

SCAP AIR QUALITY COMMITTEE UPDATE

David L. Rothbart, P.E.
March 22, 2016



SCAQMD Governing Board

Editorial Is AQMD easing up on smog?

Polluters' Coup Takes Over Air Control Agency

SoCal's Smog Regulating Body Wants to Gut Its Own Mission

In One Of The Most Polluted Places In America, Air Quality Board Weakens Pollution Rules

SCAQMD Governing Board

- December 4, 2015 RECLAIM program was “weakened” from SCAQMD staff’s 14 TPD to 12 TPD reduction
- January 2016 Republicans gained a 7-6 majority
- March 4, 2016, SCAQMD Governing Board refused to reconsider the RECLAIM program
- March 4, 2016, Barry Wallerstein dismissed as the Executive Officer
- Michael O’Kelly, existing CFO, is now acting Executive Officer
- A longer-term acting Executive Officer should be announced in April 2016

SCAQMD Governing Board

- March 8 2016, Senate Pro Tem Kevin de León announced his plans to introduce legislation that would add three seats to the SCAQMD

State Senate leader will introduce measure to counter Southern California air board's industry-friendlier plans



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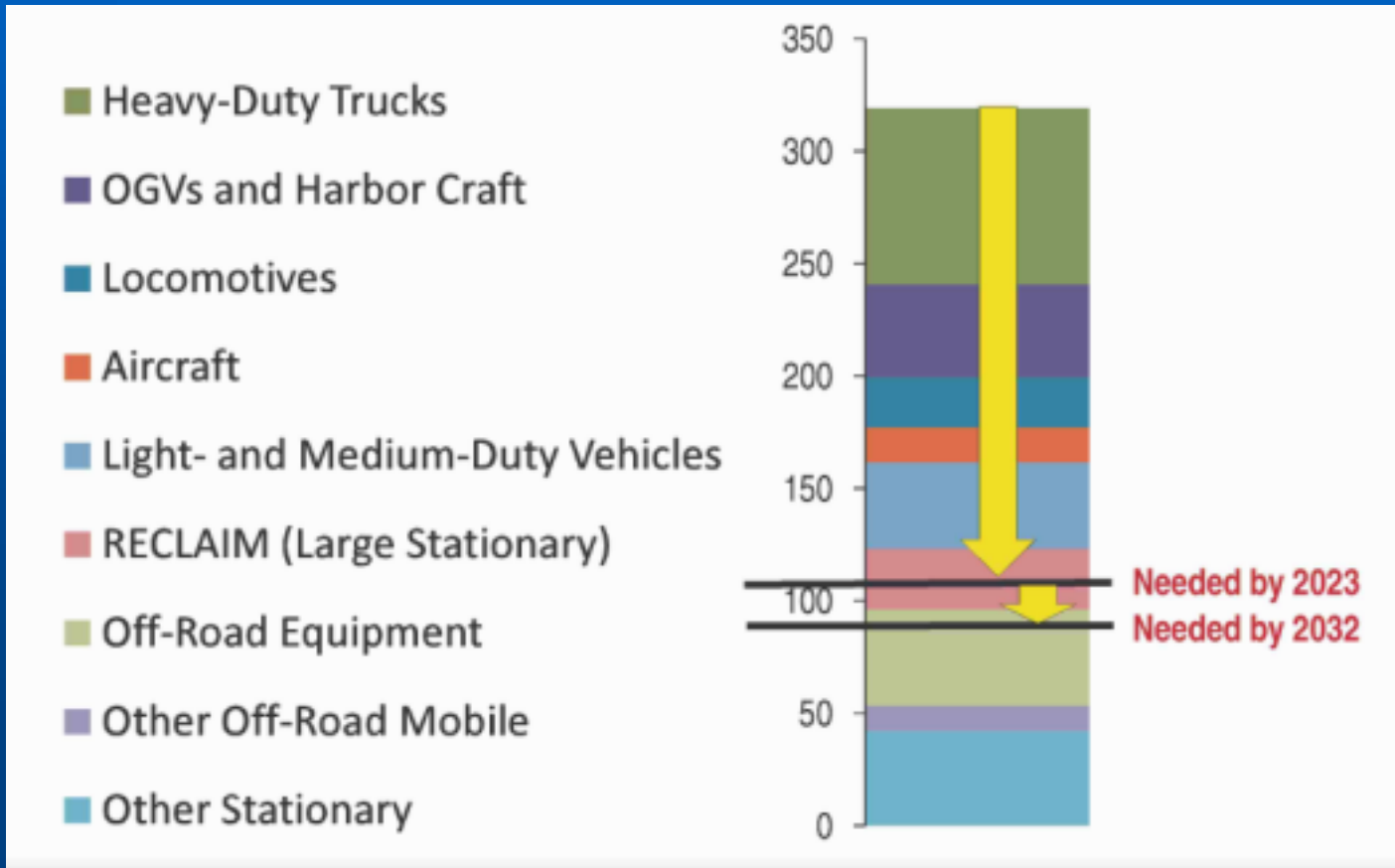
2016 Ozone Air Quality Management Plan

- To achieve the 1997 federal ozone standard, NOx emissions need to be reduced by ~50% before 2023
- CARB proposed a mobile source strategy that can reduce NOx emissions by ~ 40%
- SCAQMD to petition EPA for a national on-road heavy-duty engine NOx standard
- SCAQMD yet to release proposed stationary source control measures
- AQMP needs to be remitted to EPA by July 2016

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2016 Ozone Air Quality Management Plan

NO_x EMISSION REDUCTIONS NEEDED TO ACHIEVE NATIONAL OZONE STANDARDS IN THE SOUTH COAST AIR BASIN

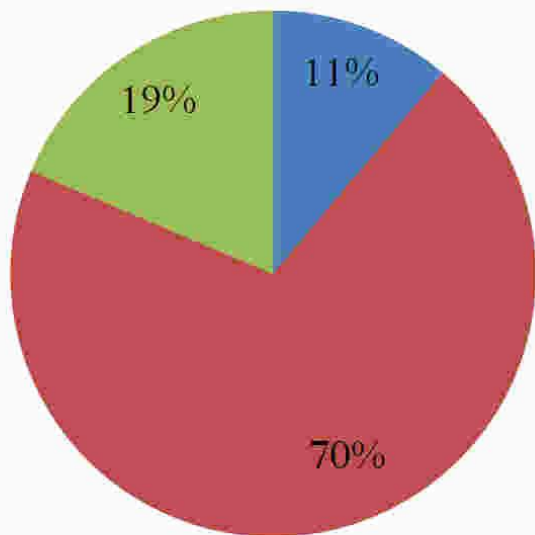


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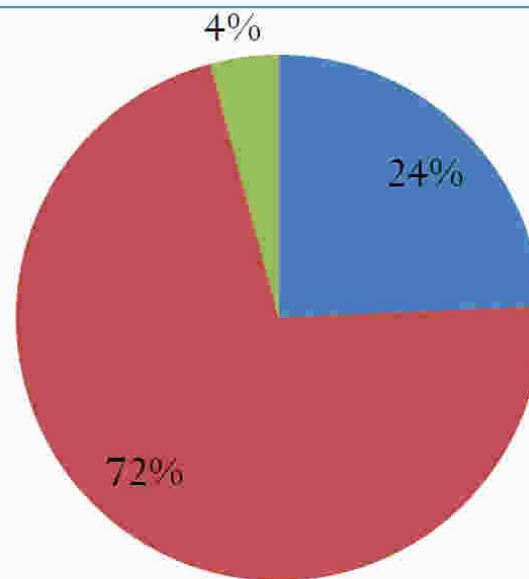
2016 Ozone Air Quality Management Plan

EMISSIONS INVENTORY & REGULATORY AUTHORITY

2016 AQMP NO_x



2016 AQMP VOC



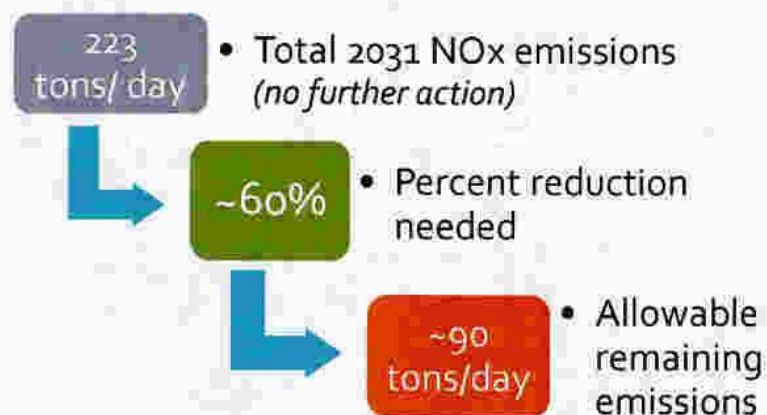
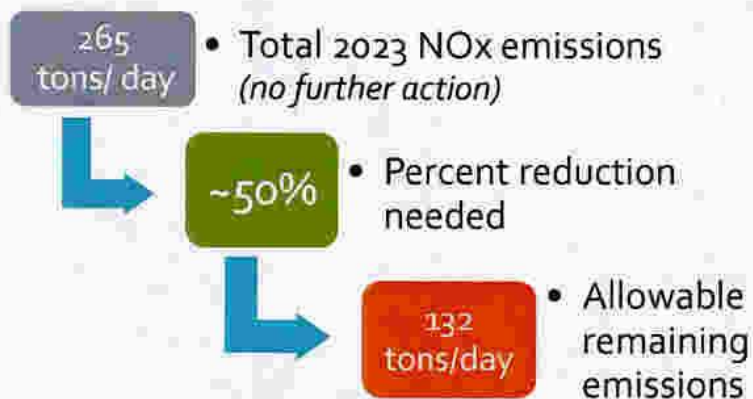
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2016 Ozone Air Quality Management Plan

Challenge in Meeting Ozone Standards

80 ppb by 2023 (7 years)

75 ppb by 2031 (15 years)

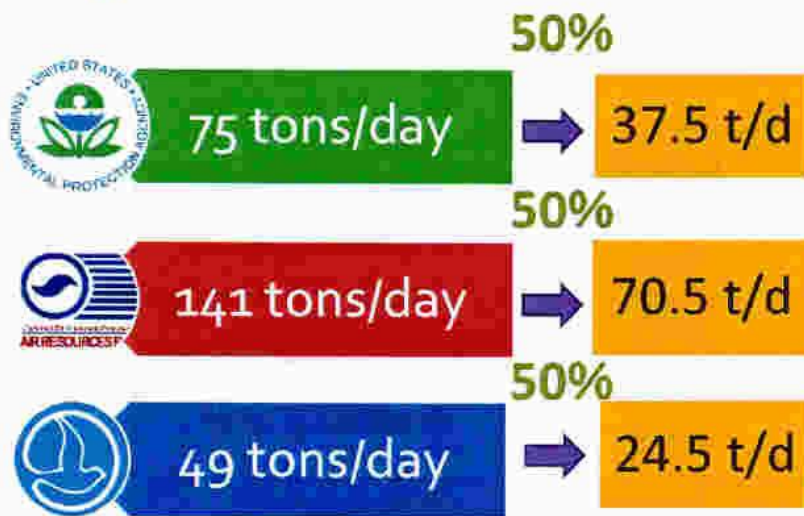


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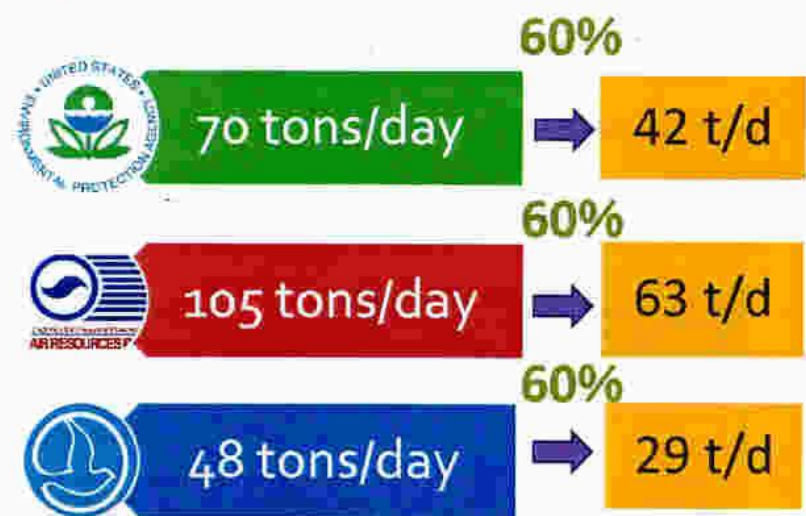
2016 Ozone Air Quality Management Plan

Agency Responsibility / Fair Share Reductions

2023 NOx Emissions – Needed Reductions



2031 NOx Emissions – Needed Reductions



TOTAL NOx (2023): 265 t/d **Reductions:** 133 t/d

TOTAL NOx (2031): 223 t/d **Reductions:** 134 t/d

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2016 Ozone Air Quality Management Plan

More Demanding Task – 80 ppb by 2023

Fair Share Target (50%)



37.5 tons/day



70.5 tons/day



24.5 tons/day



24 t/d

- Further deployment of cleaner technologies (federal sources)



7 t/d

- Local stationary sources (boilers, flares, cooking)

3 t/d

- Co-benefits from energy efficiency

6 t/d

- Incentives to modernize facilities

Local Mobile

Carl Moyer program (22 t/d)

Exchange program

SOON program (2 t/d)

Indirect sources

Incentives – faster deployment



1 t/d

- On-road/off-road regulations

1 t/d

- At-berth regulation

3 t/d

- Incentives - heavy duty vehicles

79 t/d

- Further deployment of cleaner technologies

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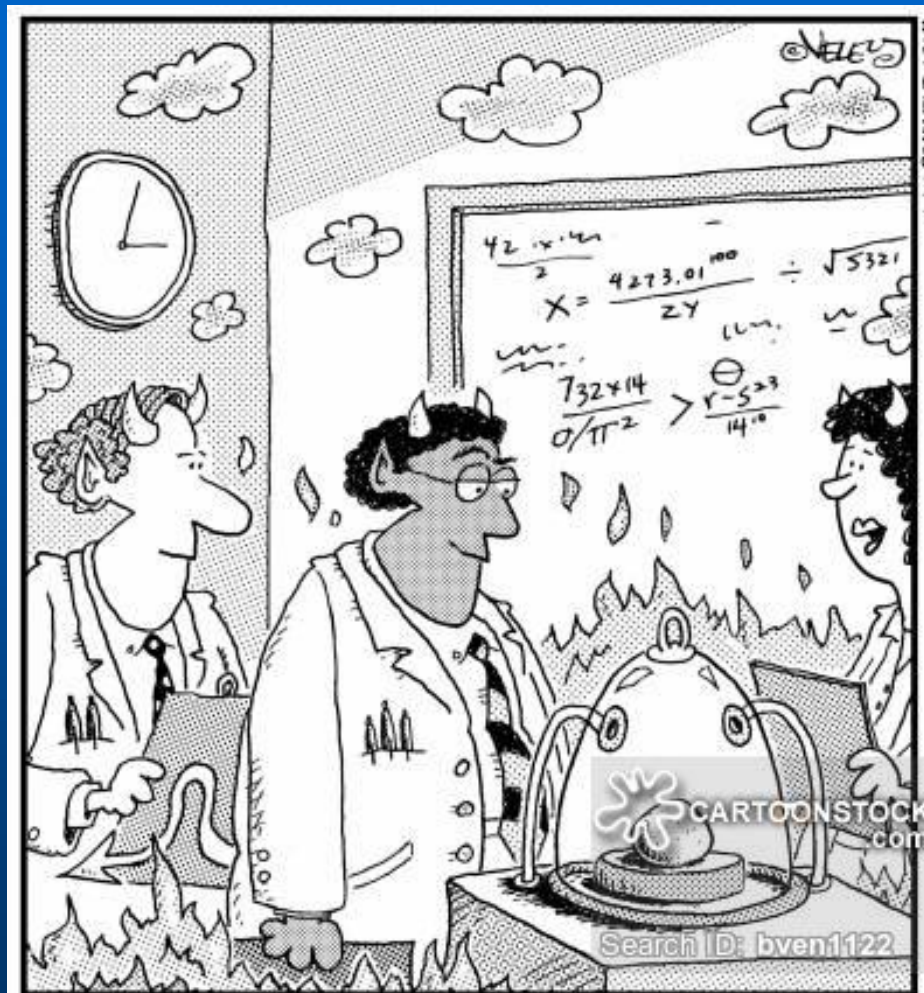
2016 Ozone Air Quality Management Plan

POTENTIAL OZONE CONTROL MEASURES:

- **Co-Benefit Emission Reductions from GHG Programs**
- **Co-Benefits from Residential Weatherization and Other Energy Efficiency Measures**
- **Co-Benefits from Energy Storage and Smart Grid**
- **Further Emission Reduction from Commercial and Multi-unit Residential Space Heating and Boilers**
- **Other Ozone Measures: Non-Refinery Flares, Restaurant Burners, Use of Fuel Cells, Improved Breakdown Procedures and All Feasible Measures**

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2016 Ozone Air Quality Management Plan



“Our research shows that, under the right conditions, a snowball can have an excellent chance here!”

Potential Changes to the PERP Regulation and Portable Engine ATCM



March 10, 2016
Sacramento



Enforcement Division

Advisory

To: Owners/Operators of
Portable Engines Rated at
50 HP and Greater

Number 347

December 2015

PORTABLE DIESEL ENGINE AIRBORNE TOXIC CONTROL MEASURE

ARB is Planning Amendments to the 2017 and 2020 Fleet Average Emission Standards

This advisory is to inform owners/operators of engines subject to the Airborne Toxic Control Measure for Diesel Particulate Matter (ATCM) from Portable Engines Rated at 50 Horsepower and Greater that the Air Resources Board (ARB) plans to revise the fleet average emission standards for diesel particulate matter (DPM) that become effective in 2017 and 2020. The Statewide Portable Equipment Registration Program Regulation (PERP regulation) will also be revised to complement any changes made to the ATCM. ARB will not enforce, and is advising the local air districts not to enforce, the 2017 ATCM fleet average emissions standards until the regulatory amendments are effective.

All other PERP regulation and ATCM provisions remain in effect, including current engine eligibility requirements, and provisions requiring all uncertified (Tier 0) equipment to be removed from service no later than January 1, 2017. All local air district permitting requirements for these engines also remain in effect. Please contact the ARB if you have questions regarding these upcoming amendments, and your local air district if you have questions regarding the use of PERP registered engines or equipment units within their jurisdiction.

Current Requirements

- Tier 0 engines removed from service since 2011
 - Except emergency & low use (2017)
- Strict eligibility for PERP and local permits
- Fleet standards currently in effect (≥ 50 bhp)

Date	<175 bhp	175 to 750 bhp	>750 bhp
1/1/13	0.3	0.15	0.25
1/1/17	0.18	0.08	0.08
1/1/20	0.04	0.02	0.02

- Fleet definition based on Responsible Official

ATCM Fleet Requirements

Potential Strategy: Tier phase-out for all fleets

Tier of Engine	Engines 50 - 750 bhp		Engines >750 bhp
	Regular Fleet	Small Fleet	
1	Year TBD	Year TBD	Year TBD
2	Year TBD	Year TBD	Year TBD
3	Year TBD	Year TBD	N/A

- Redefine fleet to be based on common ownership
- Small fleet would have no more than 750 bhp total
 - possible later schedule
- Flex engines comply based on actual emission level
- Possible faster schedule for PM_{2.5} non-attainment Air Districts

QUESTIONS?

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