



Emission Reduction Incentive Program
Public Informational Meeting

Development of
Truck Replacement and Retrofit
Program

November 15, 2007

Presentation Overview

- ARB proposed on-road regulation overview
- Proposition 1B overview
- District program goals overview



California Air Resources Board (ARB)

Proposed In-Use Heavy-Duty Diesel Vehicle Regulation



Proposed Regulation Overview

- Affected vehicles
 - All heavy-duty diesel vehicles operating in CA
 - Any truck designed to be driven on-road
- Exempt vehicles
 - Vehicles currently subject to an ARB regulation
 - Personal and low use vehicles
 - May have special consideration of farm vehicles



Proposed Regulation Overview (cont.)

- Strategies to meet compliance requirements
 - Apply a verified diesel emission control strategy (VDECS)
 - Replace with cleaner new or used vehicle
 - Install cleaner engine (repower)
- Early action credit
 - Install highest level VDECS by December 31, 2009 and delay further action until 2013



Proposed Regulation Overview (cont.)

- The NOx exhaust emissions less than or equal to a 2007 model-year engine
- Highest level VDECS for PM

| Engine Model Years | Compliance Deadline, as of December 31 |
|---------------------------|---|
| Pre-1998 | 2010 |
| 1998-2002 | 2011 |
| 2003-2004 | 2012 |
| 2005-2006 | 2013 |



Proposed Regulation Overview (cont.)

- The NOx exhaust emissions less than or equal to a 2010 model-year engine
- Highest level VDECS for PM

| Engine Model Years | Compliance Deadline, as of December 31 |
|---------------------------|---|
| Pre-2004 | 2017 |
| 2004-2006 | 2018 |
| 2007 | 2019 |
| 2008 | 2020 |
| 2009 | 2021 |



ARB On-Road Regulation Contact Information

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Goods Movement Emission Reduction Program (Proposition 1B Funding)

Concepts for Implementation



Prop 1B Funding Overview

- Voter-approved Proposition 1B
 - \$1 billion for emission reductions from activities related to the movement of freight along California's trade corridors and not required by law or regulation
 - California's trade corridors include:
 - Los Angeles/Inland Empire
 - Central Valley
 - Bay Area
 - San Diego/border



Prop 1B Funding Eligible Projects

- Retrofit existing heavy-duty diesel trucks with particulate filters or replace with new(er) trucks
- Install shore-side electrical infrastructure for cargo ship berth
- Replace freight locomotive or engine
- Replace commercial harbor craft engine
- Retrofit cargo handling crane with energy storage system



ARB Prop 1B

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- Sign up for listserv notices
- Access to documents



Truck Replacement and Retrofit

- Program Goals
- Questions to be Answered
- Potential Scenarios
- Incentive Program Successes
- Public Process



Program Goals

- Achieve maximum amount of emission reductions as expeditiously as possible
- Provide District funding flexibility
- Exceed reductions from proposed ARB On-Road Private Fleet Rule
- Ensure vehicles funded will be compliant with proposed regulations and/or achieve early reductions



Questions to be Answered

- A number of questions and issues need to be addressed to achieve program goals:
 1. Which model year trucks to target?
 2. What are the costs?
 3. How to ensure surplus emission reductions?



Which Trucks to Target?

- Newer model year trucks
 - Lowest tail pipe emissions and highest annual mileage
- Mid-range model year trucks
 - Higher tailpipe emissions and high annual mileage
- Older model year trucks
 - Highest tailpipe emissions and lowest annual mileage



What Are the Costs?

- Determine incentive funding per truck
- Establish truck owner contribution
- Debt service issues
- Value of replaced truck and willingness to relinquish
- Total incentive funding required to implement program
- ARB will provide guidance on funding issues



How to Ensure Surplus Emission Reductions?

- District has experience verifying surplus emission reductions
- Verify emission reductions would not occur through normal fleet turnover
 - Develop criteria to discover which trucks should be targeted for replacement/retrofit



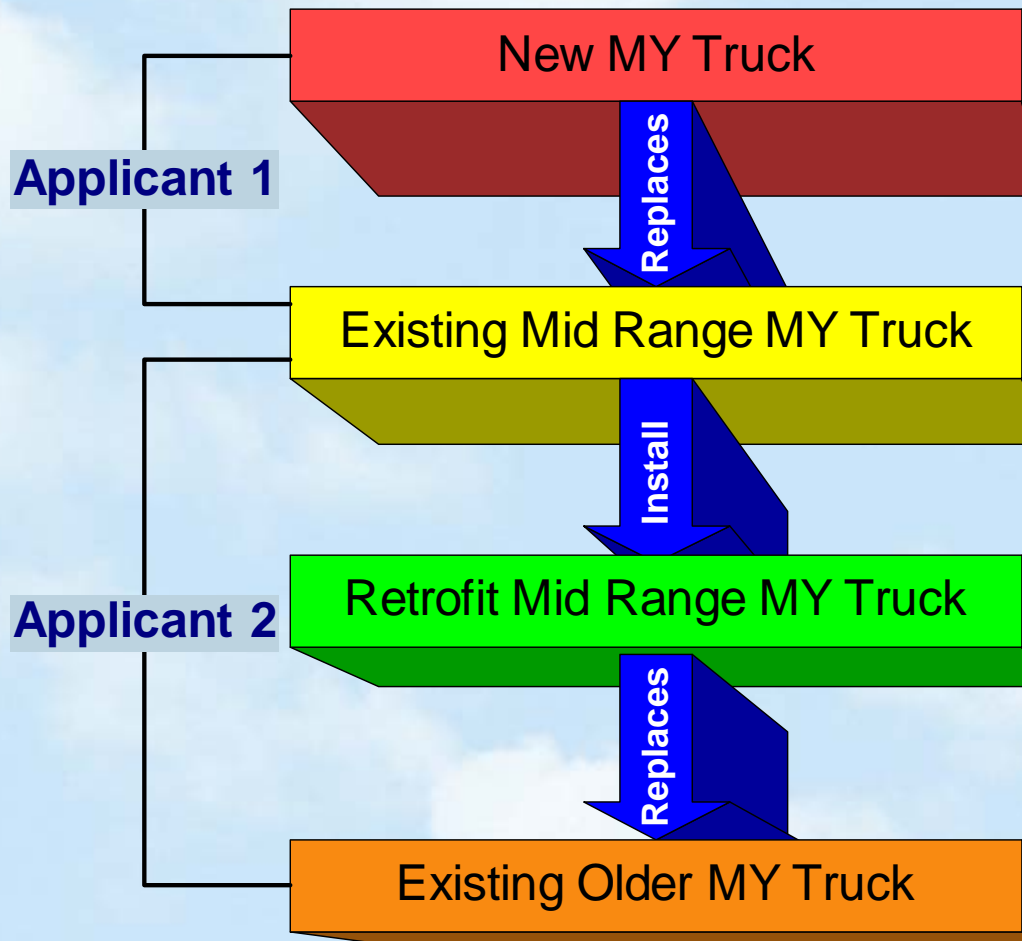
Potential Scenarios

- Four scenarios currently being evaluated
 1. Two tiered transaction:
New MY → Mid Range MY → Older MY
 2. One tiered transaction: New MY → Older MY
 3. One tiered transaction: New MY → Mid Range MY
 4. Retrofit only: Mid Range MY
- Scenario combinations also possible
- Other scenarios may be considered



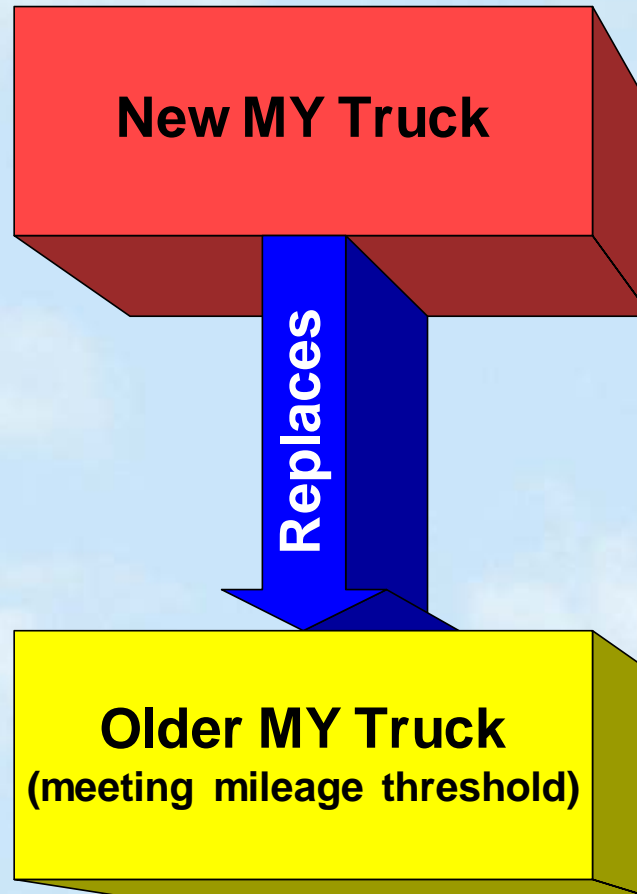
Scenario 1

2 Tiered Transaction



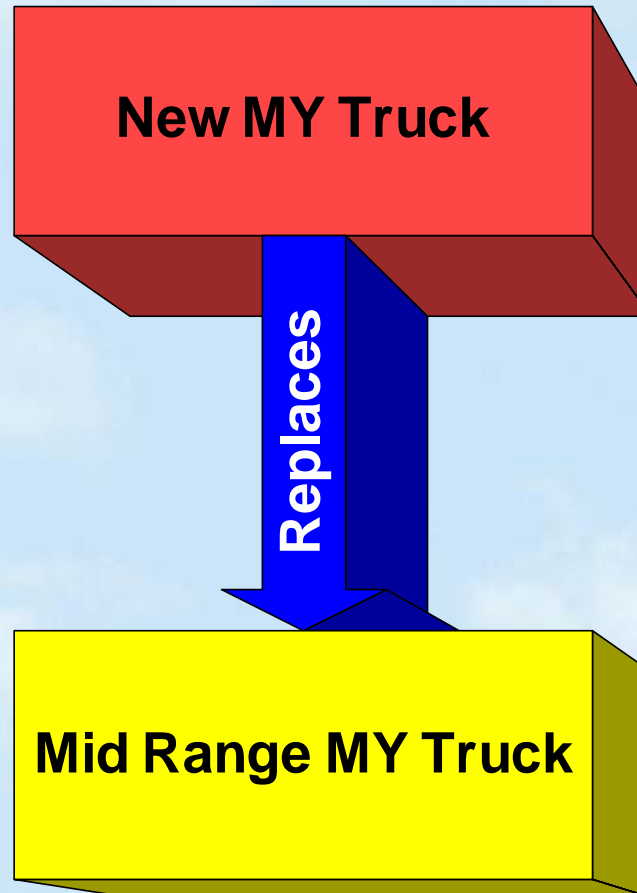
Scenario 2

1 Tiered Transaction



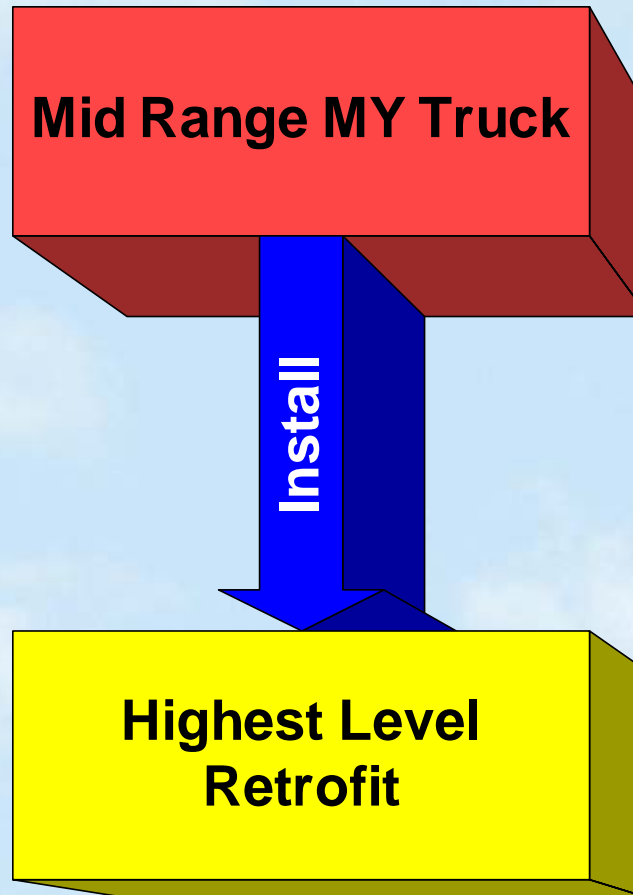
Scenario 3

1 Tiered Transaction



Scenario 4

1 Tiered Transaction



Incentive Program Successes

- The District has operated highly successful incentive programs since 1992
- District awarded over \$180 million
- Reduced 58,000 tons of lifetime emission reductions (NOX, PM, ROG)
- District has recently been audited by three separate State agencies
 - Establishes District as one of the most effective incentive programs in the State



Public Process

- Consult trucking industry representatives
- Consult District Fast Track Advisory Committee
- Coordinate with Air Resources Board



Questions



Contact Information

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