

Air Quality Update

Inland Empire

Press Enterprise Public Forum

September 12, 2013



Key Responsibilities

- Control emissions from stationary sources (e.g. power plants, refineries, gas stations)
- Comply with state and federal air quality standards
- Comprehensive air toxics program
- Permit and inspect businesses
- Responsible and Commenting Agency under the California Environmental Quality Act

Our Mission



South Coast
AQMD

The South Coast AQMD believes all residents have a **right to live and work in an environment of clean air** and is committed to undertaking all necessary steps **to protect public health from air pollution, with sensitivity to the impacts of its actions on the community and businesses.**

Key Pollutants

- **Fine Particles (PM2.5)**
 - Building Blocks: NO_x, SO_x, PM2.5, VOC, Ammonia
- **Ozone (summer smog)**
 - Building Blocks: NO_x, VOC



The Relationship



Sources

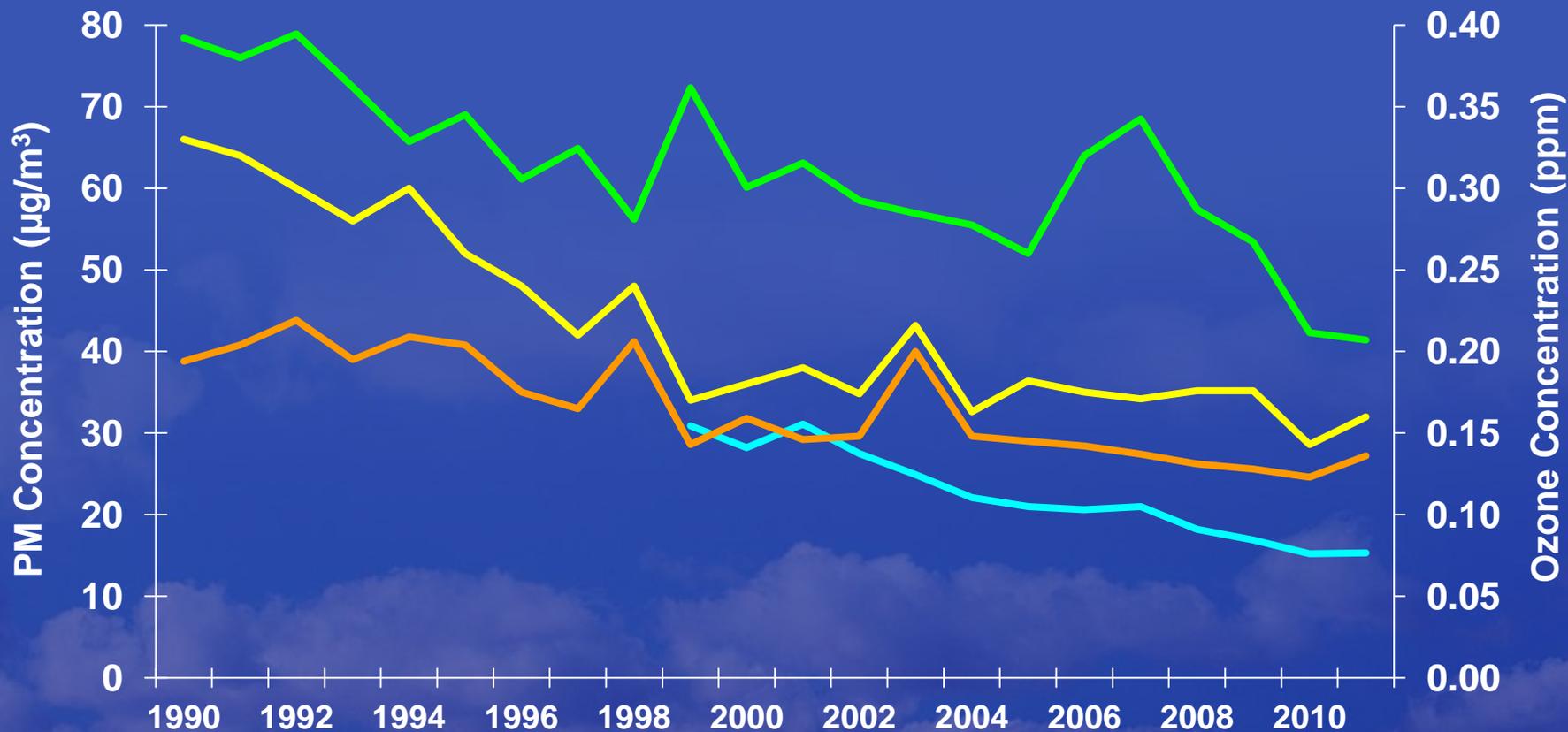
Air Quality

Health

The background of the slide is a photograph of a clear blue sky filled with numerous white, fluffy clouds. The clouds are more densely packed in the lower half of the image and become sparser towards the top. The overall color palette is dominated by various shades of blue and white.

Air Quality **Today**

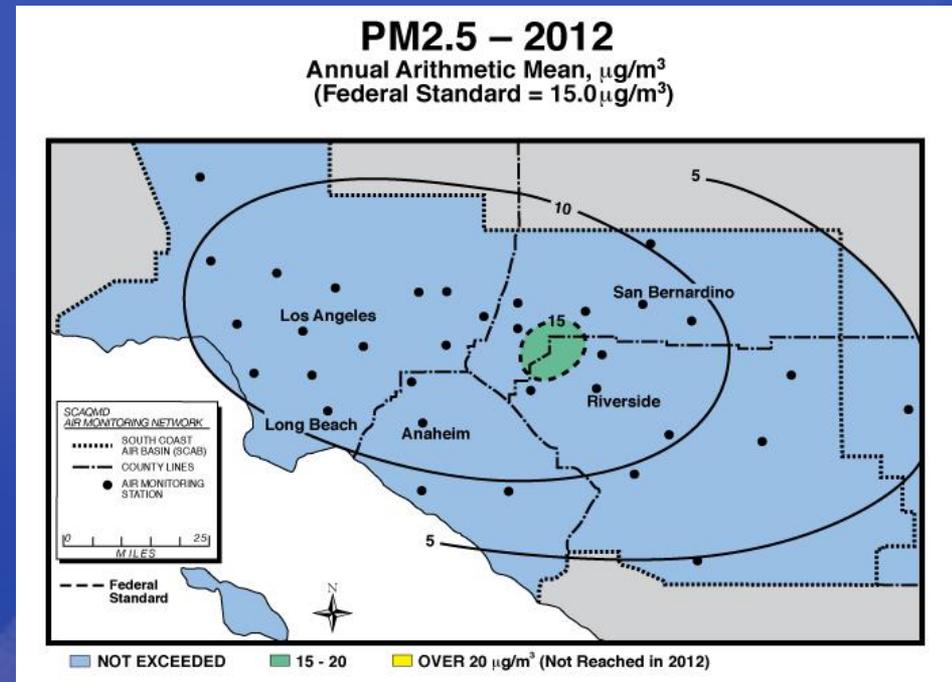
Basin Air Quality Trends



— PM10 AAM — PM2.5 AAM — 8-Hour Ozone — 1-Hour Ozone

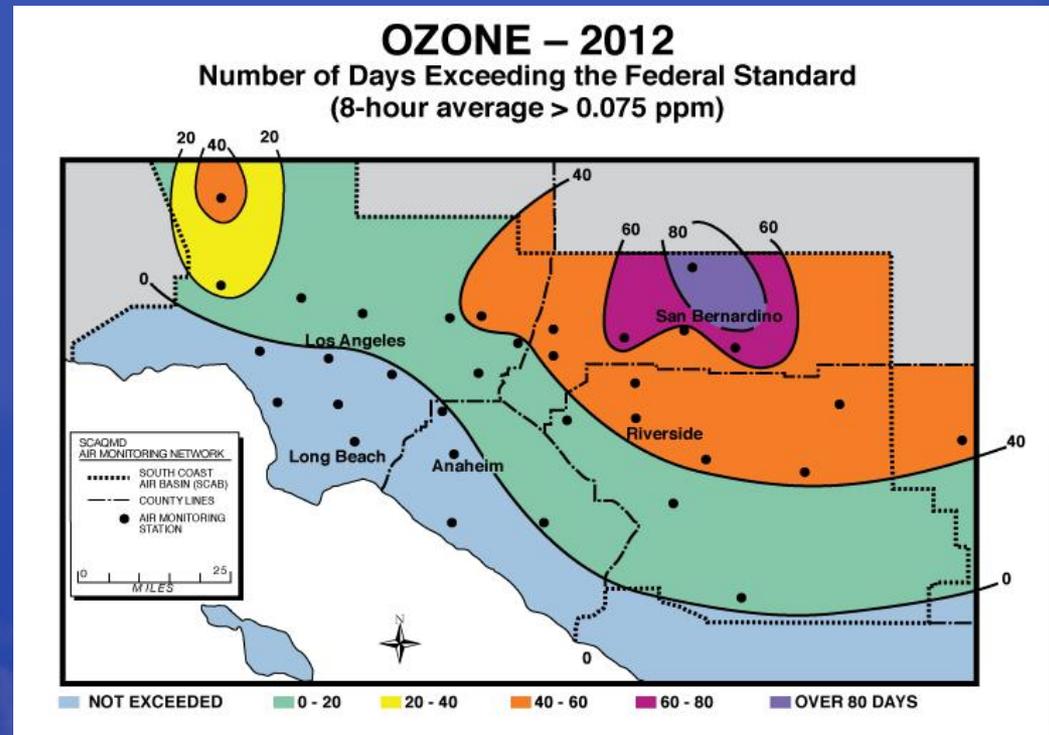
Annual PM 2.5 Concentration

- Highest concentration near Mira Loma monitoring station
- New standard of 12 $\mu\text{g}/\text{m}^3$ expected to affect larger area



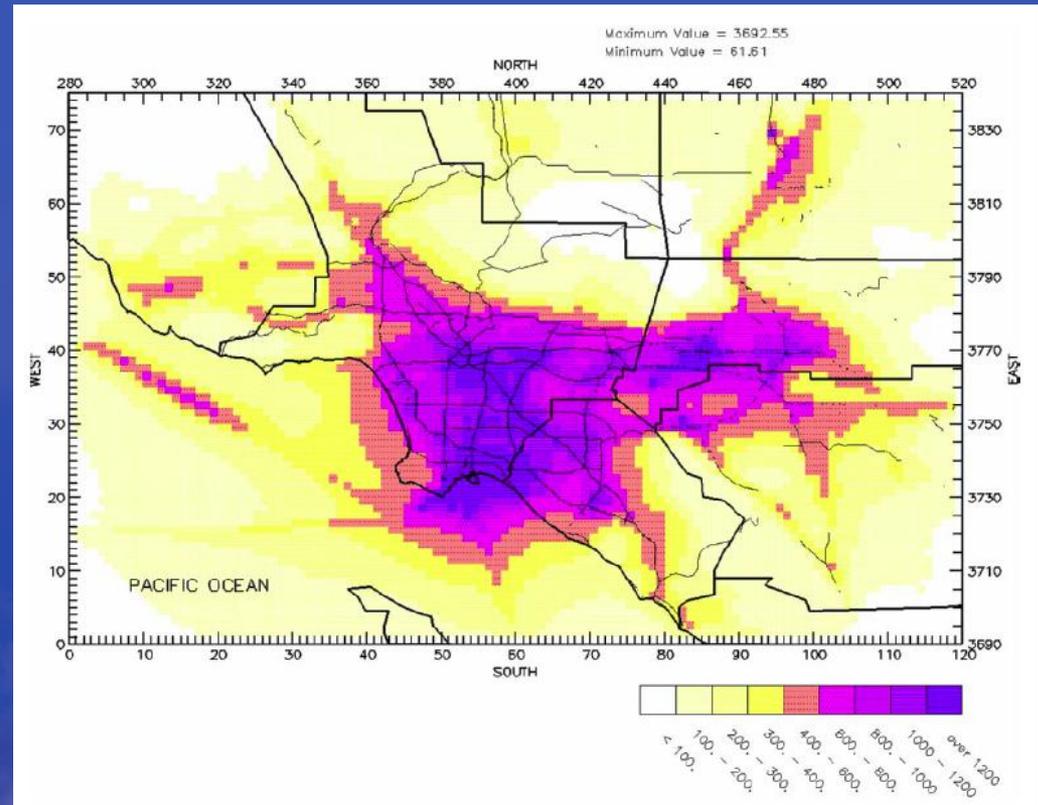
8-Hour Ozone

- In 2012 exceeded 8-hour ozone standard 111 days
- Riverside and San Bernardino highest number of exceedences



Multiple Air Toxics Exposure Study (MATES) III

- Elevated health risks in eastern portion of Basin
- Higher health risk near transportation corridors
- Greatest risk contribution is diesel particulate



The background of the slide is a clear blue sky filled with numerous white, fluffy clouds of varying sizes, creating a bright and airy atmosphere.

Air Quality **Challenges Ahead**



**250%+ Growth in
Containers
(2012-2035)**

Projected Warehousing Growth

Year	Warehouse Space (Million sq. ft.)
2009	838
2035	1,250
Growth	+412



Undeveloped land zoned for warehousing

Criteria Pollutants Challenges



Regional and
Localized Impacts
(near source, near
roadway)



Multiple and ever-
moving attainment
dates

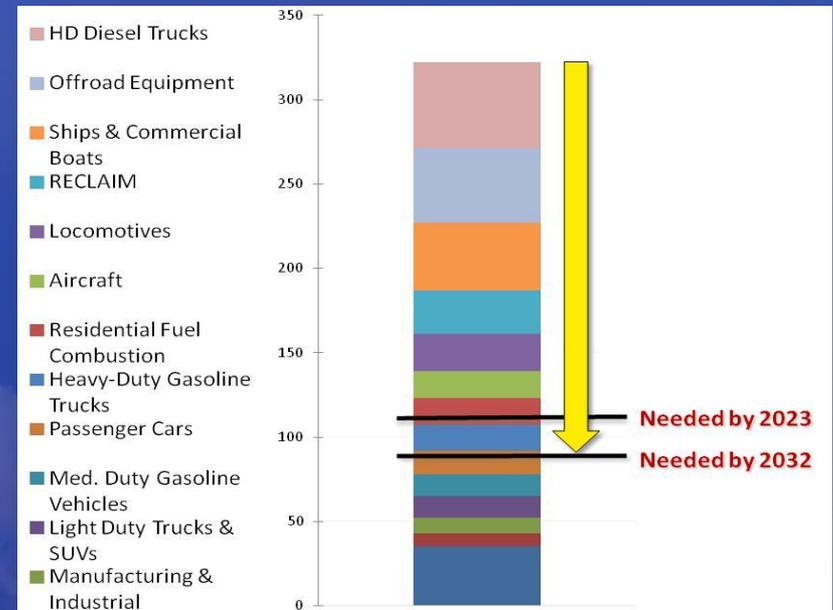
The background of the slide is a clear blue sky filled with numerous white, fluffy clouds. The clouds are more densely packed in the lower half of the image and become sparser towards the top. The overall color palette is a range of blues, from a deep cerulean at the top to a lighter, almost white-blue near the bottom, with the white of the clouds providing a high-contrast element.

Air Quality Strategies



2014 Air Quality Management Plan (AQMP)

- 2015 AQMP will focus on NO_x reductions
- 70 to 90% reduction in NO_x needed to achieve federal ozone standard
- Zero- and near-zero technologies
- Integrated approach



Top 5 NO_x Sources in 2023



Clean Communities Plan (CCP)

- SCAQMD approved CCP in 2010
- Programs and measures to address air toxics
- San Bernardino Pilot Study
 - Stakeholder Working Group
 - Identify air quality issues in San Bernardino
 - Prioritize and identify potential solution paths for each issue

2010 Clean Communities Plan

(Formerly the Air Toxics Control Plan)

*Working Together to
Build Cleaner Communities*

SCAQMD Governing Board Meeting

November 5, 2010

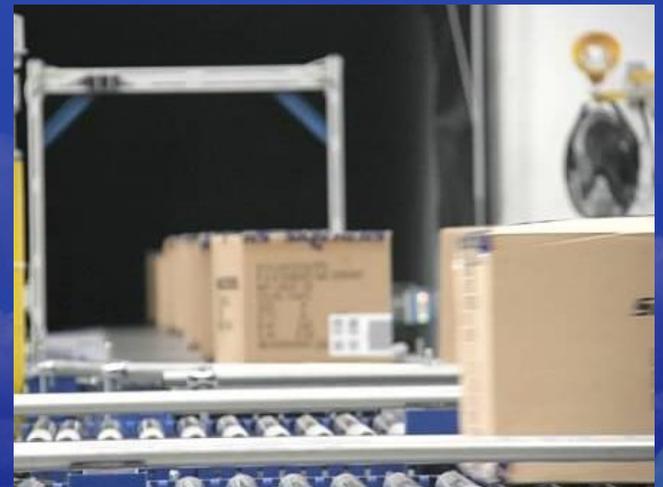


Projects in Inland Empire

Source	Funding	Source Funding	County
59 Truck Replacements	\$2.7 Million	Proposition 1B	San Bernardino
92 Truck Replacements	\$4.7 Million	Proposition 1B	Riverside
Repower 4 Switch Locomotives	\$3.0 Million	Proposition 1B	San Bernardino
Repower 2 Switch Locomotives	\$1.9 Million	Diesel Emission Reduction Act (DERA)	San Bernardino
40 Electric Trucks at UPS	\$1.4 Million	SCAQMD/EPA	San Bernardino
6 Air Filtration at Schools and Recreation Center	\$820,000	CCA EJ	San Bernardino
Lawn Mowers, Leaf Blowers, Autobody and Repair, Arch Coatings, Weatherization	~\$1.5 Million (Still implementing)	USEPA Airshed	San Bernardino
Wood Fire Place and Stove	\$400,000	SCAQMD	Riverside

CEQA Commenting

- Comment on air quality analysis in CEQA documents – emission calculations, emission factors, completeness
- Key land use developments in the Inland Empire
 - Warehousing
 - Housing developments
 - Transportation infrastructure projects



Key Mitigation Measures for New Warehouses

- WRCOG Good Neighbor Guidelines
- Clean trucks and truck routes
- Infrastructure for zero and near-zero truck technologies
- Solar
- Buffer zones/Sensitive Receptors



Conclusions

- Zero and Near-Zero transportation technologies needed to meet ambient air quality standards and reduce localized impacts
- Significant growth projected for warehousing – critical component of goods movement chain
- Solutions are available today and in the near future to reduce localized and regional air quality impacts