

UPDATE ON CLEANER FLEET MANDATES

SEAN EDGAR

**EXECUTIVE DIRECTOR, CLEAN FLEETS
COALITION**

MATT SCHRAP

**DIRECTOR, ENVIRONMENTAL AFFAIRS
CALIFORNIA TRUCKING ASSOCIATION**

Overview

- Greening the Statewide Fleet
- Policy Debate
- Implementation from a Practitioner's Perspective
- The Next Decade in California Transportation Relative to Emissions

Sean Edgar

- Twenty years of experience in transportation and environmental policy
- Compliance Specialist and advocate for several vocational transportation associations on every on-road rule CARB has done since 2000
- Member of the Executive Committee, Driving Toward a Cleaner California/California Chamber of Commerce
- Appointed by CARB to the Truck Regulations Advisory Committee (TRAC) effective September 1, 2009

Introduction to CARB

**Board Structure, Enforcement and
Greening the Fleet**

Who is CARB?

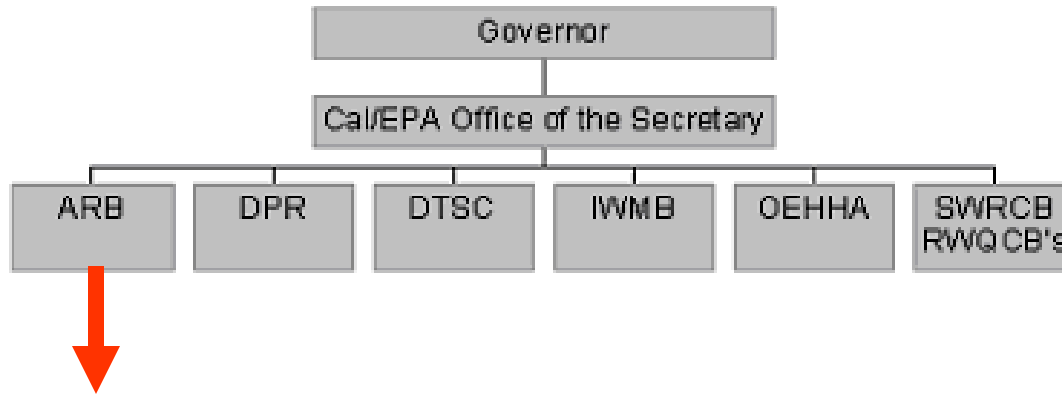
- The California Air Resources Board (CARB) has gained national and international attention for its efforts to control diesel and greenhouse emissions
- Through the Western Climate Initiative, CARB will coordinate with the Northwest states on regional pollution control and cap & trade
- Through a federal Clean Air Act waiver process, CARB is (and other states may) adopt motor vehicle standards that are more aggressive than federal law

GHG 2006 Landmark Legislation



- ***June 30, 2007 – Adopted Early Action Measures including Low Carbon Fuel Standard***
- ***Jan. 1, 2008 – Mandatory Reporting Regs &***
- ***Jan. 1, 2009 – Plan for Emission Reductions***
 - *Private Fleet Rule adopted that required GHG reductions via Smartway upgrades*
- ***Jan 1, 2010 – Early Action Measures Effective***
- ***Jan. 1, 2011 – Complete Rulemaking***
 - *GHG Reductions and Market Mechanisms*
- ***Jan. 1, 2012 – Rules and Mechanisms in Effect***
- ***Dec. 31, 2020 – Return to 1990 Emission Levels***

Calif. Air Resources Board



- CARB is an 11-member board appointed by the governor and confirmed by the Senate
- Full-time Chair, 10 part-time board members, 900 employees (104 added as a result of GHG bill of 2006)
- It has existing state legal authority to impose regulations to protect the public from pollution from mobile sources, including diesel exhaust and greenhouse gas

State Regulatory Structure

- Federal law requires attainment with health-based air quality standards
- The state is responsible for mobile sources of pollution
- Air Districts will have a role in handing out grant and bond funds to early implementers
- The vehicle owner is responsible for the combination of exhaust system upgrades (“retrofit”) and vehicle replacements that are required to comply with the rules we are discussing
- CARB is aggressively enforcing against interstate and international carriers on California highways today

Diesel Regulations

- Urban buses 2000
- School bus idling 2000
- 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



Diesel Regulations

- Transit fleet vehicles 2005
- Public agencies/utility on-road fleets 2005
- Port/rail cargo handling equipment 2005
- Ship auxiliary engine fuel 2005
- Off-road vehicles 2007
- Drayage trucks 2007
- Commercial harborcraft 2008
- Statewide trucks and buses 2008
- Agricultural off-road engines Possible 2011



ENFORCEMENT PROGRAM STATISTICS: 2009

The following statistics highlight ARB's Enforcement Program achievements in 2009:

The statistics for the Mobile Source Enforcement Program are as follows:

- 3,928 cases/citations closed for over \$13.3 million
- 245 diesel fleet and exhaust retrofit cases closed for over \$5.9 million;
- 32 mobile Transport Refrigeration Unit cases closed for over \$291,000;
- 3,465 in use diesel program citations closed for over \$1.2 million;
- Over 19,000 heavy-duty vehicles inspected for smoke emissions and tampering, with over 600 violations closed for over \$270,000;
- Over 9,500 inspections for commercial vehicle and school bus idling conducted, with over 996 violations settled for over \$298,000;
- Over 582 field inspections of solid waste collection vehicles, with over 86 citations settled and \$28,500 collected. Eleven cases closed for over \$983,000;
- Over 19,000 heavy-duty vehicles inspected for engine certification labeling requirements, with over 1,100 violations and over \$340,000 collected;
- Over 55 inspections of public agency and utility company fleet vehicles, with 11 violations cleared for over \$2,400 collected;
- Over 359 delinquent violations (multiple programs) closed for over \$218,000 collected;
- 218 general mobile source cases/citations closed for over \$6.2 million;
- 186 uncertified on and off-road vehicle cases closed for over \$1.2 million;
- 11 illegal aftermarket performance parts case closed for over \$302,000;
- One On-Board Diagnostic case closed for \$4.4 million;
- 93 cases of non-California certified vehicles sold in California illegally were closed for \$206,198;
- Over 18,202 inspections for off-road use only, non-taxed, red-dyed diesel fuel conducted for on-road vehicles;
- Over 11,622 vehicle inspections conducted in Environmental Justice areas and over 1,430 violations documented;
- Over 50 industry compliance assistance/outreach days covering over 3,000 attendees;
- 65 California Community College CCDET compliance training classes held covering approximately 900 students; and

CARB's New Truck & Trailer Rules

**Truck and Trailer GHG Rule
&
Statewide Truck & Bus Rule**

Two Rules Became Effective in 2010

- Two rules were passed on December 12, 2008 and became California law on January 8, 2010
- GHG Tractor/Trailer Rule: Owners of over 400,000 53-foot trailers and the tractors that pull them are subject to aerodynamic upgrades
- The Truck & Bus Rule impact will be felt on large and small owners of 420,000 in state and 500,000 on road diesel engines from interstate or international carriers
- Emissions and sustainability are increasing the State's focus

Reducing Climate Change Emissions

FACTS ABOUT

Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Regulation

Reducing Climate Change Emissions from Tractor-Trailers

What is the purpose of the regulation?

The California Air Resources Board (ARB) developed this regulation to reduce greenhouse gas emissions produced by heavy-duty tractors that pull 53-foot or longer box-type trailers by making them more fuel efficient. Fuel efficiency will be improved by requiring the use of aerodynamic tractors and trailers that are also equipped with low rolling resistance tires. Along with reducing greenhouse gas emissions, this regulation will, over time, save money, as well as reduce our dependence on foreign oil. In fact, over the course of the 11 years between 2010 and 2020, this regulation is estimated to save about \$8.6 billion, as well as 750 million gallons of diesel fuel in California, and 5 billion gallons of diesel fuel across the nation.



The tractors and trailers subject to this regulation must either use United States Environmental Protection Agency Smartway (SmartWay) certified tractors and trailers, or retrofit their existing fleet with Smartway verified technologies. The SmartWay certification process is part of their broader voluntary program called the SmartWay Transport Partnership Program (SmartWay program). For information about the SmartWay program, go to: <http://www.epa.gov/smartway/transport/what-smartway/tractor-trailer.htm>

Who is affected by the regulation?

The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and the owners of heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. All owners regardless of where their vehicles are registered must comply with the regulation when they operate their affected vehicles on California highways.

Besides the owners of these vehicles, drivers, motor carriers, California-based brokers and California-based shippers that operate or use them also share in the responsibility for compliance with the regulation. One or all of these parties may be held accountable for operating or using non-compliant vehicles on California highways.



All parties
have need
to comply

GHG Rule Overview

Applicability:

- Long-haul tractors pulling 53' or longer box-type trailers 53' or longer box-type trailers (dry-van & refrigerated van trailers) pulled by long-haul tractors
- Responsible for compliance: owner, driver, motor carrier, California-based broker, and California-based shipper
- All owners operating affected vehicles in California regardless of where their vehicle is registered
- Optional phase-in for small fleets (2013-2016) and large fleets (2010-2015)

What are the tractor requirements?

Tractor Requirements

- 2011+ model year (MY) sleeper cabs: SmartWay certified as of 1/1/2010
- 2011+ MY day cabs: Low rolling resistance tires as of 1/1/2010
- All pre-2011 MY sleeper cabs & day cabs: Low rolling resistance tires by 1/1/2012

What are the trailer requirements?

- Trailer Requirements Compliance Phase-In Options

Large Fleets (21 or more trailers)

- Phase-in: 2010 – 2015
- Early compliance option
- Submit compliance plan by **July 1, 2010**

Small Fleets (20 or fewer trailers)

- Phase-in: 2013-2016
- Submit compliance plan by **July 1, 2012**

Proposed Trailer Phase-in (Large Fleet) for Dec 2010 Hearing

- Registration: Option 1 by July 1, 2010; Option 2 by July 1, 2011
- Option 2 phase-in begins one year later & is more accelerated

Option 1 % of Trailers	Option 2 % of Trailers	Compliance Before
5%	--	January 1, 2011
15%	20%	January 1, 2012
30%	40%	January 1, 2013
50%	60%	January 1, 2014
75%	80%	January 1, 2015
100%	100%	January 1, 2016

*Applies to fleets with 21 or more 53-ft box trailers

To do's for the transportation industry

1. Outreach
2. Survey of cost impact
3. Discussion of methods to deal with the cost impact

TRUCKING INDUSTRY PERSPECTIVE

MATT SCHRAP

**DIRECTOR, ENVIRONMENTAL AFFAIRS
CALIFORNIA TRUCKING ASSOCIATION**

Matt Schrap

- Worked in the Legislature
- Senate Fellow
- Has spent the past five years of increasingly responsible roles on fleet rule negotiation and analysis
- Member of the Executive Committee, Driving Toward a Cleaner California/California Chamber of Commerce
- Appointed by CARB to the Truck Regulations Advisory Committee (TRAC) Outreach Committee

California Trucking Association Since 1934

The California Trucking Association promotes leadership in the California motor carrier industry, advocates sound transportation policies to all levels of government, and works to maintain a safe, environmentally responsible and efficient California transportation goods movement system.

California Trucking Industry Perspective



CARB Programs...

Impacting our Industry

- Transport Refrigerated Units
- Port/Rail Trucks
- Over-the Road Trucks
- Trash Trucks
- Municipal Trucks
- Off-Road Equipment
- ULSCARB Diesel
- Idling Restrictions
- What's Next?????
- Did I Miss Anything???



















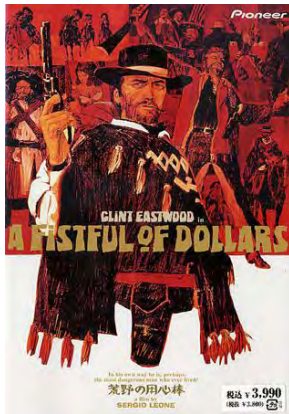
Governor Earl Warren

1943 -1953

- June 10, 1947, California Governor Earl Warren signs into law the Air Pollution Control Act, authorizing the creation of an Air Pollution Control District in every county of the state.
- In 1945 The City of Los Angeles began its air pollution control program, establishing the Bureau of Smoke Control in its health department.

Governor Goodwin Knight 1953-1959

- In 1959 CA enacted legislation requiring the state Department of Public Health establish air quality standards and necessary controls for motor vehicle emissions. The first statewide air quality standards were set by the Department of Public Health for total suspended particulates, photochemical oxidants, sulfur dioxide, nitrogen dioxide, and carbon monoxide.



1967...



- Federal Air Quality Act of 1967 was enacted. It established a framework for defining "air quality control regions" based on meteorological and topographical factors of air pollution. It allowed the State of California a waiver to set and enforce its own emissions standards for new vehicles based on California's unique need for more stringent controls.

Governor Ronald Reagan

1967 -1975

- in 1967 The California Air Resources Board was created from the merging of the California Motor Vehicle Pollution Control Board and the Bureau of Air Sanitation and its Laboratory. The Mulford-Carrell Air Resources Act was signed into law by Governor Ronald Reagan.
- Dr. Arie J. Haagen-Smit was appointed Chairman of the Air Resources Board by Governor Ronald Reagan. First meeting of the State Board was held in Sacramento on February 8, 1968.

President Richard Nixon 1969-1974

- Federal Clean Air Act Amendments of 1970 were enacted. They served as the principal source of statutory authority for controlling air pollution. Established the basic US program for controlling air pollution.

Governor George Dukemejian 1983-1991

- In 1988 the California Clean Air Act was signed by Governor Deukmejian. The Act set forth the framework for how air quality will be managed in California for the next 20 years.

Governor Pete Wilson 1991-1999

- In 1993 ARB enacted new standards for cleaner diesel fuel, resulting in a reduction of diesel particulate emissions by approximately 14 tons/day, 80 tons/day less SO_x and 70 tons/day NO_x emissions. Diesel busses and trucks are a major source of NO_x emissions.
- Known worldwide as CARB Diesel

President George HW Bush 1989-1993

- The Clean Air Act Amendments of 1990 were signed into law by President George H.W. Bush. They relied largely on elements of the CCAA, and required a number of new programs aimed at curbing urban ozone, rural acid rain, stratospheric ozone, toxic air pollutant emissions and vehicle emissions, and establishes a new, uniform national permit system.

Governor Arnold Schwarzenegger 2003-2010

- In 2006, AB 32 signed. The California Global Warming Solutions Act of 2006 establishes the first-in-the-world comprehensive program of regulatory and market mechanisms to achieve real, quantifiable, cost-effective reductions in greenhouse gases (GHG). It makes the ARB responsible for monitoring and reducing GHG emissions.

What does this mean for us?

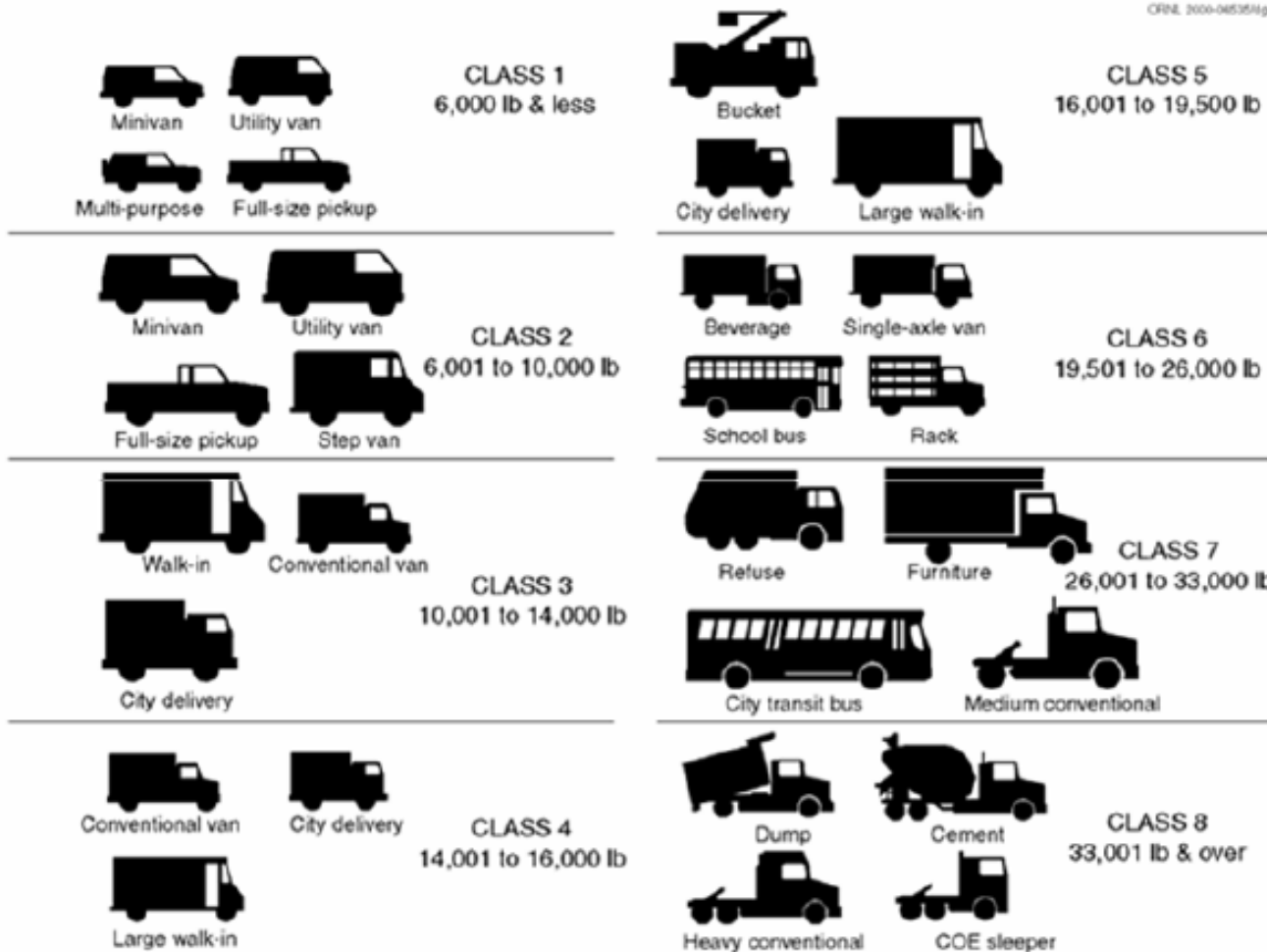
CARB Truck Rule Update

“Statewide Truck and Bus” Rule

Rule Covers Class 4 and Up

Vehicle Weight Classes

CFR, 2000-04/30/14p



Truck types by gross vehicle weight (GVW). Source: *Commercial Carrier Journal* (<http://www.ccmagazine.com>).

Applicability

- Private fleets, federal fleets, public schools
- Any person, business, or federal government agency who owns, leases, rents, or sells a vehicle in California
- California based brokers and dispatchers
 - Must verify that each hired or dispatched vehicle is in compliance with the regulation

Rule Status

- January 8, 2010: Rule became law
- December 2010: Board to evaluate changes to the 2010-2016 fleet compliance percentage requirements.
- Minor changes to diesel particulate matter control (2011-2016)
- Major changes to delay the NO_x part of the Rule until 2020-2023.

Three Compliance Options

- Class 4 to 6 Trucks (up to 26,001 lbs GVWR) where engines are banned according to model year
- Class 7 and 8 Trucks (26,001 and up) where engines are retrofit or replaced according to model year
- Class 7 and 8 Trucks Optional Phase-in of particulate matter requirements, then replacement

Proposed Requirement for Smaller Trucks

Less than 26,001 lbs GVWR

- No PM filter requirements
- Truck replacements start 2015
 - Replace when 20 years old until 2020
 - Replace remaining pre-2010 engines 2020-2023
- No reporting required
- All 2010 engines by 2023

Proposed Requirements for Larger Trucks

More than 26,000 lbs GVWR

Option 1

- **PM filters 2012-2014**
 - 1998-2006 model year engines
 - Can keep truck 8 more years
- **Replacements start 2015**
 - 20 years old or older until 2020
 - Replace remaining pre-2010 engines 2020-2023
- **All 2010 engines by 2023**

Proposed Phase-in Requirement for Larger Trucks

More than 26,000 lbs GVWR

Option 2

- Phase in PM filters between 2011-2016
 - Applies to 2006 and older engines
 - Can keep that fleet legal until the 2023 deadline for only 2010 and newer engines
- Only 2010 engines by 2023

Wrapping up

- California's programs are not going away
- There are near term deadlines to be met
- The entire transportation system will need to confront and work through the compliance issues
- The CTA and Clean Fleets Coalition are ongoing resources to assist you

QUESTIONS

