



***Air Resources Board's  
Proposed Public and Utility  
Fleet Rule***

***CAPCOA Technology Conference  
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Sacramento, CA***

# *Outline of Today's Presentation*

- Background
- Proposed Rule's Requirements
- Issues Raised During Public Comment Periods
- Next Steps
- Comments and Questions



# ***BACKGROUND***



*California Environmental Protection Agency*

**AIR RESOURCES BOARD**

# *Health Impacts of Diesels in California*



- Every Year Exposure to Diesel PM Causes
  - 2,900 Premature Deaths
  - 3,600 Hospital Admissions
  - 240,000 Asthma Attacks or Respiratory Symptoms
  - 600,000 Lost Work Days

# ***Diesel Risk Reduction Plan (DRRP)***

- Goal:
  - Reduce 75% Diesel PM Risk by 2010
  - Reduce 85% Diesel PM Risk by 2020
- Strategies:
  - Clean Fuels
  - Stringent Standards for New Engines
  - Ensure In-Use Performance
  - **Aggressive Reductions from In-Use Engines**

# *Status of DRRP*

- New Engine Regulations
  - On-Road Truck Engines - Adopted
  - Off-Road Engines - Adopted
- Clean Fuels - Adopted
- Ensure In-Use Emissions
  - Recall Testing - Agreements Reached
  - Engine Manufacturer Diagnostics - Adopted
  - Heavy Duty Engine On-Board Diagnostics - Adopted

# *DRRP Adopted In-Use Engines Controls*

- Transit Agencies
  - Urban Buses (8,000)
  - Transit Agencies' Vehicles (4,000)
- Refuse Haulers (13,000)
- Stationary Engines (26,000)
- Transportation Refrigeration Units (40,000)
- Portable Engines (35,000)
- Idling School Buses (26,000)
- Commercial Idling (409,000)
- Intrastate Locomotive and Harbor Craft Fuel (5,000)

# ***DRRP Regulations Under Development***

- Marine Vehicles/Vessels - Cargo Handling Equipment and Ship Auxiliary Engines (2005)
- Stationary Agricultural Engines
- Off Road Fleets (Private and Public)
- Harbor Craft
- Ocean Vessels - Propulsion Engines
- Private On-Road Fleets
- **Public and Utility Fleets (November 2005)**



***PROPOSED RULE:  
PUBLIC AND UTILITY  
ON-ROAD FLEETS***

# *Proposed Applicability*

- Municipal or Utility Active Fleet
  - Vehicles owned and operated by municipality or utility
  - Includes leased vehicles operated by the municipality or utility
- Diesel Fueled over 14,000 GVWR
- Model Years 1960 to 2006

# ***Proposed Best Available Control Technology (BACT)***

- Engine Certified to 0.01 g/bhp-hr PM or 0.1 g/bhp-hr plus Retrofit with Highest Level Verified DECS
- Alternative-fuel, or Heavy-Duty Pilot Ignition Engine Certified to Lowest Optional PM Standard
- Retrofit with Highest Level Verified DECS
- Once in Compliance the Vehicle Must Remain In Compliance

# *Diesel Emission Control Strategy Verification Levels*

- **Level 1 (25% or greater PM Reduction)**
- **Level 2 (50% or greater)**
- **Level 3 (85% or greater or  $\leq 0.01$  g/bhp-hr)**
  - Optional NO<sub>x</sub> Reduction, 15% min.

# *Proposed Implementation Schedule*

<b>Group</b>	<b>Model Years</b>	<b>BACT %</b>	<b>Deadline as of December 31<sup>st</sup></b>
<b>1</b>	<b>1960 – 1987</b>	<b>20</b>	<b>2007</b>
		<b>60</b>	<b>2009</b>
		<b>100</b>	<b>2011</b>
<b>2</b>	<b>1988 - 2002</b>	<b>20</b>	<b>2006</b>
		<b>60</b>	<b>2008</b>
		<b>100</b>	<b>2010</b>
<b>3</b>	<b>2003 –2006 (includes dual/bi-fuel engines)</b>	<b>50</b>	<b>2009</b>
		<b>100</b>	<b>2010</b>

# *Proposed Compliance Extensions*

- Based on Early Implementation
- No Verified DECS
- Dual-Fuel or Bi-Fuel Engine
- Engine Near Retirement
- Participation in Experiment/Demonstration

# *Proposed Early Compliance Extension*

- Group 1 -Implement BACT on 50% by December 31, 2007 may delay remaining Group 1 vehicles to July 1, 2012.
- Group 2 - Implement BACT on 50% by December 31, 2006, may delay remaining Group 2 vehicles to July 1, 2011
- May count all vehicles meeting BACT requirements of Section 2022.1(b) as of January 1, 2005, towards 50% compliance level.

# *Low Population Counties Implementation Schedule*

- Municipalities located in counties with less than 125,000 as of July 1, 2005 based on projection
- Allowed to follow an alternate compliance schedule
- Counties are listed in regulation

# *Proposed Low Population County Municipality Implementation Schedule*

<b>Group</b>	<b>Model Years</b>	<b>BACT %</b>	<b>Deadline as of December 31<sup>st</sup></b>
<b>1</b>	<b>1960 – 1987</b>	<b>20</b>	<b>2009</b>
		<b>40</b>	<b>2011</b>
		<b>60</b>	<b>2013</b>
		<b>80</b>	<b>2015</b>
		<b>100</b>	<b>2017</b>
<b>2</b>	<b>1988 - 2002</b>	<b>20</b>	<b>2008</b>
		<b>40</b>	<b>2010</b>
		<b>60</b>	<b>2012</b>
		<b>80</b>	<b>2014</b>
		<b>100</b>	<b>2016</b>
<b>3</b>	<b>2003 –2006 (includes dual/bi-fuel engines)</b>	<b>20</b>	<b>2011</b>
		<b>40</b>	<b>2012</b>
		<b>60</b>	<b>2013</b>
		<b>80</b>	<b>2014</b>
		<b>100</b>	<b>2015</b>

# *Proposed Special Circumstances*

- DECS Failure
- Discontinuation of Fuel DECS
- Level 1 DECS Has Limited Life

# *Proposed Recordkeeping*

- Records Kept Accessible at Vehicle Location
- Records Kept in the Vehicle (Labeling Requirement)

# *Additional Compliance Requirements*

- A municipality or utility shall include language requiring any contractor to be in compliance with all applicable California air pollution control laws and regulations in a new contract for services that the municipality or utility would normally provide that has an effective date of December 31, 2006 or subsequent.



*Issues Raised During  
Public Comment Periods*

# *Issues Raised*

- Proposed Rule's Cost Reimbursable by the State
- Emergency Vehicles and Military Tactical Vehicles
- Special Provisions for Rural Counties
- Biodiesel and EPA Act Compliance

# *Reimbursable Costs*

- Is the proposed regulation costs reimbursable by the State under California Government Code Section 17500?
  - Is the regulation requiring a new program or an increased level of service in an existing program?
    - No. The proposed regulation does not require a new program or an increased level of service.
  - Is the costs of regulations unique to local governments?
    - No. The proposed regulation is equally applicable to investor-owned private utilities and local agencies (County of LA vs. California et al, 43 Cal 3d 46 (1987)).

# *Emergency Vehicles and Military Tactical Vehicles*

- Emergency Vehicles are exempted from the scope of the proposed rule by California Vehicle Code Section 27156.2
- Military Tactical Vehicles are exempted from the scope of the proposed rule by Title 13, California Code of Regulations Section 1905

# *Rural Counties*

- ARB is now considering an optional compliance path to assist low population (“rural”) counties with compliance
  - Accelerated Turnover Schedule
  - Replace all 1993 and older with 1994 and newer engines by 2020
  - Apply BACT for 1994 to 2006 engines by 2025

# *Biodiesel and EPAct Compliance*

- Biodiesel is being used by public fleets for compliance with the Energy Policy Act (EPAct)
- Agencies already using B20 or B100 are concerned that they may have to stop using it once this rule is implemented
- ARB staff has been working with retrofit manufacturers to verify DECS with biodiesel blends
- ARB's Biodiesel Working Group has been working with the industry to develop ASTM approved methods for fuel specifications

# ***NEXT STEPS***

- Board Hearing set for November 17-18, 2005
- Staff Report Published 45 Days Prior, or September 30, 2005

# Questions or Comments?

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