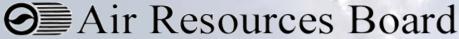
Enforcement of ARB's Diesel Emissions Regulations

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



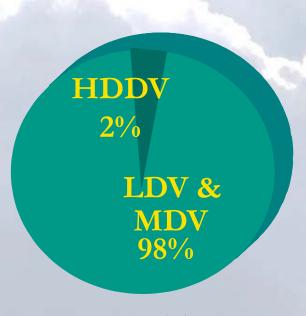


Presentation Overview

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

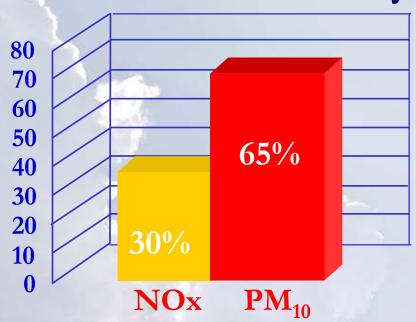


The Problem



% of Total
On-Road Vehicles









#4: Los Angeles-Long Beach- Riverside, CA

#6: Sal Lake City-Ogden-Clearfield, UT

#7: Pittsburgh-New Castle, PA

#5: Modesto, CA

#8: Merced, CA

#9: Fairbanks, AK

#10: Logan, UT-ID

#12: Stockton, CA

#13: Las Cruces, NM

#17: Green Bay, WI

#14: Visalia-Porterville, CA

#14: Eugene-Springfield, OR

#17: Seattle-Tacoma-Olympia, WA

#19: Indianapolis-Anderson-Columbus, IN

#19: Harrisburg-Carlisle-Lebanon, PA

#16: Chicago-Naperville-Michigan City, IL-IN-WI

#11: Provo-Orem, UT

OF TH	EAIR	LUNG ASSOCIATION.
By Ozone	By Year Round Particle Pollution	By Short-Term Particle Pollution
#1: Los Angeles-Long Beach-Riverside, CA	#1: Bakersfield-Delano, CA	#1: Bakersfield-Delano, CA
#2: Visalia-Porterville, CA	#1: Merced, CA	#2: Fresno-Madera, CA
#3: Bakersfield-Delano, CA	#3: Fresno-Madera, CA	#3: Hanford-Corcoran, CA

#4: Hanford-Corcoran, CA

#7: Visalia-Porterville, CA

#8: Pittsburgh-New Castle, PA

#12: Louisville-Jefferson County-

Elizabethtown-Scottsburgh, KY-IN

#14: Canton-Massillon, OH

#14: Fairbanks, AK

AL

#6:Modesto, CA

#9: El Centro, CA

KY-IN

DE-MD

#4: Los Angeles-Long Beach-Riverside, CA

#10: Cincinnati-Middletown-Wilmington, OK-

#11: Philadelphia-Camden-Vineland, PA-NJ-

#12: St. Louis-St. Charles-Farmington, MO-IL

#14: Macon-Warner Robins-Fort Valley, GA

#14: Allentown-Bethlehem-Easton, PA-NJ

#18: Atlanta-Sandy Springs-Gainesville, GA-

#18: Phoenix-Mesa-Glendale, AZ

#20: Cleveland-Akron-Elyria, OH

#4: Fresno-Madera, CA

#5: Hanford-Corcoran, CA

#8: Dallas-Fort Worth, TX

#10: El Centro, CA

#11: Merced, CA

#13: Modesto, CA

IN

#7: Houston-Baytown-Huntsville, TX

#11: San Diego-Carlsbad-San Marcos, CA

#14: Birmingham-Hoover-Cullman, AL

#16: Las Vegas-Paradise-Pahrump, NV

#14: Cincinnati-Middletown-Wilmington, OH-KY-IN

#17: New York-Newark-Bridgeport, NY-NJ-CT-PA

#19: Charlotte-Gastonia-Salisbury, NC-SC

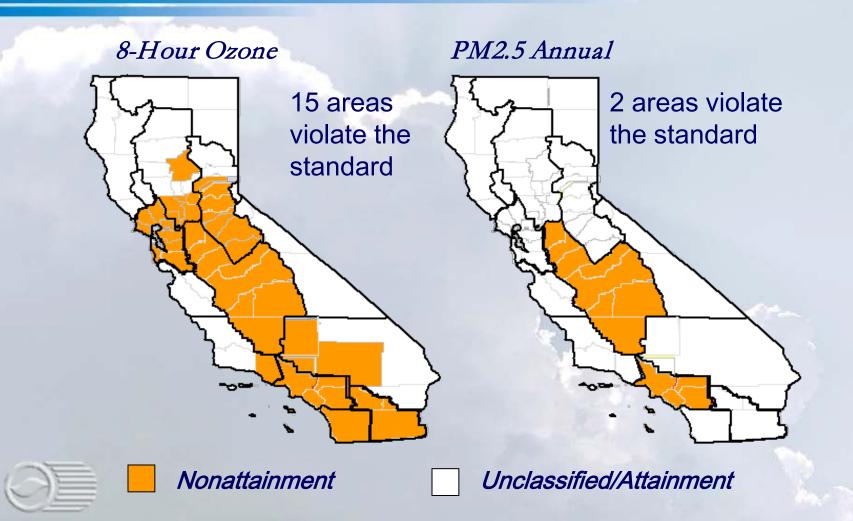
#20: Oklahoma City-Shawnee, OK

#17: Louisville-Jefferson County-Elizabethtown-Scottsburg, KY-

#6: Sacramento-Arden-Arcade-Yuba City, CA-NV

#9: Washington-Baltimore-Northern Virginia, DC-MD-VA-WV

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



LA Smog Video

LOS ANGELES SEEKS REMEDY AS RECORD SMOG COVERS CITY

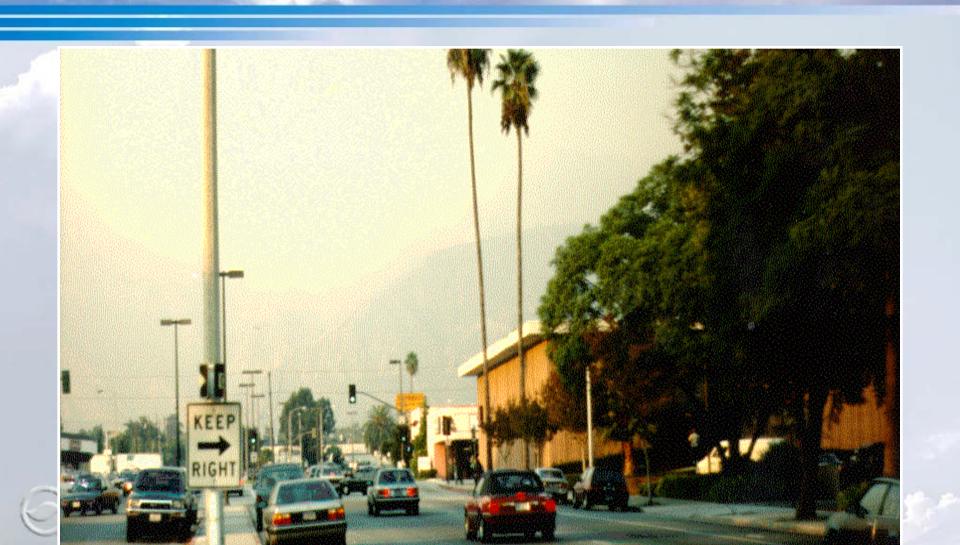
Commentary by PETER ROBERTS
NEWS of the DAY



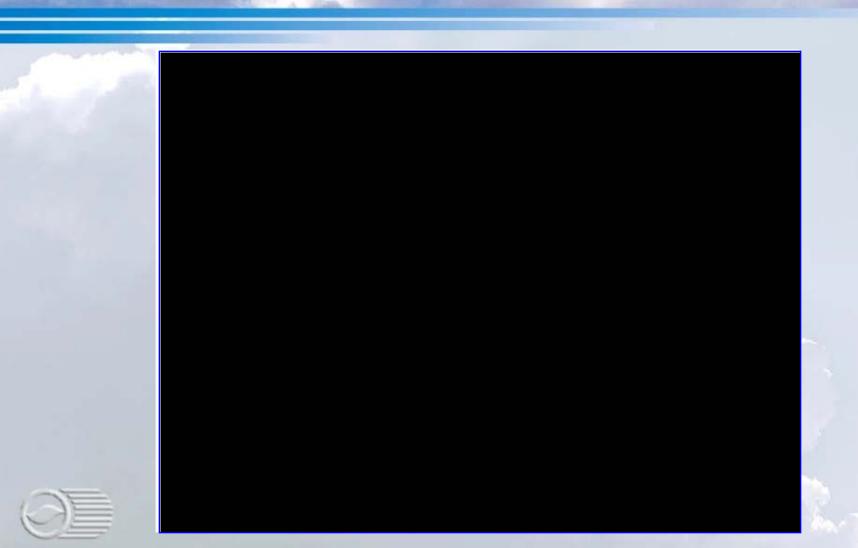
Clear Day Los Angeles



Smoggy Day Los Angeles



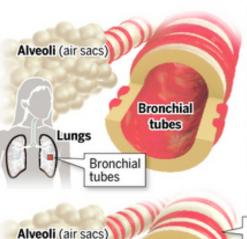
Health Impacts of Diesel Exhaust Video





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.



Excess mucus blocks airway

Sources: McClatchy Tribune, American Lung Association

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

Mucosal lining swells, making airway smaller

NATHANIEL LEVINE nlevine@sacbee.com

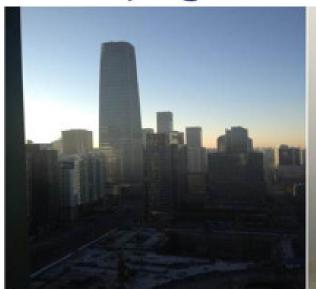
Asthma Attack







Beijing versus Temuco







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



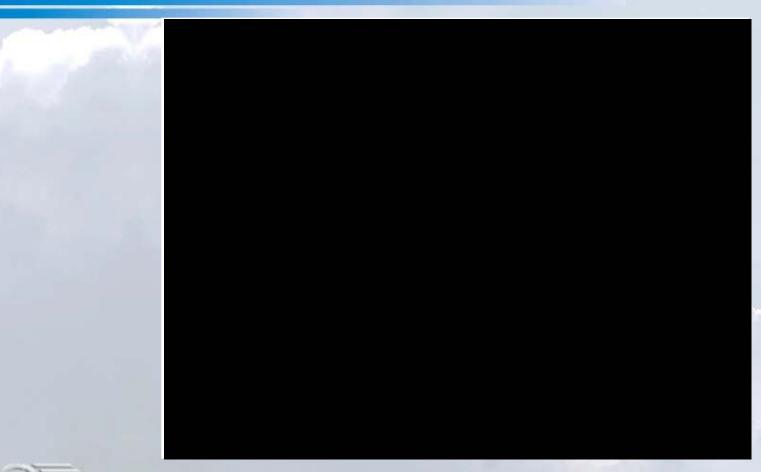
Legacy Diesel Enforcement Programs

- 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



SAE J1667 Snap-Acceleration Test





Engine Emission Certification (AB 1009) Label Example





SAE J1667 Snap-Acceleration Test Otay Mesa Border Crossing





Otay Mesa Border Crossing



Enforcement Programs http://www.arb.ca.gov/enf/enf

Wednesday, March 7, 2012

UP LINKS

- Reducing Air Pollution ARB Programs
- Enforcement Programs

PROGRAM LINKS

- Advisories
- Case Settlements
- Diesel Enforcement
- Enforcement Background
- Fuels Enforcement
- Forms
- Legal Actions / Settlement Agreements
- Mobile Vehicles and Equipment
- Reports
- Stationary Sources
- Training
- What's New
- Workshops / Meetings

RESOURCES

- Contact Us
- File an Air Pollution Complaint
- Join Any Enforcement Email List(s)
- RSS / Newsfeed
 ■

Enforcement Programs

This page last reviewed January 3, 2012

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

Program	Enforcement Actions Closed	Penalties
Mobile Sources	2,570	\$13,514,357
Fuels	21	\$568,550
Consumer Products	73	\$1,993,952
Cargo Tanks	31	\$14,500
Railroad MOUs	18	\$3,600
Total Cases	2,713	\$16,094,959

HISTOI	ricai Entorcement	Statistics	
Year	Enforcement Actions Closed	Penalties	
2001	645	\$ 2,510,525	
2002	1535	\$ 11,293,173	
2003	1237	\$ 6,209,001	
2004	1314	\$ 4,601,142	
2005	1576	\$ 11,839,508	
2006	1994	\$ 6,686,227	
2007	3442	\$ 29,850,475	
2008	2597	\$ 11,979,812	
2009	4054	\$ 16,381,158	

3701

3536

2713

2362

28,344

12,787,322

6,652,309

16,094,959

11,407,134

\$ 136,885,611

2010

2011

2012

12 yr. Totals

12 yr. Avg.

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)

2010-20	12 Field In	spections	& Citations
	2010	2011	2012
Program	Inspections/Violations	Inspections/Violations	Inspections/Violations

6119/2318 (38%)

3094/356 (12%)

6456/887 (14%)

14784/111 (1%)

13274/825 (6%)

76/17 (22%)

N/A

31,856/4514 (14%)

5600/1500 (27%)

5220/291 (6%)

5604/1105 (20%)

10734/114 (1%)

10734/703 (7%)

214/48 (24%)

N/A

38,106/3761 (9.9%)

4150/1289 (31%)

2860/276 (10%)

2647/854 (32%)

11635/129 (1%)

11887/931 (8%)

583/97 (17%)

2802/432 (15%)

36564/4008 (11%)

TRUs

Drayage Trucks

CVI

HDVIP

ECL

Off Road

SWTB

Totals

2010-2012 Field Inspections & Citations

2010-20	12 Field III	Spections	& Citations
	2010	2011	2012
Program	Cleared/\$	Cleared/\$	Cleared/\$
TRUs	792/\$737K	886/\$635K	355/\$344K

183/\$140K

807/\$22K

362/\$30.9

655/\$165K

38/\$3K

N/A

144/\$139K

495/\$148K

73/\$25.8K

541/\$191K

106/\$42K

147/\$171K

19/\$5K

90/\$66K

763/\$196K

152/\$28.7K

739/\$190K

10/\$4.8K

N/A

Drayage Trucks

CVI

HDVIP

ECL

Off Road

SWTB

Other

2010-2012 Diesel Program Cases Closed

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

2012 Case Settlements (web site)

http://www.arb.ca.gov/enf/casesett/casesett.htm



- o 2009 Case Settlements
- 2008 Case Settlements
- 2007 Case Settlements
- 2006 Case Settlements
- 2005 Case Settlements
- 2004 Case Settlements
- 2003 Case Settlements
- 2002 Case Settlements
- o 2001 Case Settlements
- 2000 Case Settlements
- 1999 Case Settlements
- 1998 Case Settlements
- o 1997 Case Settlements
- 1992 Case Settlements
- 1990 Case Settlements

RESOURCES

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- Join Any Enforcement Email List(s)
- RSS / Newsfeed
 ■

Date Settled	2012 Case Settlements	News Releases	Settlement Agreements (SB1402 Reporting Requirement)
12/12	Yamaha Motor Company, USA & Yamaha Motor Company, Ltd.	N/A	Yamaha Motor Company, USA & Yamaha Motor Company, Ltd. Settlemen
12/12	Mavala / Lela Distributors	N/A	Mavala / Lela Distributors Settlement
12/12	Los Angeles Department of Water and Power	N/A	Los Angeles Department of Water and Power Settlement
12/12	Misuga Kaiun Co., Ltd.	N/A	Misuga Kaiun Co., Ltd. Settlement
12/12	Bernhard Schulte Shipmanagement (Deautschland), GmbH & Co. KG	N/A	Bernhard Schulte Shipmanagement (Deautschland), GmbH & Co. KG Settlement
12/12	Alan Berman Trucking, Inc.	N/A	Alan Berman Trucking, Inc. Settlement
12/12	The Sherwin-Williams Company	N/A	The Sherwin-Williams Company Settlement
12/12	Gillies Trucking Inc.	N/A	Gillies Trucking Inc. Settlement
12/12	Debris Box	N/A	Debris Box Settlement
12/12	Domistyle, Inc.	N/A	Domistyle, Inc. Settlement

Litigation

1 2 3 4 5 6 7 8	KAMALAD. HARRIS Attorney General of California RICHARD J. MAGASIN Supervising Deputy Attorney General GARY E. TAXETIAN (STATE BAR NO. 117135) DANIEL M. LUCAS (STATE BAR NO. 235269) Deputy Attorneys General 300 South Spring Street, Suite 1702 Los Angeles, CA 90013 Telephone: (213) 897-0628 Fax: (213) 897-2802 E-mail: Daniel.Lucas@doj.ca.gov Attorneys for the People of the State of California ex rel. the California Air Resources Board	EXEMPT FROM FILING FEES [GOV. CODE, § 6103]
9	SUPERIOR COURT OF TH	E STATE OF CALIFORNIA
10	FOR THE COUNTY O	F SAN BERNARDINO
11		
12		
13	THE PEOPLE OF THE STATE OF CALIFORNIA	Case No.
14	EXREL. THE CALIFORNIA AIR RESOURCES BOARD.	COMPLAINT FOR INJUNCTIVE
15	Plaintiff.	RELIEF AND CIVIL PENALTIES
16 17	x-	[Special Precedence Over Other Civil Matters on the Court's Calendar Pursuant to Health and Safety Code section 42404]
18		to Heath and Safety Code Section 424041
19	AND DOES 1-50, INCLUSIVE,	
20	Defendants.	
21		1
22		
23		
24		
25		
26		
27		



NEWS RELEASE

Print Release

Release #:12-02 Date:01/09/2012

ARB PIO: (916) 322-2990 CONTACT:

Karen Caesar 626-575-6728

kcaesar@arb.ca.gov

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.



NEWS RELEASE

Print Release

Release #:12-33 Date:08/02/2012

ARB PIO: (916) 322-2990 CONTACT:

Karen Caesar 626-575-6728

kcaesar@arb.ca.gov Cassandra Hockenson (916) 322-2638 chockens@arb.ca.gov

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.

⊘ Air Resources Board

Requirements for Diesel Truck and Equipment Owners

All owners of diesel trucks buses trailers and transport refrigeration units or "reefers" that operate in

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.
- 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.
- B) The Heavy-Duty Vehicle Inspection Program uses random roadside inspections to verify that diesel engines do not smoke excessively and are tamper free.
- 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 to 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 26,000 lbs. need engine upgrades as shown in the table. No reporting is required if using the heavier vehicle schedule.

ı	Schedule for Hea	wier Trucks and Buses	
1	Engine Year	PM Filter*	2010 MY Engine
	Pre-1994	Not required	January 1, 2015
	1994-1995	Not required	January 1, 2016
	1996-1999	January 1, 2012	January 1, 2020
	2000-2004	January 1, 2013	January 1, 2021
	2005 or newer	January 1, 2014	January 1, 2022
	2007-2009	Already equipped	January 1, 2023

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

LIGHTER VEHICLES with a GVWR 26,000 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

Schedule for Lighter Trucks and Buses		
Engine Year	2010 MY Engine	
1995 and older	January 1, 2015	
1996	January 1, 2016	
1997	January 1, 2017	
1998	January 1, 2018	
1999	January 1, 2019	
2003 and older	January 1, 2020	
2004-2006	January 1, 2021	
2007-2009	January 1, 2023	
1996 1997 1998 1999 2003 and older 2004-2006	January 1, 2016 January 1, 2017 January 1, 2018 January 1, 2019 January 1, 2020 January 1, 2021	

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/msprog/onrdieset/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/drayagetruck. Drayage trucks must comply with requirements (see table). Retrofit PM filters must be verified to reduce PM by 85%.

Truck Engine Model Year	Emission Requirements	
Class 8 Compliance Schedule (33	3,001 lbs. GVWR or greater)	
1994-2006 (pre-1994 not allowed)	After Dec. 31, 2012, PM Filter and; After Dec. 31, 2013, meet 2007 engine standard	
2007-2009	Compliant through 2022	
2010 and newer	Fully compliant	
Class 7 Compliance Schedule (26,001-33,000 lbs. GVWR)		
2006 and older while operating in South Coast Air Basin	After Dec. 31, 2011, PM Filter and; After Dec. 31, 2013, meet 2007 engine standard	
2006 and older	After Dec. 31, 2013, meet 2007 engine standard	
2007-2009	Compliant through 2022	
2010 and newer	Fully compliant	

(Revised 12/26/12)

4. TRACTORS AND BOX-TYPE TRAILERS ... 53 1

The Tractor-Trailer Greenhouse Gas regulation applies to 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, 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.ghg

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

Low-Rolling Resistance Tires	
Date	Requirement for 2010 MY and Older Equipment
January 1, 2013	All tractors
January 1, 2017	All trailers

Aerodynamic devices are required on all 2011 MY or newer sleeper-cab tractors and trailers. For 2010 MY and older trailers, see the table below.

Aerodynamic Requirements		
Date	Requirement for 2010 MY and Older Trailers	
June 1, 2012	Deadline to register for large fleet (21 or more	
	trailers) phase-in plan.	
January 1, 2013	Deadline to register for small fleet (20 or fewer	
	trailers) phase-in plan.	
January 1, 2013	All unregistered trailers. Exceptions may apply.	

www.arb.ca.gov/truckstop

Note: All requirements for 2003-2009 MY reefer trailers with 2003 or newer reefer engines start 2018-2020.

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.arb?prg=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 the 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 receivers) must only hire carriers that supply compliant TRUs.

TRU and TRU Generator Set Compliance Schedule			
Engine Model		Ultra-Low-Emission TRU	
Year	(50% PM Reduction)	(85% PM Reduction)	
2001 or older	Original – December 31, 2008	December 31, 2017	
	Delayed - December 31, 2009	December 31, 2016	
2002	December 31, 2009	December 31, 2017	
2003	December 31, 2010	December 31, 2018	
2004 (<25 hp)	December 31, 2011	December 31, 2018	
2004 (>25 hp)	Not Applicable	December 31, 2011	
2005 and newer	Not Applicable	December 31st of the model year plus 7 years	

For more information, call 1-888-878-2826 or 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.

Vehicle or Fleet Type	Website
Public and Private School Buses	www.arb.ca.gov/dieseltruck
Solid Waste Collection Vehicles	www.arb.ca.gov/msprog/swcv/swcv.htm
Public Transit Fleet Vehicles	www.arb.ca.gov/msprog/bus/bus.htm
State and Local Government Vehicles and Private Utilities	www.arb.ca.gov/msprog/publicfleets/publicfleets.htm

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 50 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 866-6DIESEL (866-634-3735), email 8666Diesel@arb.ca.gov, or visit the TruckStop website at: www.arb.ca.gov/truckstop.



CALIFORNIA

COMMERCIAL DRIVER HANDBOOK













Edmund G. Brown Jr., Governor State of California George Valverde, Director Department of Motor Vehicles

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 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.

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/advs/364.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 to maintain records for a minimum of two years. Please see 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/noidleorwww.arb.ca.gov/toxics/sbidling/sbidling.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/drayagetruck.

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 (or soot) emissions 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: <u>http://www.arb.ca.gov/enf/advs/advs.htm</u>
- Complete ARB and CCDET training programs: <u>http://www.arb.ca.gov/training/training.htm</u>
- 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)



Presentation Summary

- 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

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