Enforcement of ARB’s Diesel Emissions Regulations

U.S. Environmental Protection Agency
Border 2020 Environmental Enforcement Workshop
BECC, EPA & PROFEPA

June 13-14, 2013
San Diego, CA

Paul E. Jacobs
Enforcement Branch Chief

California Environmental Protection Agency
Air Resources Board
Presentation Overview

• Air Quality Overview and Health Impacts
• Diesel Vehicle Enforcement Programs
• Compliance Training (Community Colleges and ARB)
• How To Comply
• Contact Information
The Problem

% of Total On-Road Vehicles

HDDV  2%
LDV & MDV  98%

% of On-Road Vehicle Emission Inventory

NOx  30%
PM_{10}  65%
### By Ozone

1. Los Angeles-Long Beach-Riverside, CA
2. Visalia-Porterville, CA
3. Bakersfield-Delano, CA
4. Fresno-Madera, CA
5. Hanford-Corcoran, CA
6. Sacramento-Arden-Arcade-Yuba City, CA-NV
7. Houston-Baytown-Huntsville, TX
8. Dallas-Fort Worth, TX
9. Washington-Baltimore-Northern Virginia, DC-MD-VA-WV
10. El Centro, CA
11. San Diego-Carlsbad-San Marcos, CA
12. Modesto, CA
13. Sacramento-Arden-Arcade-Yuba City, CA-NV
14. Cincinnati-Middletown-Wilmington, OH-KY-IN
15. Las Vegas-Paradise-Pahrump, NV
16. Louisville-Jefferson County-Elizabethtown-Scottsburg, KY-IN
17. New York-Newark-Bridgeport, NY-NJ-CT-PA
18. Charlotte-Gastonia-Salisbury, NC-SC
19. Oklahoma City-Shawnee, OK
20. Allentown-Bethlehem-Easton, PA-NJ-DE-MD

### By Year Round Particle Pollution

1. Bakersfield-Delano, CA
2. Merced, CA
3. Fresno-Madera, CA
4. Hanford-Corcoran, CA
5. Los Angeles-Long Beach-Riverside, CA
6. Modesto, CA
7. Visalia-Porterville, CA
8. Pittsburgh-New Castle, PA
9. El Centro, CA
10. Cincinnati-Middletown-Wilmington, OK-KY-IN
12. Louisville-Jefferson County-Elizabethtown-Scottsburg, KY-IN
13. St. Louis-St. Charles-Farmington, MO-IL
14. Canton-Massillon, OH
15. Macon-Warner Robins-Fort Valley, GA
16. Allentown-Bethlehem-Easton, PA-NJ
17. Atlanta-Sandy Springs-Gainesville, GA-AL
18. Phoenix-Mesa-Glendale, AZ
19. Indianapolis-Anderson-Columbus, IN
20. Cleveland-Akron-Elyria, OH

### By Short-Term Particle Pollution

1. Bakersfield-Delano, CA
2. Fresno-Madera, CA
3. Hanford-Corcoran, CA
4. Los Angeles-Long Beach-Riverside, CA
5. Modesto, CA
6. Sal Lake City-Ogden-Clearfield, UT
7. Pittsburgh-New Castle, PA
8. Merced, CA
9. Fairbanks, AK
10. Logan, UT-ID
11. Provo-Orem, UT
12. Stockton, CA
13. Las Cruces, NM
14. Eugene-Springfield, OR
15. Chicago-Naperville-Michigan City, IL-IN-WI
16. Seattle-Tacoma-Olympia, WA
17. Green Bay, WI
18. Indianapolis-Anderson-Columbus, IN
19. Harrisburg-Carlisle-Lebanon, PA
Area Designations for National Ambient Air Quality Standards for Ozone and PM2.5

8-Hour Ozone
- 15 areas violate the standard

PM2.5 Annual
- 2 areas violate the standard
LA Smog Video

LOS ANGELES SEeks REMEDY AS RECORD SMOG COVERS CITY

Commentary by PETER ROBERTS
NEWS of the DAY
Smoggy Day
Los Angeles
Health Impacts of Diesel Exhaust Video
Health and Environmental Impacts of Pollutants

Asthma Attack

WHAT HAPPENS IN AN ASThma ATTACK
Attacks often start as an allergic reaction to pollen, smog or other substance perceived as a threat by the body.

How the lungs work
- Fresh oxygen inhaled
- Travels through bronchial tubes
- Oxygen enters blood through alveoli walls and carbon dioxide passes from blood into alveoli and is exhaled.

During an attack
- Muscles around bronchial tubes tighten to constrict airway
- Excess mucus blocks airway
- Mucosal lining swells, making airway smaller

Sources: McClatchy Tribune, American Lung Association

NATHANIEL LEVINE
nlevine@sacbee.com
Beijing versus Temuco

Sábado 12 de Enero de 2013

Domingo 1 de Junio de 2008
El 2012 fue peor
Strategies to Reduce Diesel Engine Emissions

- Diesel Risk Reduction Plan of 2000
  (Reduce PM exposure 75% by 2010 and 85% by 2020)
- Stringent Engine Certification Standards
  (2007 PM and 2010 NOx)
- Stringent Fuel Standards (15 ppm sulfur diesel 2006)
- In–Use Programs = “The 3 Rs”: Retrofit, Repower, Replace +
  Incentives and Enforcement = “Clean Green “ Engines and
  Vehicles
ARB’s In-Use Diesel Engine Regulations
Diesel Risk Reduction Program

- Urban buses - 2000
- School bus and delivery vehicle idling - 2003
- Solid waste collection vehicles - 2003
- Transport refrigeration units - 2004
- Stationary compression ignition engines - 2004
- Truck idling - 2004
- Portable engines - 2004
- Locomotive and harbor craft fuel - 2004
ARB’s In-Use Diesel Engine Regulations Diesel Risk Reduction Program (Continued)

- Transit fleet vehicles - 2005
- Public agencies and utility on-road fleets - 2005
- Port/rail cargo handling equipment - 2005
- Ship auxiliary engine fuels - 2005
- Off-road (e.g. construction and mining) vehicles - 2007
- Drayage (port) trucks - 2007
- Commercial harbor craft - 2008
- Statewide trucks and buses – December 2008, 2010 Amended
- Agricultural vehicle off-road engines – TBD
Legacy Diesel Enforcement Programs

- Roadside Heavy Duty Vehicle Inspection Program (HDVIP)---smoke emissions and tampering
- Fleet Periodic Smoke Inspection Program (PSIP)
- AB 1009 Engine Emissions Certification and Label (ECL) Program
Smoke Opacity Standards
# Engine Emission Certification (AB 1009) Label Example

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CH230</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV. BHP @ RPM</td>
<td>230 @ 2300</td>
</tr>
<tr>
<td>LB-FT TORQ. @ RPM</td>
<td>660 @ 1400</td>
</tr>
</tbody>
</table>

**EMISSIONS CONTROL SYSTEMS**

DI, TC, ECM, CAC

---

This engine has a primary intended service application as a medium heavy-duty diesel engine and conforms to U.S., EPA, California, engine and conforms to U.S. EPA, California, engine and conforms to U.S., EPA, California, engine and conforms to U.S. EPA, California.
SAE J1667
Snap-Acceleration Test
Otay Mesa Border Crossing
Otay Mesa Border Crossing
Enforcement Programs

The mission of ARB’s Enforcement Program is to protect the environment and public health and to provide safe, clean air for all Californians by reducing emissions of air contaminants through the fair, consistent and comprehensive enforcement of air pollution laws, and by providing training and compliance assistance. For more information about any of these programs, please click on the program links below. To file a complaint, please visit our Air Pollution Complaints web page.

What’s New?

ARB Enforcement Penalty Policy and Related Documents

ARB’s final penalty policy required by Senate Bill 1402 has been posted. The Enforcement Penalty Policy is available at the above link.

Mobile Vehicles and Equipment

- Cargo Tank Vapor Recovery
- Diesel Enforcement Programs
- Diesel Enforcement Strategic Plan
- Fuels Program

- Goods Movement Programs
- Heavy-Duty Diesel Vehicle Inspection
- Mobile Source Executive Orders
- Other Mobile Sources

Stationary Sources

- Asbestos NESHAP
- Composite Wood Program
- Consumer Products

- District Program Reviews/Audits
- Variance Oversight
- Other Stationary Sources

Legal Actions and Settlement Agreements

- Administrative Hearings / Penalties
- Case Settlements & Agreements

- News Releases
- SB 1402 Compliance Documents

Enforcement Tools and Assistance

- Advisories
- Forms
- Reports

- Training
- Workshops / Meetings
## 2012 Closed Enforcement Actions

<table>
<thead>
<tr>
<th>Program</th>
<th>Enforcement Actions Closed</th>
<th>Penalties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Sources</td>
<td>2,570</td>
<td>$13,514,357</td>
</tr>
<tr>
<td>Fuels</td>
<td>21</td>
<td>$568,550</td>
</tr>
<tr>
<td>Consumer Products</td>
<td>73</td>
<td>$1,993,952</td>
</tr>
<tr>
<td>Cargo Tanks</td>
<td>31</td>
<td>$14,500</td>
</tr>
<tr>
<td>Railroad MOUs</td>
<td>18</td>
<td>$3,600</td>
</tr>
<tr>
<td><strong>Total Cases</strong></td>
<td><strong>2,713</strong></td>
<td><strong>$16,094,959</strong></td>
</tr>
</tbody>
</table>
## Historical Enforcement Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Enforcement Actions Closed</th>
<th>Penalties</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>645</td>
<td>$2,510,525</td>
</tr>
<tr>
<td>2002</td>
<td>1535</td>
<td>$11,293,173</td>
</tr>
<tr>
<td>2003</td>
<td>1237</td>
<td>$6,209,001</td>
</tr>
<tr>
<td>2004</td>
<td>1314</td>
<td>$4,601,142</td>
</tr>
<tr>
<td>2005</td>
<td>1576</td>
<td>$11,839,508</td>
</tr>
<tr>
<td>2006</td>
<td>1994</td>
<td>$6,686,227</td>
</tr>
<tr>
<td>2007</td>
<td>3442</td>
<td>$29,850,475</td>
</tr>
<tr>
<td>2008</td>
<td>2597</td>
<td>$11,979,812</td>
</tr>
<tr>
<td>2009</td>
<td>4054</td>
<td>$16,381,158</td>
</tr>
<tr>
<td>2010</td>
<td>3701</td>
<td>$12,787,322</td>
</tr>
<tr>
<td>2011</td>
<td>3536</td>
<td>$6,652,309</td>
</tr>
<tr>
<td>2012</td>
<td>2713</td>
<td>$16,094,959</td>
</tr>
<tr>
<td></td>
<td><strong>12 yr. Totals</strong></td>
<td><strong>136,885,611</strong></td>
</tr>
<tr>
<td></td>
<td><strong>12 yr. Avg.</strong></td>
<td><strong>2362</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>$11,407,134</strong></td>
</tr>
</tbody>
</table>
Diesel Programs Enforcement

Settled or litigated cases for:

- Periodic Smoke Inspection Program
- Solid Waste Collection Vehicle Program
- Public Agency Utility Fleet Vehicle Program
- Urban Bus & Transit Fleet Vehicle Programs
- Transport Refrigeration Unit Program
- Verified Diesel Emissions Control Strategies (VDECS) Program
- Drayage Truck Program
- Statewide Truck and Bus Program
- Over 1000 cases closed totaling over $20M to date
- Monies go to the Air Pollution Control Fund and SEPs (e.g. Community College Diesel Technology Programs and school bus DPFs)
Delinquent Citation Enforcement

- ARB obtains judgments in Sacramento Superior Court under authority of California Health and Safety Code section 44011.6 (~3,500 obtained to date)
- ARB executes judgments to place liens on property, etc.
- CHP “out of service process” per Vehicle Code section 27159 (~500 to date -- vehicles held only)
- DMV “registration holds” per Vehicle Code 4755 (AB 233 of 2007) (~2000 to date)
## 2010-2012 Field Inspections & Citations

<table>
<thead>
<tr>
<th>Program</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inspections/Violations</td>
<td>Inspections/Violations</td>
<td>Inspections/Violations</td>
</tr>
<tr>
<td>TRUs</td>
<td>6119/2318 (38%)</td>
<td>5600/1500 (27%)</td>
<td>4150/1289 (31%)</td>
</tr>
<tr>
<td>Drayage Trucks</td>
<td>3094/356 (12%)</td>
<td>5220/291 (6%)</td>
<td>2860/276 (10%)</td>
</tr>
<tr>
<td>CVI</td>
<td>6456/887 (14%)</td>
<td>5604/1105 (20%)</td>
<td>2647/854 (32%)</td>
</tr>
<tr>
<td>HDVIP</td>
<td>14784/111 (1%)</td>
<td>10734/114 (1%)</td>
<td>11635/129 (1%)</td>
</tr>
<tr>
<td>ECL</td>
<td>13274/825 (6%)</td>
<td>10734/703 (7%)</td>
<td>11887/931 (8%)</td>
</tr>
<tr>
<td>Off Road</td>
<td>76/17 (22%)</td>
<td>214/48 (24%)</td>
<td>583/97 (17%)</td>
</tr>
<tr>
<td>SWTB</td>
<td>N/A</td>
<td>N/A</td>
<td>2802/432 (15%)</td>
</tr>
<tr>
<td>Totals</td>
<td>31,856/4514 (14%)</td>
<td>38,106/3761 (9.9%)</td>
<td>36564/4008 (11%)</td>
</tr>
</tbody>
</table>
## 2010-2012 Field Inspections & Citations

<table>
<thead>
<tr>
<th>Program</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cleared/$</td>
<td>Cleared/$</td>
<td>Cleared/$</td>
</tr>
<tr>
<td>TRUs</td>
<td>792/$737K</td>
<td>886/$635K</td>
<td>355/$344K</td>
</tr>
<tr>
<td>Drayage Trucks</td>
<td>90/$66K</td>
<td>183/$140K</td>
<td>144/$139K</td>
</tr>
<tr>
<td>CVI</td>
<td>763/$196K</td>
<td>807/$22K</td>
<td>495/$148K</td>
</tr>
<tr>
<td>HDVIP</td>
<td>152/$28.7K</td>
<td>362/$30.9</td>
<td>73/$25.8K</td>
</tr>
<tr>
<td>ECL</td>
<td>739/$190K</td>
<td>655/$165K</td>
<td>541/$191K</td>
</tr>
<tr>
<td>Off Road</td>
<td>10/$4.8K</td>
<td>38/$3K</td>
<td>106/$42K</td>
</tr>
<tr>
<td>SWTB</td>
<td>N/A</td>
<td>N/A</td>
<td>147/$171K</td>
</tr>
<tr>
<td>Other</td>
<td>-----</td>
<td>-----</td>
<td>19/$5K</td>
</tr>
</tbody>
</table>
## 2010-2012 Diesel Program Cases Closed

<table>
<thead>
<tr>
<th>Program</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off Road</td>
<td>7</td>
<td>12</td>
<td>78</td>
</tr>
<tr>
<td>VDECS</td>
<td>8</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>TRUs</td>
<td>26</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>Drayage</td>
<td>2</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>SWCV</td>
<td>20</td>
<td>37</td>
<td>21</td>
</tr>
<tr>
<td>PSIP</td>
<td>181</td>
<td>198</td>
<td>140</td>
</tr>
<tr>
<td>Transit</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>PAU</td>
<td>--</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>SWTB</td>
<td>N/A</td>
<td>N/A</td>
<td>73</td>
</tr>
<tr>
<td>Other*</td>
<td>--</td>
<td>--</td>
<td>152</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>248 (~$1.3M)</strong></td>
<td><strong>307 (~$1.8M)</strong></td>
<td><strong>560 (~$2.7M)</strong></td>
</tr>
</tbody>
</table>

* = ECL, HDVIP tampering
2012 Case Settlements

On this page you will find summaries of cases settled in 2012 in lieu of litigation through the Air Resources Board's (ARB's) mutual settlement program and those that were resolved in civil or criminal litigation. Related case documents may be available upon request subject to applicable exemptions from disclosure under California's Public Records Act.

Senate Bill 1402 (Chapter 413, Statutes of 2010) was enacted as urgent legislation on September 28, 2010 and requires ARB to post settlement agreements containing SB 1402 compliance statements on this website.

<table>
<thead>
<tr>
<th>Date Settled</th>
<th>2012 Case Settlements</th>
<th>News Releases</th>
<th>Settlement Agreements (SB1402 Reporting Requirement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/12</td>
<td>Yamaha Motor Company, USA &amp; Yamaha Motor Company, Ltd.</td>
<td>N/A</td>
<td>Yamaha Motor Company, USA &amp; Yamaha Motor Company, Ltd. Settlement</td>
</tr>
<tr>
<td>12/12</td>
<td>Mavala / Lela Distributors</td>
<td>N/A</td>
<td>Mavala / Lela Distributors Settlement</td>
</tr>
<tr>
<td>12/12</td>
<td>Los Angeles Department of Water and Power</td>
<td>N/A</td>
<td>Los Angeles Department of Water and Power Settlement</td>
</tr>
<tr>
<td>12/12</td>
<td>Misuga Kaun Co., Ltd.</td>
<td>N/A</td>
<td>Misuga Kaun Co., Ltd. Settlement</td>
</tr>
<tr>
<td>12/12</td>
<td>Behnward Schulte Shipmanagement (Deutschland), GmbH &amp; Co. KG</td>
<td>N/A</td>
<td>Behnward Schulte Shipmanagement (Deutschland), GmbH &amp; Co. KG Settlement</td>
</tr>
<tr>
<td>12/12</td>
<td>Alan Berman Trucking, Inc.</td>
<td>N/A</td>
<td>Alan Berman Trucking, Inc. Settlement</td>
</tr>
<tr>
<td>12/12</td>
<td>The Sherwin-Williams Company</td>
<td>N/A</td>
<td>The Sherwin-Williams Company Settlement</td>
</tr>
<tr>
<td>12/12</td>
<td>Gillies Trucking Inc.</td>
<td>N/A</td>
<td>Gillies Trucking Inc. Settlement</td>
</tr>
<tr>
<td>12/12</td>
<td>Debris Box</td>
<td>N/A</td>
<td>Debris Box Settlement</td>
</tr>
<tr>
<td>12/12</td>
<td>Domistyle, Inc.</td>
<td>N/A</td>
<td>Domistyle, Inc. Settlement</td>
</tr>
</tbody>
</table>
Litigation

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SAN BERNARDINO

THE PEOPLE OF THE STATE OF CALIFORNIA
EX REL. THE CALIFORNIA AIR RESOURCES
BOARD,

Plaintiff,

v.

[Redacted to protect privacy]

AND DOES 1-50, INCLUSIVE,

Defendants.

Case No.

COMPLAINT FOR INJUNCTIVE RELIEF AND CIVIL PENALTIES
[Special Precedence Over Other Civil Matters on the Court's Calendar Pursuant to Health and Safety Code section 42404]
Businesses fined over $383,000 for air quality violations

Settlement of 53 cases generates $57,000 for community colleges, $326,000 for pollution control research and projects

SACRAMENTO - The Air Resources Board announced today settlement payments of $383,375 for 53 air quality violation cases in the third quarter of 2011. Settlements from the cases will benefit California community colleges and help fund air quality research and clean-air projects. The majority of the violations involved truck and bus fleets that failed to conduct the annual emissions tests that ensure clean-running engines, as required by law.

“Businesses play a vital role in environmental protection,” said Paul Jacobs, Chief of ARB’s Mobile Source Enforcement Branch. “We work hard to establish and maintain good relationships so that we can educate business owners and keep them updated. However, if errors are made and air quality suffers as a result, we are required to take action.”

Of the $383,375.00 collected, $326,275.50 went to the California Air Pollution Control Fund to support air quality projects and research to improve California’s air quality. The Peralta Community College District received $56,130.75, and $968.75 went to the Palomar College Foundation, to fund emission education classes under the California Council for Diesel Education and Technology program.

The five companies paying the highest amounts:

- Foresthill Motorsports, LLC paid $155,000 for selling 29 motorcycles that were illegal for use in California.
- Tahoe Truckee Disposal Co., Inc. paid $25,125 for failure to comply with diesel fleet self-inspection requirements, and neglecting to install required emission-reduction devices.
- Alcal-Arcade Contracting, Inc. paid $21,075 for failing to self-inspect its diesel fleets and for not affixing emission control labels to engines.
- Kenyon Plastering, Inc. paid $21,000 for failing to inspect its diesel fleet and for not affixing emission control labels to engines.
- Redding Yamaha SeaDoo paid $20,000 for removing emissions control equipment from motorcycles, rendering them uncertified and illegal for sale in California.

Diesel exhaust contains a variety of harmful gases and over 40 other known cancer-causing compounds. In 1998, California identified diesel particulate matter as a toxic air contaminant based on its potential to cause cancer, premature death and other health problems.

ARB’s mission is to promote and protect public health, welfare, and ecological resources through effective reduction of air pollutants while recognizing and considering effects on the economy. The ARB oversees all air pollution control efforts in California to attain and maintain health based air quality standards.
Air Resources Board launches “Gear Up for Clean Truck Month” in August

Statewide enforcement campaign to focus on compliance and education

SACRAMENTO - August may be the dog days of summer, but in California it's also Gear Up for Clean Truck Month, with the Air Resources Board launching a multi-agency campaign to make sure that trucks traversing the state’s highways are in compliance with state air pollution laws.

"Our goal this month is to do everything in our power to make sure truckers know the rules and that they understand how to comply," said ARB Executive Officer James Goldstene. "All our diesel regulations were adopted with one thing in mind - protecting public health. Focusing on enforcement gives us the chance not only to educate drivers on why the regulations are important but also to ensure that truck owners investing in cleaner equipment are on a level playing field with those who are not playing by the rules."

State measures aimed at cleaning up diesel vehicles include requirements to report fleet information to ARB, employ fuel-saving technology, install diesel soot filters and replace or upgrade aging engines and transport refrigeration units.

Working in conjunction with the California Highway Patrol and other allied agencies, ARB will deploy inspectors throughout the state, focusing on trade hubs, weigh stations, ports, railyards and major points of entry into the state.

The campaign is also geared to provide advice and educational materials including information and fact sheets on how to follow regulations, maintain equipment properly, and grants and funding that may be available now and in the future to help purchase clean trucks and related equipment.

Environmental groups, community organizations and industry have all expressed support for Gear Up for Clean Truck Month, noting its goals to educate truckers, improve air quality and protect public health in the most feasible cost-efficient manner.

Truckers with questions can visit the ARB website at www.arb.ca.gov and click on The Truck Stop, contact the ARB Diesel Hotline at 1-866-6-DIESEL or email 8666Diesel@arb.ca.gov.

ARB's mission is to promote and protect public health, welfare, and ecological resources through effective reduction of air pollutants while recognizing and considering effects on the economy. The ARB oversees all air pollution control efforts in California to attain and maintain health based air quality standards.
Multi-Regulation Summary (MRS)
Requirements for Diesel Truck and Equipment Owners

All owners of diesel trucks, buses, trailers and transport refrigeration units, or "reefers," that operate in California, are required to take steps to reduce air pollution. Reducing emissions from existing equipment is necessary to meet federally imposed clean air standards and to reduce the adverse health effects from pollution. Funding opportunities may also be available to lower emissions earlier than required. This document summarizes requirements and key dates for upgrading existing equipment:

1. LEGACY PROGRAMS

A) Idling Limits restrict diesel vehicles from idling more than five minutes, and idling in school zones is not allowed with limited exceptions.

B) The Heavy-Duty Vehicle Inspection Program uses random roadside inspections to verify that diesel engines do not smoke excessively and are tamper free.

C) Emission Control Labels must be affixed to engines of all commercial heavy-duty diesel vehicles, and must be legible as proof the engine, at minimum, meets U.S. federal emissions standards for the engine model year.

D) The Periodic Smoke Inspection Program requires owners of California based fleets of two or more diesel vehicles to perform annual smoke opacity tests and keep records for at least two years for each vehicle. The requirement does not apply to cars or trucks that must undergo a Smog Check.

2. TRUCKS AND BUSES (private and federal fleets)

Diesel trucks and buses with a GVWR more than 14,000 lbs. that are owned by private or federal government fleets must reduce exhaust emissions by meeting particulate matter (PM) filter requirements and upgrading to 2010 model year (MY) or newer engines. In addition, any person residing in California who sells an affected vehicle must provide a disclosure notice about the regulation to the buyer. www.arb.ca.gov/dieseltruck.

HEAVIER VEHICLES with a GVWR more than 20,000 lbs. need engine upgrades as shown in the table. No retrofit is required if using the heavier vehicle schedule.

<table>
<thead>
<tr>
<th>Engine Year</th>
<th>2010 MY Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994-1995</td>
<td>Not required</td>
</tr>
<tr>
<td>1996-1999</td>
<td>Not required</td>
</tr>
<tr>
<td>2000-2004</td>
<td>January 1, 2010</td>
</tr>
<tr>
<td>2005 or newer</td>
<td>January 1, 2014</td>
</tr>
<tr>
<td>2007-2009</td>
<td>Already equipped</td>
</tr>
</tbody>
</table>

* 50% PM reduction can be used if 85% reduction is not available.

LIGHTER VEHICLES with a GVWR 20,000 lbs. or less need to be upgraded to 2010 model year engines or to newer models as shown in the table. No retrofit PM filters or reporting is required if using the lighter vehicle schedule.

<table>
<thead>
<tr>
<th>Engine Year</th>
<th>2010 MY Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995 and older</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>1996</td>
<td>January 1, 2016</td>
</tr>
<tr>
<td>1997</td>
<td>January 1, 2017</td>
</tr>
<tr>
<td>1998</td>
<td>January 1, 2017</td>
</tr>
<tr>
<td>1999</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>2000</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>2001</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>2002</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>2003 and older</td>
<td>January 1, 2020</td>
</tr>
<tr>
<td>2004-2006</td>
<td>January 1, 2021</td>
</tr>
<tr>
<td>2007-2009</td>
<td>January 1, 2023</td>
</tr>
</tbody>
</table>

ALL VEHICLES can be kept longer with early PM retrofit filters, and trucks operated in less polluted counties in California do not need to be upgraded to have 2010 model year engines if equipped with PM filters. Small fleets (1-3 trucks with a GVWR more than 14,000 lbs.) must report to delay compliance until January 1, 2014. Fleet owners must report to take advantage of these and other provisions: www.arb.ca.gov/mapprogram/diesel/reportinginfo.htm

3. DRAYAGE TRUCKS

Diesel-fueled trucks that transport marine cargo, containers, or transport chassis must be registered in the statewide Drayage Truck Registry prior to port or rail yard entry. For more information, call 888-247-4821 or visit www.arb.ca.gov/drayagetruk. Drayage trucks must comply with requirements (see table). Retrofit PM filters must be verified to reduce PM by 85%.

<table>
<thead>
<tr>
<th>Truck Engine Model Year</th>
<th>Emission Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 2 Compliance Schedule (33,001 lbs. GVWR or greater)</td>
<td></td>
</tr>
<tr>
<td>2010 and newer</td>
<td>Fully compliant</td>
</tr>
<tr>
<td>Class 7 Compliance Schedule (26,001-33,000 lbs. GVWR)</td>
<td></td>
</tr>
<tr>
<td>2006 and older while operating in South Coast Air Basin</td>
<td>After Dec. 31, 2011, PM Filter and:</td>
</tr>
<tr>
<td>2010 and newer</td>
<td>Fully compliant</td>
</tr>
</tbody>
</table>

(Revised 12/20/12)
4. TRACTORS AND BOX-TYPE TRAILERS

The Tractor-Trailer Greenhouse Gas regulation applies to 53-foot or longer box-type trailers, including both dry-van and refrigerated-trailer trucks, and all heavy-duty tractors that pull them on California highways. Any person residing in California who sells an affected vehicle must provide a disclosure notice about the regulation to the buyer. Fleets must register to take advantage of short haul, local haul or storage trailer exemptions and passes. [www.arb.ca.gov/tractortrailer.php](http://www.arb.ca.gov/tractortrailer.php)

Low-rolling resistance tires are required on all 2011 MY or newer sleeper and trailer trucks. For 2010 MY and older equipment, see the table below.

<table>
<thead>
<tr>
<th>Low Rolling Resistance Tires</th>
<th>Requirement for 2010 MY and Older Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Requirement for 2010 MY and Older Equipment</td>
</tr>
<tr>
<td>January 1, 2013</td>
<td>All trailers</td>
</tr>
<tr>
<td>January 1, 2017</td>
<td>All trailers</td>
</tr>
</tbody>
</table>

[www.arb.ca.gov/transportstop](http://www.arb.ca.gov/transportstop)


5. TRANSPORT REFRIGERATION UNITS (TRUs or Reefers)

All TRUs based outside California that operate in California must meet the in-use standards. Every California-based TRU and TRU generator set must be registered and operator reports must be submitted and kept current at: [https://arber.arb.ca.gov/Welcome?pg=tru](https://arber.arb.ca.gov/Welcome?pg=tru)

Requirements are based on the TRU engine’s model year (see table). To meet requirements, TRU engines may be retrofitted with a PM filter or replaced with newer engines. All TRU engines can operate for seven years after their engine model year, before any additional upgrades are required. Beginning January 1, 2013, the business entity that hires reefer carriers (e.g. brokers, forwarders, shippers or reseivers) must only hire carriers that comply to transport units (TRUs).

For more information, call 1-888-679-2626 or [http://www.arb.ca.gov/diesel/tru/tru.htm](http://www.arb.ca.gov/diesel/tru/tru.htm)

6. PUBLIC FLEETS AND OTHERS

Vehicles with a GVWR greater than 14,000 lbs. that are owned by state and local government fleets, private and public school buses, private utilities, and solid waste collection vehicles, must be retrofitted with the best available ARB verified PM filters or upgraded. The requirements for these regulations will be fully implemented by January 1, 2013.

<table>
<thead>
<tr>
<th>Vehicle or Fleet Type</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public and Private School Buses</td>
<td><a href="http://www.arb.ca.gov/dieseltruck">www.arb.ca.gov/dieseltruck</a></td>
</tr>
<tr>
<td>Solid Waste Collection Vehicles</td>
<td><a href="http://www.arb.ca.gov/swprog/swgyvl.htm">www.arb.ca.gov/swprog/swgyvl.htm</a></td>
</tr>
<tr>
<td>Public Transit Fleet Vehicles</td>
<td><a href="http://www.arb.ca.gov/pmsprog/bus/bus.htm">www.arb.ca.gov/pmsprog/bus/bus.htm</a></td>
</tr>
<tr>
<td>State and Local Government</td>
<td><a href="http://www.arb.ca.gov/pmsprog/publicfleets/publicfleets.htm">www.arb.ca.gov/pmsprog/publicfleets/publicfleets.htm</a></td>
</tr>
</tbody>
</table>

FUNDING OPPORTUNITIES

Grants are available to help fleets and individuals comply with California regulations earlier than is required. Additional funding is available for vehicle replacements, retrofits, or zero-emission technologies. Loan assistance may also be available for small businesses with vehicles that operate at least 20 percent of the time in California to help purchase trucks, PM filters, aerodynamic retrofits or low-rolling resistance tires. Equipment owners are encouraged to apply as early as possible to maximize potential funding options. See the TruckStop website’s “Useful Links” for more funding information.

FOR MORE INFORMATION

Please contact ARB’s diesel hotline at 800-6DIESEL (800-634-3735), email 8888DIESEL@arb.ca.gov, or visit the TruckStop website at: [www.arb.ca.gov/truckstop](http://www.arb.ca.gov/truckstop).
**STATE AIR EMISSIONS RULES**

ALL diesel vehicles and equipment operating in California, even those based out-of-state are currently subject to the following emission reduction requirements. For more information on each regulation, please visit the Air Resources Board (ARB) webpage at [www.arb.ca.gov/enf/hdvip/hdvip_pamphlet.pdf](http://www.arb.ca.gov/enf/hdvip/hdvip_pamphlet.pdf) or call 1-866-6DIESEL (1-866-634-3735).

**Heavy Duty Vehicle Inspection Program**

Heavy duty vehicles operating in California are subject to annual opacity test requirements that are verified by random roadside inspections of engine smoke emissions and tampering. For more information, see [www.arb.ca.gov/enf/hdvip/hdvip_pamphlet.pdf](http://www.arb.ca.gov/enf/hdvip/hdvip_pamphlet.pdf).

**Engine Emission Control Labels (ECL)**

All heavy duty commercial vehicles need to have proof that their engines meet emissions requirements at least as stringent as U.S. federal standards for the engine model year. A properly affixed and legible manufacturer emission control label is required as proof that the engine meets these standards. Please see [www.arb.ca.gov/enf/advs/advs364.pdf](http://www.arb.ca.gov/enf/advs/advs364.pdf).

**Periodic Smoke Inspection Program**

This program applies to California-based fleets with two or more heavy-duty vehicles. Requires fleets to perform smoke opacity tests for their vehicles each year and maintain records for a minimum of two years. Please see [www.arb.ca.gov/enf/hdvip/psip_pamphlet.pdf](http://www.arb.ca.gov/enf/hdvip/psip_pamphlet.pdf).

**Commercial Idling Requirements**

These requirements prohibit idling longer than five minutes. Shorter idling limits apply when within a school zone. Please see [www.arb.ca.gov/noidle](http://www.arb.ca.gov/noidle) or [www.arb.ca.gov/toxics/sbiddling/sbiddling.htm](http://www.arb.ca.gov/toxics/sbiddling/sbiddling.htm).

The following NEW requirements for trucks and buses will further reduce diesel exhaust and greenhouse gas emissions. These reductions require the retrofit and/or upgrade of existing vehicles and equipment.

**Tractors That Enter Ports and Rail Yards (Drayage Trucks)**

The regulation applies to all diesel-fueled drayage trucks with a gross vehicle weight rating (GVWR) greater than 33,000 lbs. Drayage trucks must be registered in the statewide Drayage Truck Registry (DTR) prior to entering ports or rail yards. See [www.arb.ca.gov/drayagettruck](http://www.arb.ca.gov/drayagettruck).

**Compliance Dates:**

**January 1, 2010:**

Pre-1994 model year engines are prohibited from entering ports and rail yards. Drayage trucks with:

- 1994-2003 model year engines must reduce particulate matter (soot) by 85 percent.
- 2004-2006 model year engines must reduce soot emissions by 85 percent according to deadlines specified in the regulation.

**January 1, 2014:**

- All drayage trucks must meet or exceed 2007 emission standards.

**Trucks and Buses That Do Not Enter Ports and Rail Yards**

The Statewide Truck and Bus Rule requires the clean-up of existing diesel engines used in most diesel trucks and buses with a GVWR over 14,000 pounds, including certain yard trucks equipped with off-road certified engines and certain diesel shuttle vehicles.

**March 31, 2010:**

- Reporting required for fleets taking advantage of extended deadlines for agriculture vehicles and for fleets that have downsized since 2008.

**January 1, 2011:**

- Phase-in schedule starts for reducing particulate matter (soot).
How to Comply

• Maintain vehicles/equipment per factory specifications and keep accurate and current records

• Maintain communications with ARB staff regarding programs and compliance and sign up for “list serves” on the ARB’s web site: http://www.arb.ca.gov/listserv/listserv.php

• See Advisories on ARB’s web site: http://www.arb.ca.gov/enf/advs/advs.htm

• Complete ARB and CCDET training programs: http://www.arb.ca.gov/training/training.htm

• Frequently visit the ARB’s web site: www.arb.ca.gov
CCDET: California Community College Council on Diesel Education and Technology Industry Compliance Training Program

• Partnership: community colleges with diesel technology programs, ARB and diesel engine/equipment industry
• Low-cost classes: SAE J1667 smoke emissions test protocol, emissions related engine repairs and VDECS installations and maintenance
• ARB audits classes for QA/QC
• Participating Colleges:
  1. College of Alameda (Oakland area)
  2. San Joaquin Delta College (Stockton)
  3. L.A. Trade Tech College (Los Angeles)
  4. Santa Ana College (Orange County)
  5. Palomar College (San Diego County)
  6. American River College* (Sacramento area)

* Charter member
• Diesel vehicles and equipment produce a disproportionate amount of California’s Nitrogen Oxides (NOx) and Particulate Matter (PM 2.5) emissions

• ARB administers numerous programs to reduce emissions from these vehicles and equipment

• Programs are cost-effective and achieve significant emissions reductions to protect public health

• Programs have become models for national and international programs

• These programs are the foundation of the ARB’s Diesel Risk Reduction Plan and also reduce greenhouse gases

• Use ARB’s outreach and training resources to comply

• Attend CCDET Classes
ARB Contacts

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• Martina Diaz Manager, Diesel Equipment Enforcement
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