



# Reducing Particulate Matter Emissions from On-Road Heavy Duty Diesel-Fueled Vehicles Owned Or Operated By Public Agencies And Utilities







# **Area Designations for National Ambient Air Quality Standards for Ozone and PM2.5**





- Nonattainment
- Unclassified/Attainment

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# Significant Health Impacts Attributed to Diesel PM

 2,900 premature deaths compared to 3,700 car accident deaths and 2,000 homicides in 2001



- 2,500 chronic bronchitis cases
- 240,000 asthma attacks and respiratory symptoms
- 3,600 hospital admissions
- 600,000 lost work days
- 3.2 million minor restricted activity days

### Diesel Risk Reduction Plan

### Adopted 2000

- 75 percent risk reduction by 2010
- 85 percent risk reduction by 2020

### • Multiple Strategies:

- Stringent new engine standards
- Cleaner diesel fuel (<15 ppm sulfur)</li>
- Ensure in-use emissions performance
- Aggressive reductions from in-use engines

# Fleet Rule For Public Agencies and Utilities

### Scope and Applicability

- Effective January 5, 2007
- Vehicles owned, leased, or operated by a municipality or utility
- On-road diesel vehicles over 14,000 GVWR
- Medium heavy-duty and heavy heavy-duty engines
- 1960 to 2006 model-year engines

### Vehicles Exempt From Rule

- Emergency vehicles
- Military tactical support vehicles
- Off-road vehicles
- School buses
- Solid waste collection vehicles
- Public transit buses
- Federal fleet vehicles
- Dedicated snow removal vehicles

### **On-Road Covered**











### Off-Road NOT Covered











# Major Elements of the Fleet Rule for Public Agencies and Utilities

- Apply BACT to each engine in engine model year group
- Follow specific implementation schedule based on engine model-year
- Keep records for and label each vehicle
- Remain in compliance

# Best Available Control Technology (BACT)

- Engine certified to 0.01 g/bhp-hr PM standard (2007 engine) or
- Engine certified to 0.10 g/bhp-hr PM and retrofit with highest level verified diesel emission control strategy (DECS) or
- Alternative-fuel, gasoline, or heavy-duty pilot ignition engine certified to lowest optional PM standard or
- Existing engine retrofitted with highest level verified DECS

### Implementation Schedule for All Fleets

| Group          | Engine Model-<br>Years   | Percentage of Group to use BACT | Compliance Deadline as of December 31 |
|----------------|--|---------------------------------|---------------------------------------|
| 1 <sup>a</sup> | 1960 - 1987  | 20%<br>60%<br>100%              | 2007<br>2009<br>2011                  |
| 2              | 1988 - 2002  | 20%<br>60%<br>100%              | 2007<br>2009<br>2011                  |
| 3              | 2003 – 2006<br>(Includes all<br>dual-fuel and bi-<br>fuel engines) | 50%<br>100%                     | 2009<br>2010                          |

<sup>&</sup>lt;sup>a</sup> An owner may not use a Level 1 technology as BACT on Group 1 engines

### Retired Vehicle

- Section 2022(b)(5)
  - Sold outside of California
  - Meets BACT requirement if transferred to a fleet within California
  - Engine dismantled for scrap
  - Converted for use as a low usage or lowpopulation low usage vehicle
  - Keep records to document retirement

#### **Extensions to Deadlines**

- Compliance extensions provided, section 2022.1(d)(1) through (6)
  - May require an application
- Special circumstances, section 2022.1(e)(1) through (4)

# Required Records (by December 31, 2007)

#### Fleet vehicle records

- Individual records by vehicle
- Kept centrally
- Available for inspection by appointment

#### Vehicle labels

- Door jamb, or
- Location known by driver
- Durable and legible

#### Compliance statement

Statement certifying engines are in compliance as required

### Contractor Compliance Requirements

- Section 2022.1 (g)
  - Contracts with an effective date of December 31, 2007 or later
  - Contractor must comply with all federal, state, and local air pollution control laws and regulations applicable to the contractor

### Non-Compliance

- Section 2022.1(h)
  - Violations may carry civil penalties as specified by state law
  - Failure to keep required vehicle records
    - may be subject to a \$100 fine for each day records are not kept
  - Failure to label vehicles
    - may be subject to a \$100 fine per vehicle for each day labels are not kept

### **Contact Information**

# Fleet Rule for Public Agencies and Utilities www.arb.ca.gov/msprog/publicfleets/publicfleets.htm

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### Other Contact Information

### **Diesel Programs**

http://www.arb.ca.gov/diesel/diesel.htm

### Regulations in Development

Off-Road Equipment (In-Use) Control Measure

http://arb.ca.gov/msprog/ordiesel/ordiesel.htm

Private On-Road Vehicles (In-Use) Control

http://arb.ca.gov/msprog/onrdiesel/onrdiesel.htm

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## **Questions?**

