

Aplicación de la normatividad de ARB sobre emisiones de diesel

Agencia de Protección Ambiental de los Estados Unidos
Taller de Frontera 2020 sobre Aplicación de Normas Ambientales
COCEF, EPA y PROFEPA

13 y 14 de junio de 2013
San Diego, CA

Paul E. Jacobs
Jefe de la División de Aplicación de la Normatividad

California Environmental Protection Agency
 Air Resources Board

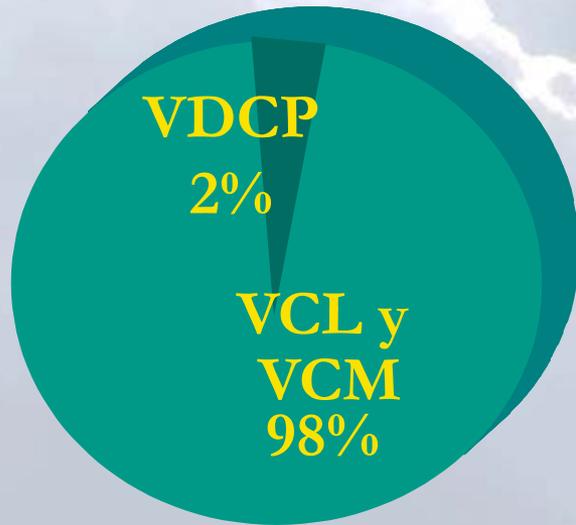


Esquema de la presentación

- Situación general de la calidad del aire e impactos a la salud
- Programas de aplicación de la normatividad a vehículos a diesel
- Capacitación para el cumplimiento (centros universitarios y ARB)
- Cómo cumplir con la normatividad
- Información de contactos

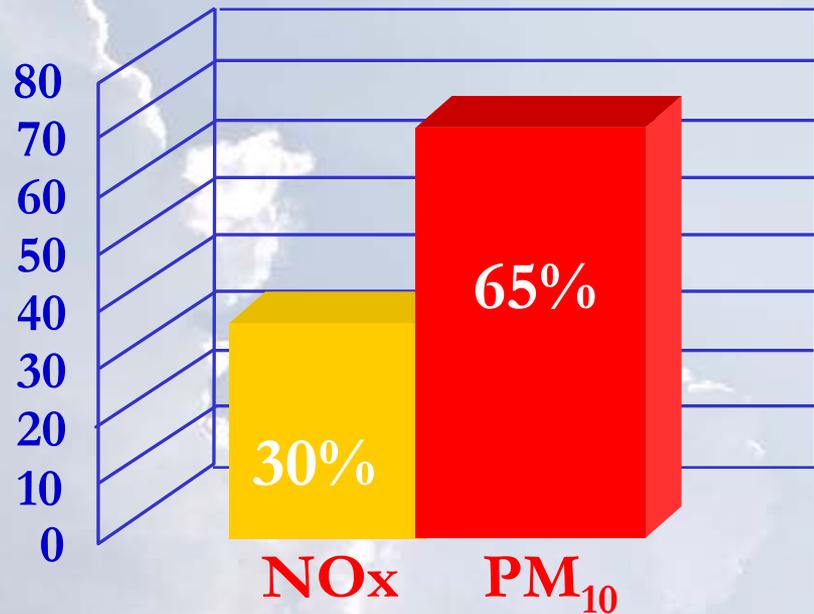


El problema



% del total de vehículos en circulación

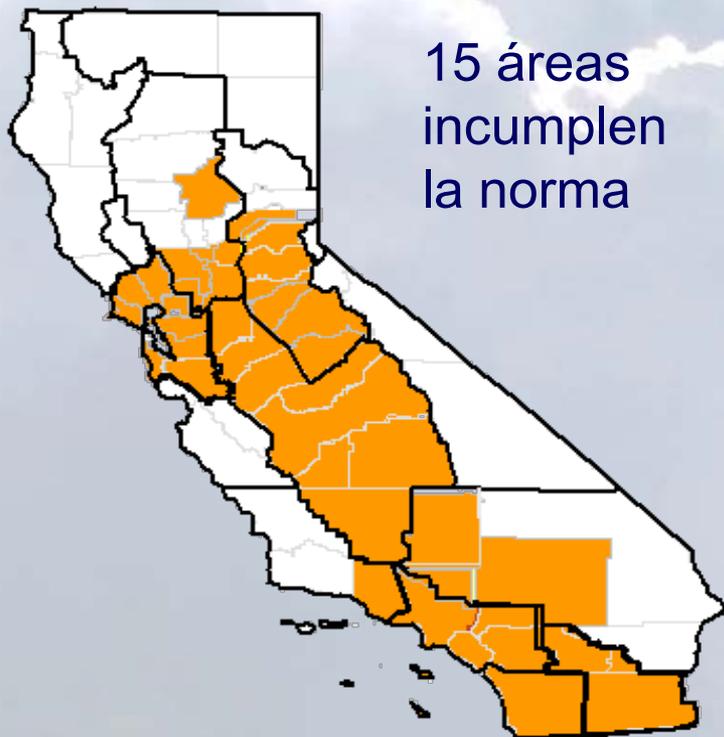
% del inventario de emisiones de vehículos en circulación



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: Fresno-Madera, CA	#4: Hanford-Corcoran, CA	#4: Los Angeles-Long Beach- Riverside, CA
#5: Hanford-Corcoran, CA	#4: Los Angeles-Long Beach-Riverside, CA	#5: Modesto, CA
#6: Sacramento-Arden-Arcade-Yuba City, CA-NV	#6: Modesto, CA	#6: Sal Lake City-Ogden-Clearfield, UT
#7: Houston-Baytown-Huntsville, TX	#7: Visalia-Porterville, CA	#7: Pittsburgh-New Castle, PA
#8: Dallas-Fort Worth, TX	#8: Pittsburgh-New Castle, PA	#8: Merced, CA
#9: Washington-Baltimore-Northern Virginia, DC-MD-VA-WV	#9: El Centro, CA	#9: Fairbanks, AK
#10: El Centro, CA	#10: Cincinnati-Middletown-Wilmington, OK-KY-IN	#10: Logan, UT-ID
#11: San Diego-Carlsbad-San Marcos, CA	#11: Philadelphia-Camden-Vineland, PA-NJ-DE-MD	#11: Provo-Orem, UT
#11: Merced, CA	#12: Louisville-Jefferson County-Elizabethtown-Scottsburgh, KY-IN	#12: Stockton, CA
#13: Modesto, CA	#12: St. Louis-St. Charles-Farmington, MO-IL	#13: Las Cruces, NM
#14: Cincinnati-Middletown-Wilmington, OH-KY-IN	#14: Canton-Massillon, OH	#14: Visalia-Porterville, CA
#14: Birmingham-Hoover-Cullman, AL	#14: Macon-Warner Robins-Fort Valley, GA	#14: Eugene-Springfield, OR
#16: Las Vegas-Paradise-Pahrump, NV	#14: Allentown-Bethlehem-Easton, PA-NJ	#16: Chicago-Naperville-Michigan City, IL-IN-WI
#17: Louisville-Jefferson County-Elizabethtown-Scottsburgh, KY-IN	#14: Fairbanks, AK	#17: Seattle-Tacoma-Olympia, WA
#17: New York-Newark-Bridgeport, NY-NJ-CT-PA	#18: Atlanta-Sandy Springs-Gainesville, GA-AL	#17: Green Bay, WI
#19: Charlotte-Gastonia-Salisbury, NC-SC	#18: Phoenix-Mesa-Glendale, AZ	#19: Indianapolis-Anderson-Columbus, IN
#20: Oklahoma City-Shawnee, OK	#20: Cleveland-Akron-Elyria, OH	#19: Harrisburg-Carlisle-Lebanon, PA

Designación de las áreas con respecto a las normas de calidad del aire intradomiciliario en materia de ozono y PM2.5

Norma de 8 horas de ozono



15 áreas incumplen la norma

PM2.5 Anual



2 áreas incumplen la norma



Fuera de norma



Sin clasificar/Cumple con la norma



Video: Smog en Los Ángeles

LOS ANGELES SEEKS
REMEDY AS RECORD
SMOG COVERS CITY

Commentary by PETER ROBERTS
NEWS of the DAY



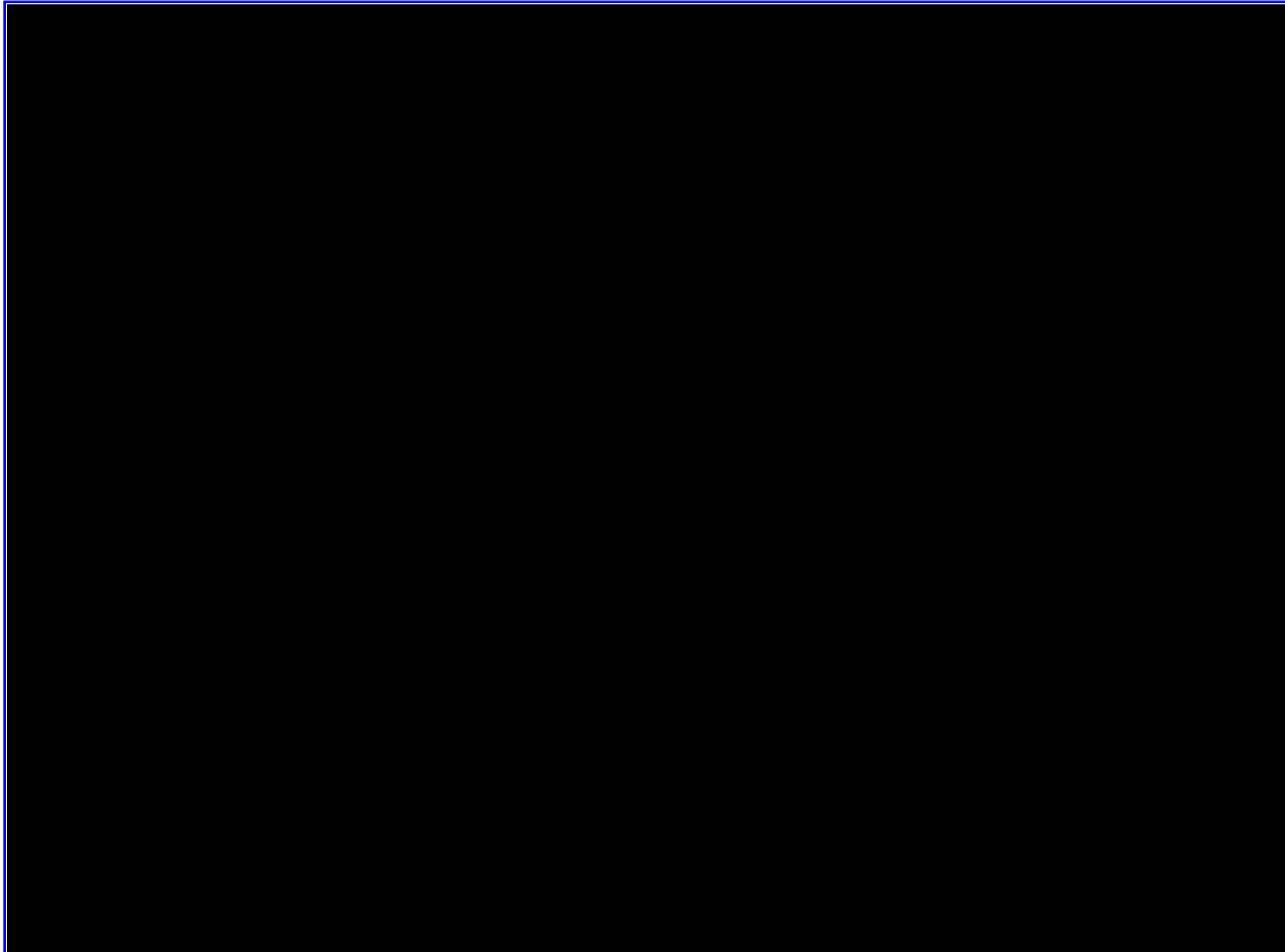
Día despejado en Los Ángeles



Día con smog en Los Ángeles



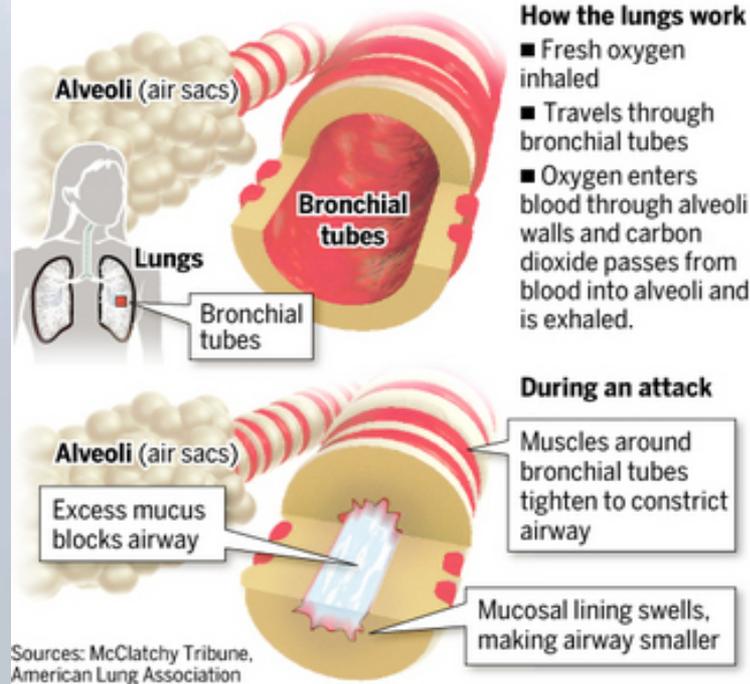
Video: Impactos a la salud de los escapes de motores a diesel



Impactos sanitarios y ambientales de los contaminantes

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.



NATHANIEL LEVINE nlevine@sacbee.com



Ataque de asma



Beijing versus Temuco



Sábado 12 de Enero de 2013



Domingo 1 de Junio de 2008

El 2012 fue peor





Estrategias para reducir las emisiones de los motores a diesel

- Plan de reducción de riesgos del diesel del año 2000
(Reducir en un 75% la exposición a PM para 2010 y en un 85% para 2020)
- Normas rigurosas para la certificación de motores
(2007 PM y 2010 NOx)
- Normas rigurosas para combustibles (15 ppm de azufre en el diesel para 2006)
- Programas para vehículos en circulación = “Las 3 Rs”: Renovar, Reacondicionar, Reemplazar + Incentivos y Aplicación de las normas
= Motores y vehículos “limpios y ecológicos”



Normatividad de ARB para motores diesel de vehículos en circulación

Programa de reducción de riesgos del diesel

- **Camiones urbanos - 2000**
- **Marcha mínima de camiones escolares y vehículos repartidores – 2003**
- **Vehículos recolectores de residuos sólidos - 2003**
- **Unidades de refrigeración para transporte - 2004**
- **Motores estacionarios de encendido por compresión - 2004**
- **Camiones en marcha mínima - 2004**
- **Motores portátiles - 2004**
- **Combustible para locomotoras y embarcaciones portuarias - 2004**



Normatividad de ARB para motores diesel de vehículos en circulación

Programa de reducción de riesgos del diesel (Continuación)

- **Parque vehicular de transporte público - 2005**
- **Flotillas de dependencias oficiales y organismos operadores de servicios públicos en circulación - 2005**
- **Equipo para movimiento de carga portuaria/ferroviaria - 2005**
- **Combustibles para motores auxiliares marinos - 2005**
- **Vehículos para obras (p.ej. construcción y minería) - 2007**
- **Camiones para acarreo (portuario) - 2007**
- **Embarcaciones portuarias comerciales - 2008**
- **Camionetas y camiones de circulación estatal – Diciembre de 2008, Modificada en 2010**
- **Motores de vehículos agrícolas que no circulan por vialidades – Pendiente**



Programas preexistentes de vigilancia de cumplimiento

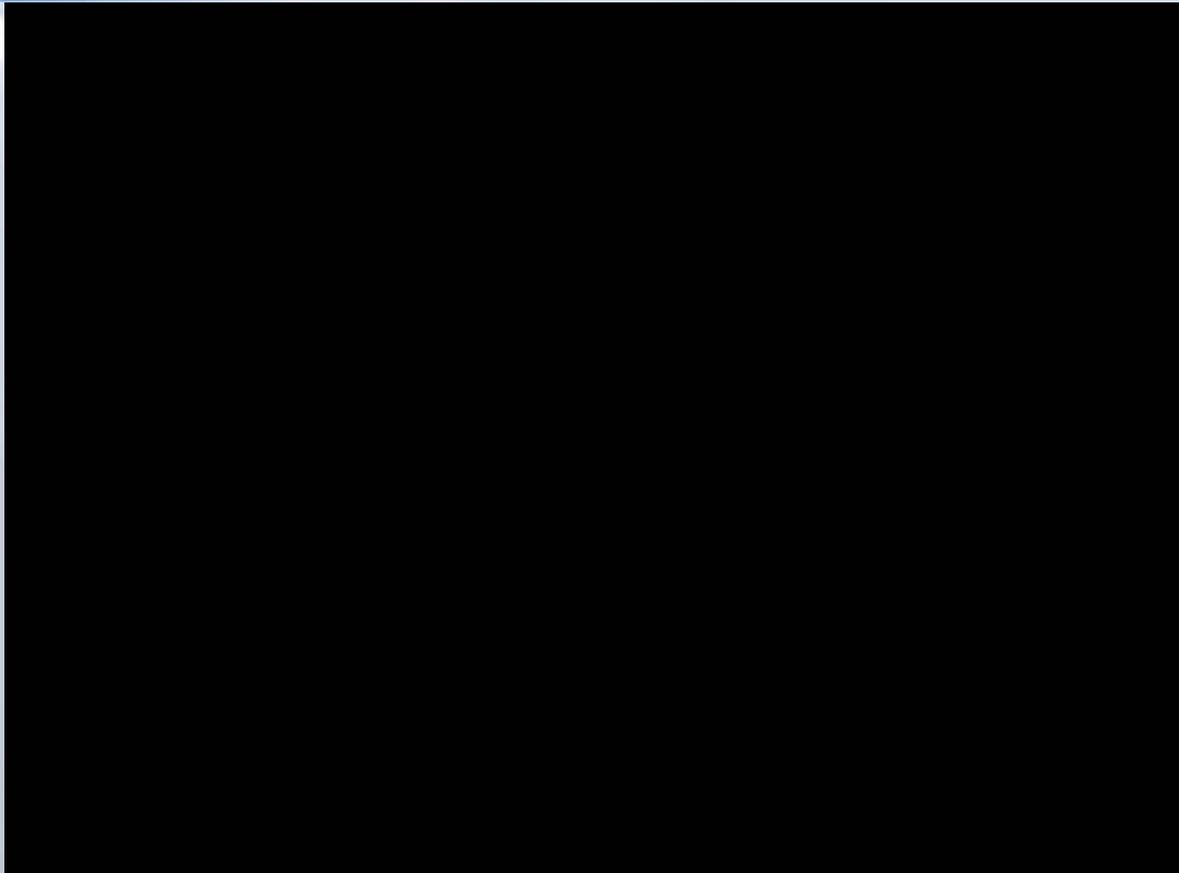
- Programa de inspección de vehículos de carga pesada (HDVIP, por sus siglas en inglés)--- emisiones de humo y alteraciones al motor
- Programa de inspección periódica de emisiones de humo en el parque vehicular (PSIP, por sus siglas en inglés)
- Programa de certificación y etiquetado de emisiones de motores, conforme a la ley AB 1009



Normas de opacidad del humo



Prueba de aceleración instantánea SAE J1667



Ejemplo de etiqueta de certificación de emisiones de motores (AB 1009)

MODEL MODÈLE	CH230
ADV. BHP @ RPM PUISSANCE TR/MIN	230 @ 2300
LB-FT TORQ. @ RPM COUPLE LB-PI À TR/MIN	660 @ 1400
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, AUSTRALIAN, AND CANADIAN HEAVY-DUTY DIESEL REGULATIONS APPLICABLE FOR THE IMPLIED MODEL DESIGNATED TO OPERATE ON DIESEL FUEL.	

Family DT 466E HT
DE MOTEUR



Prueba de aceleración instantánea SAE J1667 en el cruce fronterizo de Otay Mesa



Cruce fronterizo de Olay Mesa



Programas de cumplimiento

<http://www.arb.ca.gov/enf/enf>

Wednesday, March 7, 2012

UP LINKS

- ◊ [Reducing Air Pollution - ARB Programs](#)
- ◊ [Enforcement Programs](#)

PROGRAM LINKS

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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](#)



Acciones coercitivas cerradas en 2012

Programa	Acciones coercitivas cerradas	Sanciones
Fuentes móviles	2,570	\$13,514,357
Combustibles	21	\$568,550
Productos de consumo	73	\$1,993,952
Tanques de carga	31	\$14,500
Convenios ferroviarios	18	\$3,600
Total de casos	2,713	\$16,094,959



Estadísticas históricas

<i>Año</i>	<i>Acciones coercitivas cerradas</i>	<i>Sanciones</i>
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
2010	3701	\$ 12,787,322
2011	3536	\$ 6,652,309
2012	2713	\$ 16,094,959
Total 12 años	28,344	\$ 136,885,611
Prom. 12 años	2362	\$ 11,407,134

Ejecución de programas sobre el diesel

Se finiquitaron o litigaron casos de :

- Programa de inspección periódica de emisiones de humo
- Programa para vehículos recolectores de residuos sólidos
- Programa para vehículos de dependencias oficiales y organismos operadores de servicios públicos
- Programas para camiones urbanos y vehículos de transporte público
- Programa de unidades de refrigeración para transporte
- Programa de Estrategias Verificadas para el Control de Emisiones de Diesel (VDECS, por sus siglas en inglés)
- Programa para camiones de acarreo
- Programa para camionetas y camiones de circulación estatal
- Hasta la fecha se han cerrado más de 1,000 casos por un total de más de \$20 millones de dólares
- El dinero va al Fondo para el Control de la Contaminación Atmosférica y a los Programas Estatales de Emisiones (p.ej. Programas de tecnologías diesel en centros universitarios y filtros de partículas diesel para camiones escolares)





Ejecución de infracciones vencidas

- ARB obtiene sentencias judiciales en el Tribunal Superior de Sacramento en virtud de la autoridad de la sección 44011.6 del Código de Salud y Seguridad de California (a la fecha se han obtenido ~ 3,500)
- ARB ejecuta las sentencias judiciales para entablar un embargo sobre las propiedades, etc.
- Proceso de la Patrulla de Caminos de California para “sacar de circulación los vehículos”, conforme a la sección 27159 del Código Vehicular (a la fecha sólo ~500 vehículos detenidos)
- “Suspensión del registro” del Depto. de Vehículos Motorizados, conforme a la sección 4755 del Código Vehicular (AB 233 de 2007) (~2000 a la fecha)



Inspecciones de campo e infracciones en 2010-2012

	2010	2011	2012
Programa	Inspecciones/Infracciones	Inspecciones/Infracciones	Inspecciones/Infracciones
TRUs	6119/2318 (38%)	5600/1500 (27%)	4150/1289 (31%)
Camiones para acarreo	3094/356 (12%)	5220/291 (6%)	2860/276 (10%)
CVI	6456/887 (14%)	5604/1105 (20%)	2647/854 (32%)
HDVIP	14784/111 (1%)	10734/114 (1%)	11635/129 (1%)
ECL	13274/825 (6%)	10734/703 (7%)	11887/931 (8%)
Vehículos especiales	76/17 (22%)	214/48 (24%)	583/97 (17%)
SWTB	N/A	N/A	2802/432 (15%)
Totales	31,856/4514 (14%)	38,106/3761 (9.9%)	36564/4008 (11%)

Inspecciones de campo e infracciones en 2010-2012

	2010	2011	2012
Programa	Cobrado/\$	Cobrado/\$	Cobrado/\$
TRUs	792/\$737K	886/\$635K	355/\$344K
Camiones para acarreo	90/\$66K	183/\$140K	144/\$139K
CVI	763/\$196K	807/\$22K	495/\$148K
HDVIP	152/\$28.7K	362/\$30.9	73/\$25.8K
ECL	739/\$190K	655/\$165K	541/\$191K
Vehículos especiales	10/\$4.8K	38/\$3K	106/\$42K
SWTB	N/A	N/A	147/\$171K
Otro	-----	-----	19/\$5K

Casos del programa de diesel cerrados en 2010-2012

Programa	2010	2011	2012
Veh. Especiales	7	12	78
VDECS	8	6	18
TRUs	26	36	35
Acarreo	2	7	26
SWCV	20	37	21
PSIP	181	198	140
Transp. Público	4	6	8
PAU	--	5	9
SWTB	N/A	N/A	73
Otro*	--	--	152
Total	248 (~\$1.3M)	307 (~\$1.8M)	560 (~\$2.7M)

* = alteraciones a etiquetas ECL, HDVIP



Finiquitos en 2012 (sitio web)

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



California Environmental Protection Agency
Air Resources Board

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Friday, January 11, 2013

2012 Case Settlements

This page last reviewed January 4th, 2013.

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.

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. Settlement
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 (Deutschland), GmbH & Co. KG	N/A	Bernhard Schulte Shipmanagement (Deutschland), 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	Domistvle, Inc.	N/A	Domistvle, Inc. Settlement

UP LINKS

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- [2012 Case Settlements](#)

PROGRAM LINKS

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Litigio

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Board*

**EXEMPT FROM FILING FEES
[GOV. CODE, § 6103]**

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.

██████████, ██████████,
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]**



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
626-575-6728kcaesar@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.

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 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.

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.

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

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/onrdiesel/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 (33,001 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

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-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

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/Welocome_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.

For more information, call 1-888-878-2826 or <http://www.arb.ca.gov/diesel/tru/tru.htm>

TRU and TRU Generator Set Compliance Schedule Engine Model Year	Low-Emission TRU (50% PM Reduction)	Ultra-Low-Emission TRU (85% PM Reduction)
2001 or older	Original – December 31, 2008 Delayed – December 31, 2009	December 31, 2017
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 31 st of the model year plus 7 years

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 866Diesel@arb.ca.gov, or visit the TruckStop website at: www.arb.ca.gov/truckstop.

CALIFORNIA

COMMERCIAL DRIVER HANDBOOK

ENGLISH
2010-2011



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/hdvp/hdvp_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/hdvp/hdvp_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.

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/hdvp/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 or www.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).

Cómo cumplir con las normas

- Dar mantenimiento a los vehículos/el equipo conforme a las especificaciones de fábrica y conservar actualizados los registros correspondientes
- Llevar comunicación con el personal de ARB para verificar el cumplimiento de los programas y anotarse en las “listas de correo” en el sitio web de ARB:
<http://www.arb.ca.gov/listserv/listserv.php>
- Revisar los avisos en el sitio web de ARB:
<http://www.arb.ca.gov/enf/adv/adv.htm>
- Tomar los programas de capacitación de ARB y CCDET:
<http://www.arb.ca.gov/training/training.htm>
- Visitar con frecuencia el sitio web de ARB: www.arb.ca.gov



CCDET:

Programa de Capacitación Industrial para el Cumplimiento del Consejo de Educación y Tecnología sobre Diesel del California Community College



- Alianza entre: centros universitarios con programas de tecnología diesel, ARB y la industria de motores/equipo a diesel
- Clases económicas: protocolo de prueba de emisiones de humo SAE J1667, reparaciones a motores con emisiones e instalación y mantenimiento de VDECS
- Clases de auditoría de Control de Calidad/ Verificación de Calidad de ARB
- Centros universitarios participantes:
 1. College of Alameda (zona de Oakland)
 2. San Joaquin Delta College (Stockton)
 3. L.A. Trade Tech College (Los Angeles)
 4. Santa Ana College (Condado de Orange)
 5. Palomar College (Condado de San Diego)
 6. American River College* (zona de Sacramento)

* Miembro fundador



Resumen de la presentación

- En California, los vehículos y el equipo a diesel producen una cantidad desproporcionada de emisiones de óxido de nitrógeno (Nox) y partículas (PM2.5)
- ARB administra muchos programas para reducir las emisiones de este tipo de vehículos y equipo
- Los programas son rentables y con ellos se logra una considerable reducción de emisiones para proteger la salud pública
- Los programas se han convertido en modelos para otros programas nacionales e internacionales
- Estos programas son el fundamento del Plan de Reducción de Riesgos del Diesel de ARB, además de que con ellos se reducen también los gases de efecto invernadero
- Se deben aprovechar los recursos de difusión y capacitación de ARB para cumplir con las normas
- Asistir a las clases de CCDET



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