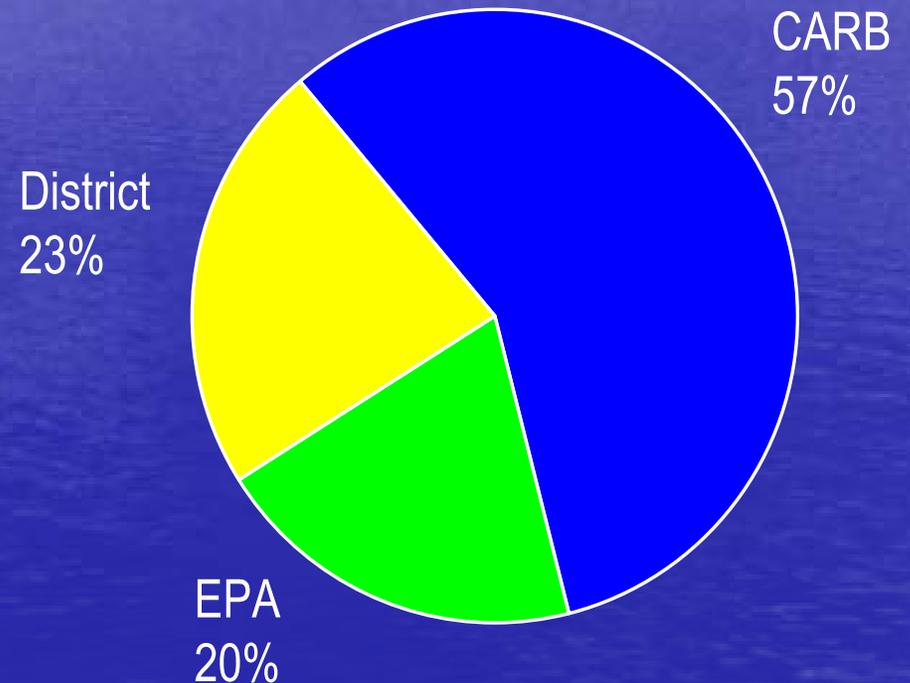
Emissions Responsibility by Agency

PM2.5, 2014



(NOx, SOx, PM2.5)

8-Hr Ozone, 2023



(VOC, NOx)

Revisions to Attainment Demonstration

- Revised Modeling Based on Latest Inventory Changes
- Updated Reductions and Carrying Capacities
- PM2.5 Attainment
 - Reductions from CARB's Strategy Not adequate
 - Attainment Based on District's Additional Measures
- Ozone Attainment
 - NOx-Heavy Control Strategy Most Appropriate

Needed Pollution Reduction (tons per day)

	2014	2023
NOx	203 (31%)	383 (76%)
VOC	59 (11%)	116 (22%)
SOx	24 (56%)	---
PM2.5	14 (14%)	---

Revisions to District's Stationary and Mobile Source Measures

- Major Revisions of Measures
 - New or Re-Development Projects (EGM-01)
 - Space Heaters (CMB-03)
 - Facility Modernization (MCS-01)
 - RECLAIM NO_x (MCS-07)
 - Gas Specification (CMB-04)
- New Measures
 - Emission Charges of \$5,000 per Ton for Stationary Sources (≥ 10 tons per year) (MCS-08)
 - Identification and Repair (or Replacement) of High-Emitting Light- and Med-Duty Vehicles (MOB-05,06)
 - Consumer Products Not Regulated by CARB (CTS-04)
 - Concurrent Reductions from Global Warning Strategies (MOB-07)

ARB Proposed NOx Measures

(summer season, tons per day)

NOx Measures	2014	2023
On-Road		
• Passenger Vehicles	14	7
• Trucks	47	18
Goods Movement	49	99
Off-Road Equipment	14	15
<i>TOTAL</i>	125	139

ARB Proposed ROG Measures

(summer season, tons per day)

ROG Measures	2014	2023
On-Road		
• Passenger Vehicles	18	11
• Trucks	5	2
Goods Movement	1	3
Off-Road Construction & Mining	2	2
Other Off-Road		
• Evaporative Standards	NYQ	NYQ
• Recreational Vehicles & Boats	6	21
Consumer Products	13	14
TOTAL	45	52

ARB Proposed SOx/PM2.5 Measures

(summer season, tons per day in 2014)

SOx Measures	
Goods Movement	20
<i>TOTAL</i>	<i>20</i>
PM2.5 Measures	
On-Road (Trucks)	4
Goods Movement	3
Off-Road Equipment	3
<i>TOTAL</i>	<i>>9</i>

2007 ARB Rulemaking Proposals

- Diesel and on-road private fleet rules
- Ports-related strategies:
 - Lower ship speeds in coastal waters, commercial harbor craft, cold ironing, port trucks, cleaner fuels in OGV main engines
- Evaporative and exhaust standards
- Tighter rules covering consumer products and architectural coatings
- Portable outboard marine tanks, inboard and stern drive boat regulations
- Tighter aftermarket parts replacement program

Revisions to Long-Term Strategy

- 4 New Measures to Replace Draft AQMP
 - On-Road Mobile Sources (SCLTM-01A,B)
 - Off-Road Mobile Sources (SCLTM-02)
 - Consumer Products (SCLTM-03)

Contingency Measures

- Not Identified in Draft AQMP
- 4 New Measures Included
 - Offsetting Emission Increase Due to Natural Gas Specifications (CTY-01)
 - Emission Charge for Stationary Sources (≥ 10 tons per year) (CTY-02)
 - Banning pre-Tier 3 Off-Road Engines (CTY-03)
 - Accelerated Implementation of CARB's Proposed Measures (CTY-04)

Key Issues

- PM2.5 Attainment by 2015 and Specific Control Strategy
- 8-hour Ozone Attainment by 2023 and “Black Box” Measures

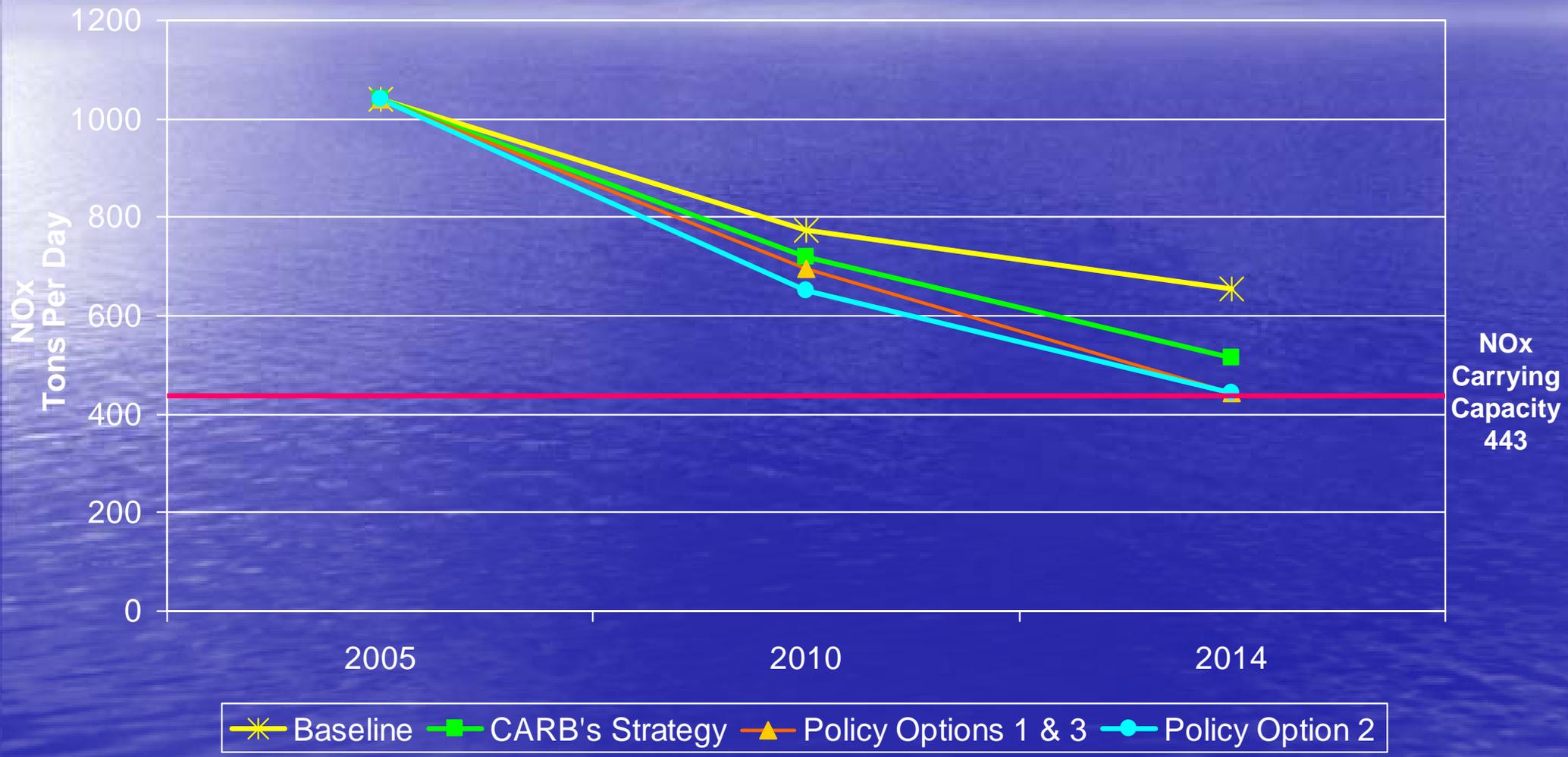
PM2.5 Attainment

- Attainment Date Fast Approaching
- CARB's Strategy Not Attaining Standard until 2020
 - Not an Acceptable Public Policy Option
- AQMD Staff Offers three Policy Options to Achieve the Needed Reductions by 2015

District Staff's Proposed Policy Options for PM2.5 Attainment

- Policy Option 1
 - District's Proposed Additional Mobile Source Control Measures (71 t/d NOx)
- Policy Option 2
 - CARB 2003 AQMP Commitment for Defined Measures in 2010 with Additional Reductions by 2014
- Policy Option 3
 - Same Rate of Reduction under Policy Option 1
 - Incentive Programs
 - \$600 million per year

Comparison of Rate of Reductions Under Various Policy Options



Proposed Additional Mobile Source Measures

	Implementation Proposal
Construction/ Industrial Equip. (15.8 tpd – NOx)	<ul style="list-style-type: none">• Move Up Proposed Fleet Average Limits (Equivalent to Replacing Tier 0 and 1 with Tier III or Better by 2014)
HD Truck Retrofits/ Modernization (20.9 tpd – NOx) (6.3 tpd – NOx – Port Trucks)	<ul style="list-style-type: none">• Increase Target Vehicles by 15% (Up to Model Year 2005); ~ 21,600 HD Vehicles• ~15,000 Port Trucks by 2012 Implemented Under Ports Clean Air Action Plan
Locomotives (11 tons/day NOx)	<ul style="list-style-type: none">• 100% Tier III (as Provided in Port Clean Air Action Plan)

Proposed Additional Mobile Source Measures

	Implementation Proposal
Ground Support Equipment (0.8 tpd – NOx; 0.3 tpd – VOC)	Additional Reductions to Meet Original MOU and for GSE Not Covered by MOU or CARB Off-Road Rule Proposal
Fuel Reformulation and Alternatives (5.2 tpd – NOx – Gaso.; 3.9 tpd – NOx – Diesel)	10 ppm Sulfur Content Cap on Gasoline Fuels; 10% Use of Diesel Alternatives
Pleasure Craft (1.1 tpd – NOx; 2.9 tpd – VOC)	Evap/Ex. Standards; Accelerated Turnover

Proposed Additional Mobile Source Measures

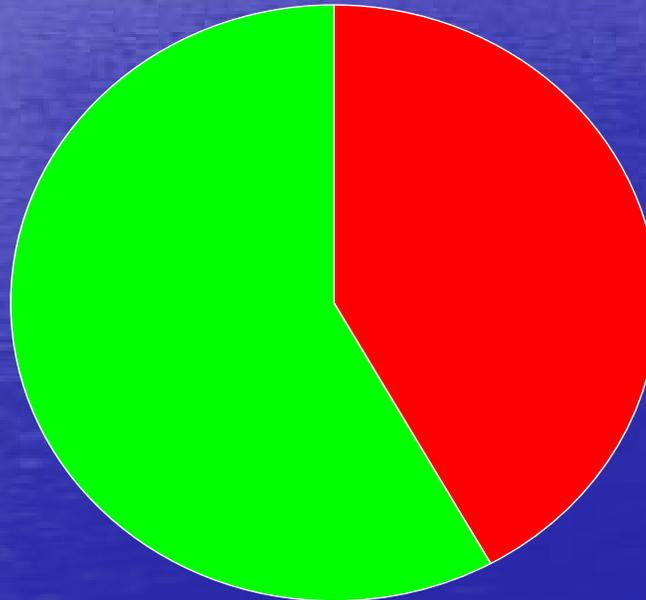
	Implementation Proposal
Light-Duty Vehicles (3.65 tpd – NOx 2 tpd – VOC)	<ul style="list-style-type: none">• 100,000 ATPZEVs by 2014; 1 MM by 2020• Greater Deployment of OBD III
Cargo Handling Equipment (1.1 tpd – NOx)	Additional Reductions as Identified in Ports Clean Air Action Plan
Transport Refrigeration Units (1.12 – NOx)	Additional Reductions Through NOx Retrofits

Ozone Attainment

- Significant Reductions Needed for Attainment
- “Black Box” Measures (41%)
- Mobile Sources NO_x Reductions Focus
- Extensive Penetration of Advanced Technology Vehicles, Zero- or near-Zero Transportation Systems; Cleanest Trucks, Off-Road Equipment, Ships, Trains, and Aircraft

8-Hour Ozone Attainment Strategy

Short-Term Measures
(59%, 292 t/d)



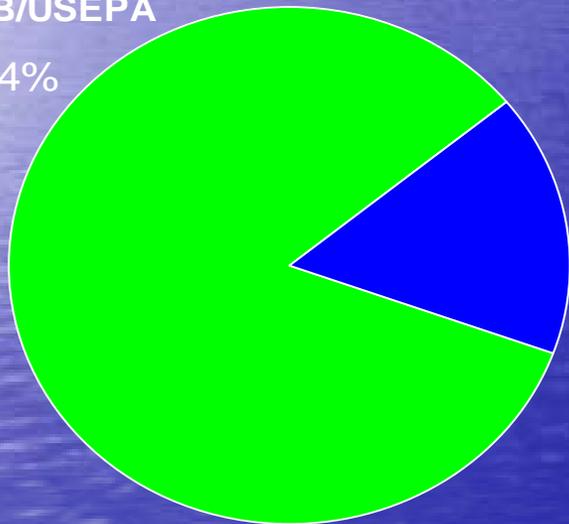
Black Box
(41%, 207 t/d)

Total Reductions = 499 tpd

Reduction Responsibility By Agency

VOC

CARB/USEPA
84%

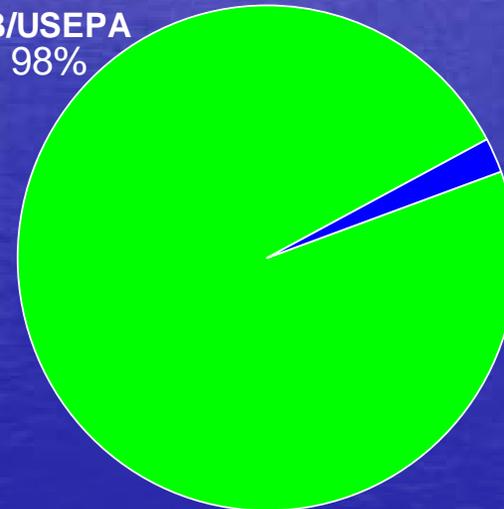


District
16%

Total Reduction = 116 TPD

NOx

CARB/USEPA
98%



District
2%

Total Reduction = 383 TPD

Bump-Up Requests

- Reclassification of Non-Attainment Status
- South Coast Air Basin
 - “Severe-17” to “Extreme”
 - 2021 to 2024 Attainment Date
- Coachella Valley Portion of Salton Sea Air Basin
 - “Serious” to “Severe-15”
 - 2013 to 2018 Attainment Date

Schedule

- Public Workshops (4) – Mar 13-15, 2007
- Draft Socio-Econ Assessment – April 2007
- Regional Hearings (5) – April 17 – 19, 2007
- Adoption Hearing – May 4, 2007
- CARB Hearing – May 2007
- Submittal to U.S. EPA – June 2007