

SAE 2010 Powertrains, Fuels and Lubricants Meeting

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Erik White

Assistant Chief, Mobile Source Control Division



We have Come A Long Way

- Our efforts to reduce air pollution have been a tremendous success
- We have many achievements to build on
- We must now continue to turn our efforts to diesel engines



Diesel Engines Remain an Important Focus

- They are the lifeblood of the California economy
- Staggering statistics
 - More than 750,000 trucks
 - Thousands of locomotives and ships
 - >100,000 Transport Refrigeration Units
 - 375,000 Off Road Engines
- 170,000 business that use diesel trucks
- Their emission impact is overwhelming



Many Areas of the State do not meeting Federal AQ Standards

8-Hour Ozone



PM2.5 Annual



 **Nonattainment**

 **Unclassified/Attainment**

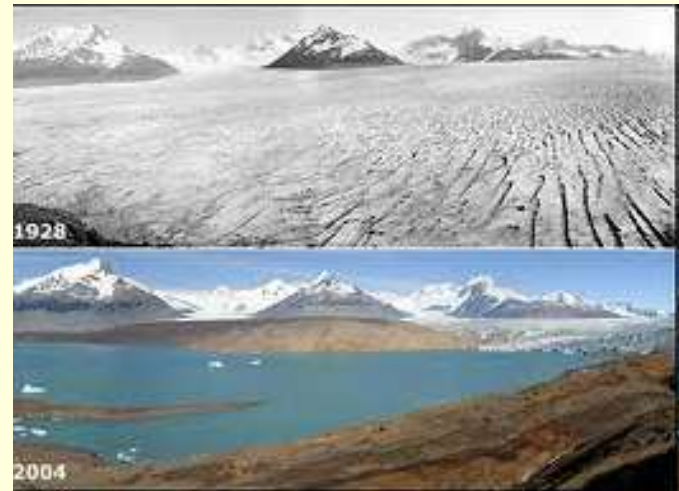
Staggering Emission Statistics

- 2/3 of all statewide NOx emissions
- 95% of mobile source PM2.5 emissions
- Significant contributor to PM2.5 mortality
- 70% of known cancer risk from all air toxics

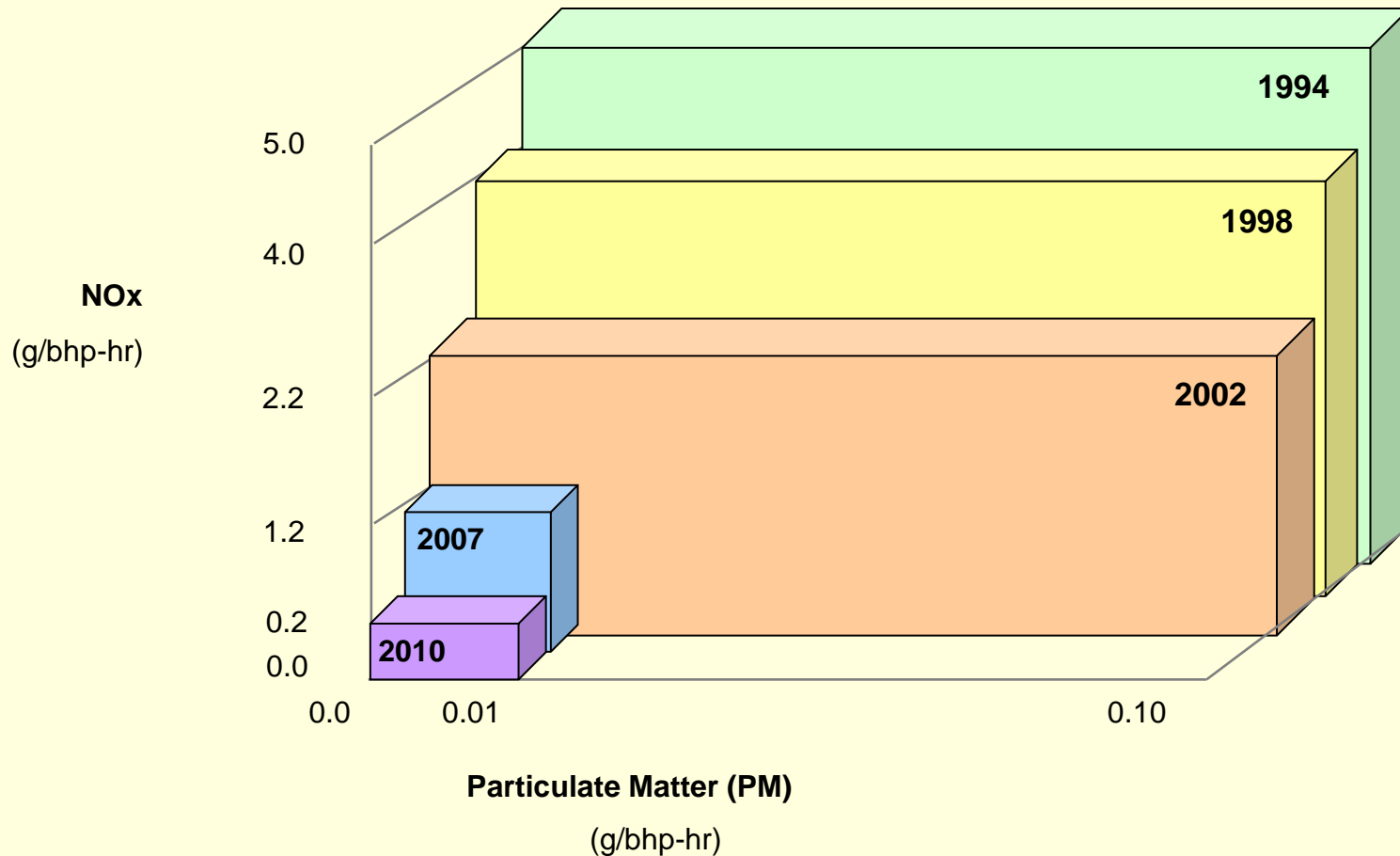


Important GHG Contributor

- AB 32 will substantially reduce GHG emissions
 - 1990 levels by 2020
 - 80% reduction by 2050
- Transportation sector major source
 - 40% of all emissions
 - 50% increase by 2020



New Trucks are Cleaner than Ever



Legacy Fleet Remains a Challenge

- Existing engines retain long useful lives
 - Average age of HD trucks is 10-14 years
- Business as usual turnover not fast enough
- Strategies to reduce emissions from existing vehicles are key
- Must combine near-term and long-term goals



Strategies in Place to Reduce Emissions

- Retrofit with DPF
- Replace with new vehicle
- Repower with cleaner engine
- Retire



GHG Reductions Remain a Focus

- New retrofit technology available
 - Tires, tractors and trailers
- More hybrids are available
 - On- and off-road
- Integrate engine and vehicle



Incentives Remain an Important Piece

- Largest diesel incentive portfolio in nation
 - \$1 billion in bonds for goods movement
 - \$140 annually for other diesel engines
 - Supplemental loan assistance programs
- \$50 million for new technologies
 - Hybrids
 - ZEVs
- More \$\$\$ is needed

Introduction

The VIP is a streamlined approach to reduce emissions by replacing all high-polluting vehicles with new, lower emission vehicles. This program is limited to entrepreneurs with fleets of 2 or fewer vehicles that have been operating at least 75% in California during the previous twenty-four (24) months. The goal of this program is to reduce emissions from in-use heavy-duty trucks in small fleets by replacing engine Model Year 2001 and older with Model Year 2007 (or newer) emissions compliant models. The VIP will be implemented by AQIDD through contractual agreements with Dealers and Distributors. The Dealers will apply to the AQIDD for the vouchers on behalf of the applicant. The approved voucher amount will be deducted from the total purchase price of the truck by the Dealer. Applicants interested in replacing their truck must purchase their replacement truck through an AQIDD-approved VIP Participating Dealership (for provided models) that has completed the required training for the VIP. Updates to this list and a new list of AQIDD approved Dealers/Distributors will be posted on our website as they become available.

Please visit www.aqidd.gov/vip/implementation/vip for more information.

2010 Carl Moyer On-Road Heavy-Duty Voucher Incentive Program

Challenges Remain, but Future is Bright

- Additional reductions still needed
- More stringent AQ standards are coming
- Diesels will play important role
 - Lower future engine standards
 - Successful implementation of OBD
 - New vehicle efficiency standards
- Continued innovation will guide the path forward!