



The Dealer Impact of CARB's New Heavy Duty Diesel Truck and Greenhouse Gas Regulations

With several California air districts out of compliance with federal Clean Air Act standards—jeopardizing billions of dollars in federal highway funds—the California Air Resources Board (CARB) took aim at one of California's largest and most stubborn sources of pollutants: the aging diesel truck fleet. CARB's Heavy Duty On-Road Truck and Bus Regulation (Truck Regs) took effect earlier this year with the goal of cleaning up California's heavy duty diesel fleet—which creates a large proportion of California's smog-forming pollutants. CARB is attacking two types of pollutants, NOx and Diesel Particulate Matter. Unlike passenger vehicles, which have a relatively fast fleet turnover, diesel trucks and busses are generally used for high-mileage activity for long periods of time. This slow turnover rate has created a scenario where well-built diesels with little or no emission control technology are driven tens to hundreds of thousands of miles per year and the introduction of newer, cleaner technology into California's fleet has taken place on a much slower path than with passenger vehicles. The Truck Regs seek to remove older vehicles from the fleet by requiring the owners to retire the vehicles, replace engines, or retrofit engines to achieve emissions reductions by certain deadlines. A second rule, based on the voluntary federal SmartWay program, requires Heavy Duty diesel trucks, tractors, and trailers to reduce greenhouse gas emissions through improvements in fuel efficiency (Tractor-Trailer Regs) to meet fuel efficiency targets. This article provides a brief overview and discusses the impact of the Truck Regs and Tractor-Trailer Regs on California vehicle dealers.

Truck Regs

Changes Coming:

This regulation, which took effect on January 8, 2010, is currently under review by CARB staff and amendments are slated to be proposed in the fall. We will keep you advised of any changes.

If you wish to receive updates from CARB via e-mail, you can sign up for the listserv at:

http://www.arb.ca.gov/listserv/listserv_ind.php?listname=onrdiesel

Fact Sheets and Advisories are posted at:

<http://www.arb.ca.gov/msprog/onrdiesel/documents.htm>

Which trucks are covered?:

The Truck Regs affects owners of on-road heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) over 14,000 pounds, yard trucks with on-road or off-road certified engines, and diesel-fueled shuttle vehicles of any GVWR that can carry 10 or more passengers for an average

of 10 trips per day. The Truck Regs also apply to out of state trucks and busses operated in California.

What Happens to My Inventory?:

The good news. Truck dealers have a new selling point to prospective purchasers of new Model Year 2010 heavy duty diesel trucks: replace your trucks with new 2010-certified trucks and you’ve complied with the Truck regs.

The bad news. The Truck Regs will cause a devaluation of older truck inventory and trade-ins because at some point down the road, fleet owners of heavy duty trucks will need to pay for the installation of expensive retrofits or replace their engines to reduce NOx and Diesel Particulate Matter emissions to meet Model Year 2010 standards. The older the truck, the sooner these retrofits will need to be made—meaning that the truck becomes less valuable. Important to dealers, however, is that the regulation specifically states that vehicles sitting in a dealer’s inventory for sale (and not being used for any other purposes) are *not* subject to the retrofitting and emissions requirements, meaning that dealers will still be able to sell older units to purchasers.

Note: We understand that many manufacturers are not manufacturing 2010-certified engines for Model Year 2010 Vehicles—instead using emissions credits as allowed under CARB emissions rules. Before telling your customer that a Model Year 2010 diesel in your inventory is fully compliant with the Truck Regs, make sure that the engine in that vehicle is in fact 2010-certified—otherwise it likely meets only the 2007 standards.

Technology Mandates:

The Truck Regs require (by certain deadlines) that vehicles must meet NOx and Particulate Matter emissions requirements (known as Best Available Control Technology, or BACT Requirements), depending upon the model year of the engine.

NOx BACT: To achieve NOx BACT requirements, the engine used on the vehicle must either meet Model Year 2010 or newer certification standards, or meet requirements to be deemed 2010 emissions-equivalent. To be deemed 2010 emissions-equivalent, the engine must meet the following requirements, depending on the engine certification:

<i>Engine Certified to Meet Model Year</i>	<i>NOx Requirements</i>
Pre-2004	Must be replaced with an engine certified to meet 0.2 g/bhp-hr or less NOx emissions level
2004 -2006 Model Year Engine	Must be equipped with a verified diesel emission control strategy (VDECS) that reduces NOx exhaust emissions by more than 85 percent
2007 – 2009 Model Year Engine	Must be equipped with a VDECS that reduces NOx exhaust emissions by more than 70 percent

PM BACT: To achieve the PM BACT requirements, the engine must either be originally equipped with a diesel particulate filter certified to meet the 0.01 grams/BHP-HR certification

standard, or a PM filter verified by CARB must be installed on the vehicle. For older vehicles, this will mean that the owner will need to install a PM filter.

Retrofit Kits:

The retrofit device (which CARB refers to as diesel emission control strategy (DECS)) must be CARB Certified to meet the requirements under the Truck Regs. All certified traps are found on the following webpage: <http://www.arb.ca.gov/diesel/verdev/level3/level3.htm>. CARB also maintains a webpage giving fleet owners guidance on the selection and installation of DECS retrofits at: <http://www.arb.ca.gov/msprog/decsinstall/decsinstall.htm>.

Overview of Fleet Compliance Options:

To achieve the desired fleet turnover rate, heavy duty diesel owners are required to replace, repower, or retrofit their vehicles to meet Model Year 2010 NOx and PM emissions standards—and CARB’s pushing truck owners to replace their vehicles through stringent enforcement efforts and truck purchase incentive programs. The primary mandates under the regulation apply to fleet owners, most of whom must choose one of the following compliance options:

Option One: Best Available Control Technology (BACT) Requirements: This option allows a fleet owner to have 100% of their applicable vehicles meet the NOx and PM BACT requirements shown in the BACT Requirements Table, below. The BACT schedule prescribes which vehicles must be equipped with a VDECS, or replaced based on engine Model Year. If a fleet owner decides to choose this option (and does, in fact, meet these requirements for every vehicle in their fleet), they become exempt from strict fleet reporting requirements that must be met by fleet owners looking to “phase-in” their fleet compliance or meet the fleet average standard under options two and three.

BACT REQUIREMENTS TABLE:

<i>Compliance Deadline, as of January 1</i>	<i>Engine Model Years</i>	<i>BACT Requirements</i>
2011	Pre-1994	PM BACT
2012	2003 – 2004	PM BACT
2013	2005 – 2006	PM BACT
	1994 – 1999	NOx and PM BACT
2014	2000 – 2002	NOx and PM BACT
	2007 and later that do not meet PM BACT	PM BACT
2015	Pre-1994	NOx and PM BACT
2016	2003 -2004	NOx and PM BACT
2017	2005 – 2006	NOx and PM BACT
2018	All pre-2007	NOx and PM BACT
2019	All pre-2007	NOx and PM BACT
2020	All pre-2007	NOx and PM BACT
2021	2007 or equivalent	NOx and PM BACT
2022	2008	NOx and PM BACT
2023	2009	NOx and PM BACT

Option 2: BACT Percentage Limitation: As an alternative to meeting the BACT requirements on a per-vehicle basis, fleet owners can instead choose to phase-in fleet compliance according to the following schedule which sets the minimum number of VDECS to be installed and the minimum number of vehicles that must meet the NOx BACT each year. To use this option, fleet owners must annually submit a report of all of the affected vehicles, engines and VDECs in their fleet to CARB. This option allows fleet owners to comply with the NOx and PM BACT requirements according to the BACT Percentage Limitation Table, below.

BACT PERCENTAGE LIMITATION TABLE:

<i>Compliance Deadline as of January 1</i>	<i>Percent of Total Fleet Complying with BACT</i>	
	<i>PM BACT</i>	<i>NOx BACT</i>
2011	25%	NA
2012	50%	NA
2013	75%	25%
2014	100%	50%
2015	100%	50%
2016	100%	60%
2017	100%	80%
2018	100%	80%
2019	100%	80%
2020	100%	90%
2021	100%	90%
2022	100%	90%
2023	100%	100%

Option 3: Fleet Average: As an alternative, fleet owners can comply with a complicated fleet averaging formula under which they analyze the average NOx and PM emissions for all of the vehicles in their fleet. To use this option, fleet owners must annually submit a report of all of the affected vehicles, engines and VDECs in their fleet to CARB. This option allows some fleet owners to install NOx and PM filters to try and get their fleet average down without widespread vehicle replacement.

Rentals and Leases:

While vehicles held for sale in a dealer’s inventory are not counted towards a dealer’s fleet, vehicles that are rented or leased for a period of less than one year *are* considered part of the renter or lessee’s fleet—which means that the renter or lessor will be responsible for retrofitting and all other fleet owner requirements. With longer-term leases (one-year or more), things get tricky: the Truck Regs permit the lessor and lessee to decide which party will be deemed the fleet owner for purposes of regulatory compliance. Unless a dealer/lessor is prepared to assume this responsibility, it is recommended that a provision be included in the lease agreement that specifies that the lessee is responsible for compliance with the regulation.

Note: For purposes of enforcement, at any time a leased vehicle is inspected and cited for noncompliance, the operator must be able to produce evidence of the party responsible for compliance with state laws. Otherwise the owner shall be presumed to be both the rental or leasing entity and the renting operator or lessee of the vehicle.

Exceptions to the Requirements:

While most exceptions are dependent upon the size of an owner's fleet or use of the vehicle by the owner (and beyond the scope of this article), the following two relevant categories of vehicles are completely exempt from the regulation:

- Vehicles 19,500 pounds GVWR and less with originally equipped pick-up beds used exclusively for personal, non-commercial, non-governmental uses; and
- Vehicles in the possession of dealers, financing companies, or other entities that do not intend to operate the vehicle or offer the vehicle for hire or operation in California, and that are operated only to demonstrate functionality to potential buyers or to move short distances while awaiting sale for purposes such as maintenance or storage. This is the exemption that covers dealer inventory and demos.
- Motor homes for non-commercial private use.

Customer Questions:

While dealers naturally want to assist their customers with information concerning which vehicles comply with the regulatory requirements, compliance with the regulation depends on the number, type, age, and usage of the vehicles in the prospective buyer's fleet. The regulation itself is extremely long and complicated, with dozens of exceptions and special requirements. Because compliance with the Truck Regs is the owner's responsibility and compliance factors will vary widely depending on the mix and age of vehicles in the owner's fleet, dealer will need to be very careful when making any representations to prospective customers or providing compliance advice. Customers that rely on bad advice from a dealer may later demand contract rescission or other costly damages (i.e., that the dealer pay for retrofitting). Dealers should direct compliance issues to CARB by having customers call the CARB Diesel Hotline at 1 (866) 6DIESEL or visit CARB's Truck Stop webpage at:

<http://www.arb.ca.gov/msprog/truckstop/truckstop.htm>.

Financial Assistance:

In many cases, financial assistance will be available to purchasers to help them with compliance, either in the form of loans or grants. The best way to find out about potential financial assistance is to fill out CARB's automated financial assistance questionnaire at: <http://www.arb.ca.gov/msprog/truckstop/questions.php?page=funding>, which allows fleet owners to input information about their fleet and receive information about potential eligibility for funding programs. CARB has also developed an incentive program brochure at: http://www.arb.ca.gov/msprog/onrdiesel/documents/incentive_funding_ordv.pdf.

Who to Call For Help:

Questions should be directed to CARB's Diesel Hotline at 1 (866) 6DIESEL (1 (866) 634-3735) or e-mail at 8666diesel@arb.ca.gov.

Disclosure and Recordkeeping Requirements:

Perhaps the most important requirement for dealers is that sellers of covered vehicles must provide the following disclosure to purchasers on the bill of sale:

An on-road heavy-duty diesel or alternative-diesel vehicle operated in California may be subject to the California Air Resources Board Regulation to Reduce Particulate Matter and Criteria Pollutant Emissions from In-Use Heavy-Duty Diesel Vehicles. It therefore could be subject to exhaust retrofit or accelerated turnover requirements to reduce emissions of air pollutants. For more information, please visit the California Air Resources Board website at <http://www.arb.ca.gov/dieseltruck>.

Compliance Recommendation

Disclosure Form: Despite the fact that not all dealers use a bill of sale to document the sale of a new truck, we recommend that dealers who sell covered vehicles include a bill of sale as part of documenting the transaction. DMV bill of sale forms (REG 262 or REG 135) can be utilized for this purpose. We have confirmed with CARB that stapling a separate disclosure form to the bill of sale that contains the required disclosure will satisfy the disclosure requirement. To this end, CNCDA Form Source has produced, at no charge to CNCDA dealer members, a disclosure form that satisfies the disclosure requirement (Form Source Form No. B525 – see attachment). The Form Source disclosure form is also available for download on the CNCDA homepage at <http://www.cncda.org>.

Note: This requirement is effective and currently being enforced.

Record Retention: The regulations require dealers to maintain records showing that they made the required disclosures for three years after the sale of the vehicle. Therefore, we recommend that a signed copy of the disclosure form be maintained in the deal jacket for at least three years.

Tractor-Trailer Regs

In general, the regulation applies to long-haul 53-foot or longer box-type trailers (“trailers”) and the tractors that pull these trailers. The regulation requires that the affected tractors and trailers either meet federal EPA SmartWay certification requirements or be retrofitted with SmartWay-verified technologies when operated on California roads. The Tractor-Trailer Reg is designed to reduce GHG emissions by improving the fuel efficiency of the tractor-trailer combination through improvements in aerodynamic drag and tire rolling resistance of affected tractors and trailers. This mandate applies to both Model Year 2011 and newer tractors and trailers, which can be purchased SmartWay-certified from dealers, and older tractors and trailers which must be retrofitted with SmartWay-verified aerodynamic and low rolling resistance tire technologies.

General Requirements:

Model Year 2011 and newer tractors and trailers may not be operated on California roads unless they are federal SmartWay certified vehicles, or retrofitted with SmartWay-verified technologies. Older tractors and trailers must also be retrofitted with SmartWay-verified technologies, as described below. Information on SmartWay certification requirements and the SmartWay retrofit technology verification requirements is available on the federal EPA website at: www.epa.gov/smartway/transport/what-smartway/tractor-trailer.htm.

Tractor Requirements:

- Model Year 2011 and newer sleeper-cab tractors that pull affected trailers must be SmartWay certified, beginning January 1, 2010;
- Model Year 2011 and newer day-cab tractors that pull affected trailers must use SmartWay-verified low rolling resistance tires, beginning January 1, 2010
- All pre-2011 Model Year tractors that pull affected trailers must use SmartWay-verified low rolling resistance tires, beginning January 1, 2012

Trailer Requirements:

- Model Year 2011 and newer trailers must either be:
 - SmartWay certified or
 - Retrofitted with the following SmartWay-verified technologies:
 - Low rolling resistance tires, and
 - Aerodynamic devices
- Model Year 2010 and older trailers (not including certain 2003 to 2008 Model Year refrigerated-van trailers) must either:
 - Meet the same requirements as Model Year 2011 trailers before January 1, 2013, or
 - Choose a compliance schedule based on fleet size and submit an appropriate compliance plan to CARB—allowing fleet owners to phase-in their compliance over time.
- 2003 to 2008 Model Year refrigerated-van trailers equipped with 2003 or subsequent model year transport refrigeration units must meet the same requirements as Model Year 2011 trailers between 2017 and 2019.

Leased Tractors and Trailers:

For leased tractors and trailers, the registered owner of the vehicle is generally considered the owner for purposes of compliance with the Tractor-Trailer Regs, unless the lease agreement includes specific disclosures. Dealers operating tractor and trailer leasing companies that wish to shift the compliance burden to their lessees should consult with competent counsel to ensure their contracting practices adhere to the regulatory requirements to do so.

Exceptions:

The Tractor-Trailer Regs contain several exemptions, including the following:

- drop-frame trailers;
- chassis trailers;
- curtain-side trailers;
- livestock trailers;
- refuse trailers;
- box-type trailers less than 53 feet in length;
- emergency vehicles; and
- military tactical support vehicles.

Also, several exemptions apply depending upon the use of the vehicle—particularly short haul tractors operated on a limited-mileage basis and local-haul tractors and trailers operated within a limited area if operated on a limited-mileage basis.

Customers Questions:

As with the Truck Regs, the Tractor-Trailer Regs are extremely complicated and can lead to significant confusion. As is the case with the Truck Regs (see discussion above) we recommend that dealers direct inquisitive customers to the CARB hotline or website for answers to their questions, which will depend upon the customer's fleet mix.

Where To Find More Information?:

CARB suggests contacting their diesel hotline for assistance, at (866) 6DIESEL (634-3735), and to visit their website at <http://www.arb.ca.gov/cc/hdghg/hdghg.htm>.

Disclosure and Recordkeeping Requirements:

As with the Truck Regs, the Tractor-Trailer Regs disclosure requirement should be of an immediate concern for dealers. Similar to the Truck Reg disclosure requirement, sellers of tractors or trailers covered under the Tractor-Trailer Regs are required to provide the following disclosure on the bill of sale.

A heavy-duty tractor and 53-foot or longer box-type trailer operated in California may be subject to the California Air Resources Board Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Measure. These vehicles may be required to use low-rolling resistance tires and meet aerodynamic equipment requirements to reduce greenhouse gas emissions. For more information, please visit the California Air Resources Board website at <http://www.arb.ca.gov/cc/hdghg/hdghg.htm>.

Compliance Recommendation

Disclosure Form: As recommended with the Truck Regs, dealers should include a bill of sale as part of documenting the sale of covered tractors and trailers. DMV bill of sale forms (REG 262 or REG 135) can be utilized for this purpose. To this end, CNCDA Form Source has produced, at no charge to CNCDA dealer members, a single disclosure form that satisfies the disclosure requirements for both the Truck Regs and the Tractor-Trailer Regs. (Form Source Form No. B525 – see attachment). CARB has confirmed with us that stapling the separate disclosure form to a bill of sale will satisfy the disclosure requirement. The Form Source disclosure form is also available for download on the CNCDA homepage at <http://www.cncda.org>.

Record Retention: While the Tractor-Trailer Regs do not contain a mandatory recordkeeping requirement, we recommend retaining a signed copy of the disclosure form in the deal jacket to assist in resolving potential future disputes.

California Air Resources Board Heavy Duty Diesel Truck & Trailer Informational Disclosure

California Air Resources Board regulations require that sellers of certain heavy duty diesel vehicles and box-type trailers provide the below disclosures on the bill of sale for those vehicles and trailers. The below disclosures are incorporated into and made part of the bill of sale to which this disclosure form is attached.

An on-road heavy-duty diesel or alternative-diesel vehicle operated in California may be subject to the California Air Resources Board Regulation to Reduce Particulate Matter and Criteria Pollutant Emissions from In-Use Heavy-Duty Diesel Vehicles. It therefore could be subject to exhaust retrofit or accelerated turnover requirements to reduce emissions of air pollutants. For more information, please visit the California Air Resources Board website at <http://www.arb.ca.gov/dieseltruck>.

A heavy-duty tractor and 53-foot or longer box-type trailer operated in California may be subject to the California Air Resources Board Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Measure. These vehicles may be required to use low-rolling resistance tires and meet aerodynamic equipment requirements to reduce greenhouse gas emissions. For more information, please visit the California Air Resources Board website at <http://www.arb.ca.gov/cc/hdghg/hdghg.htm>.

By signing below, buyer(s) acknowledge receipt of the above disclosures on the bill of sale.

Buyer's Signature: _____

Co-Buyer's Signature: _____