

# California State Fleet Regulations

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SLO County Air Pollution Control District

# Why we have regulations

- **Reduce Diesel Exhaust Particulate Matter (PM)**
  - In 1998, California identified diesel PM as a toxic air contaminant
    - PM10 is among the most harmful of all air pollutants.
    - Premature deaths linked to PM are now at levels comparable to deaths from traffic accidents & second-hand smoke (CARB 2002a)
  - The major source of diesel PM are the 1,250,000 diesel-fueled engines & vehicles in use in CA
    - These diesel engines release over 25,000 tons of PM annually
  - SLO County does not meet the State's health-based PM standard
- **Climate Change**
  - AB 1493 (Pavley) requires ARB to reduce greenhouse emissions from mobile sources.
  - Governor's GHG reduction plan: 2010 reductions of ~1 megaton per year
  - Advances in vehicle technologies will make this possible

# California's Diesel Reduction Plan

- In September 2000, ARB approved a comprehensive Diesel Risk Reduction Plan
  - Applies to new and existing diesel-fueled engines
  - Goal: Reduce diesel PM risk by 75% in 2010 and 85% in 2020
  - 14 measures are identified in the Plan
    - Stringent emission standards for new engines
      - For on-road vehicles, the Plan's goal is to reduce diesel PM by 90% from 2000 on-road standards
    - Particulate trap retrofit requirements for existing engines
    - Clean fuels -- reduce sulfur content in diesel fuel
    - Alternatives for diesel-fueled engines & vehicles

# ARB's Regulatory Schedule

## Existing Fleet Regulations

- Public Transit Agency Fleets 2000
- Solid Waste Collection Vehicles 2004
- On-Road Heavy-Duty Diesel Public Fleets 2005

## Upcoming Regulations

- In-Use Off-Road Diesel Engines

# Public Transit Agency Fleets

- Adopted by ARB in 2000
  - Goal: 85% PM Reductions from 2002 levels
- Applies to Urban Buses, 15+ passengers
- **Diesel Path vs. Alt-Fuel Path**
  - Same Emission Levels required in 2010 (0.2 g/bhp-hr NOx)
  - Different Implementation Schedule
- NOx fleet average 4.8g/bhp-hr 2002+
- Ultra Low-Sulfur Diesel 2002+
- Recent modifications for transit agencies on diesel path:
  - Align emission standard w/ 2007 HDD Truck standard
    - 1.2 g/bhp-hr NOx



# Solid Waste Collection Vehicles

- Approximately 12,000 diesel-fueled commercial & residential solid waste and recycling collection vehicles
- Applies to all 1960-2006 MY engines over 14,000 lbs gross vehicle weight
- Implementation schedule depends on fleet size and age
  - Starts 2004
  - Ends 2011
- ARB's Best Available Control Technologies (BACT) Implementation Required:
  - Engine certified to 2007 MY standard 0.01g/bhp-hr
  - Engine certified to 0.10 g/bhp-hr, w/ Diesel Emission Control Strategy
  - Alternative-fuel engine
  - Diesel or dual-fuel engine (MY 2004-2006) retrofitted w/ DECS



# On-Road Heavy-Duty Diesel-Fueled Vehicles Public Fleet Rule



- Applicability:
  - Diesel vehicles over 14,000 GVWR
  - Model year engines 1960 to 2006
  - Vehicles owned (or leased) and operated by a municipality or utility
  - Special provisions for low population counties (less than 125,000 population as of July 1, 2005)
  - Implementation schedule depends on fleet size and age
- ARB's BACT
  - Engine certified to 0.01 g/bhp-hr PM standard (2007 engine)
  - Engine certified to 0.10 g/bhp-hr PM plus retrofit with highest level verified DECS
  - Alternative-fuel, gasoline, or heavy-duty pilot ignition engine certified to lowest optional PM standard
  - Existing engine retrofit with highest level verified DECS
- Benefit: 510 tons PM reduced by 2020



# Other Regulations

- Idling emissions from new and in-use heavy-duty trucks
  - School buses: idling is prohibit in school zones
  - Commercial vehicles (diesel-fueled): 5 minute limit
  - Sleeper trucks
- Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards



# Upcoming Regulations & Plans

- In-Use Off-Road Diesel Engines
- On-Road Private Fleets
- Heavy-Duty Vehicle Smoke Inspections
- Good Movement Action Plan
- Railyard Emission Reduction Plan
- Green House Gas Action Plan

And more regulations to continue  
the drive for cleaner fuel & vehicle  
technologies

