



DIESEL TRUCK REGULATION FACT SHEET

On December 12, 2008, the California Air Resources Board (ARB) approved a new regulation to significantly reduce emissions from existing on-road diesel vehicles operating in California. The regulation requires affected trucks and buses to meet performance requirements between 2011 and 2023. By January 1, 2023, all vehicles must have a 2010 model year engine or equivalent.

Regulatory amendments are now planned for August 2010, where the Board will consider amendments to both the Truck and Bus Regulation and the In-Use Off-Road Vehicle Regulation. The amendments would be designed to provide additional regulatory relief to affected fleets while still achieving California's clean air commitments. Special provisions to delay requirements are available for small fleets. Small fleets with three or fewer vehicles do not have to report until January 31, 2011 and do not have clean-up requirements until January 1, 2014.

Are food banks going to be affected by the On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation passed by the California Air Regulation Board?

Yes, but each food bank will be affected differently, depending on their specific fleet and its use. There are provisions for small fleets, fleets located in low pollution areas, and options for getting into compliance. There are also sources of funding available as well as trainings to assist with the transition.

Do I have to replace my entire fleet by 2011?

No, the regulation does not require any vehicles be replaced until 2013, and it never requires all the vehicles within a fleet to be replaced in a single year. The regulation requires fleets to install exhaust retrofits that capture pollutants before they are emitted to the air, and to accelerate vehicle replacements to those with cleaner engines.

For most fleets, the first performance requirements for PM do not begin until January 1, 2011, followed by engine replacement requirements to reduce NOx emissions starting January 1, 2013. For fleets with three or fewer affected vehicles, none of the performance requirements begin until January 1, 2014. The regulation is phased in such that by January 1, 2023, all vehicles must have a 2010 model year engine or equivalent. The cost of PM filters vary, but generally range from \$2,000 to \$15,000 depending on the vehicle.

What types of vehicles are subject to the regulation?

Affected vehicles include on-road heavy-duty diesel fueled vehicles with a gross vehicle weight rating (GVWR) greater than 14,000 pounds, yard trucks with off-road certified engines, and diesel fueled shuttle vehicles of any GVWR.

- Out-of-state trucks and buses that operate in California are also subject to the regulation.
- Drayage trucks and private utility-owned vehicles are subject to the regulation beginning January 1, 2021.
- The regulation requires that fleets qualifying for agricultural vehicle provisions and fleets with two engine street sweepers with Tier 0 auxiliary engines report information about their vehicles by March 31, 2010.
- The regulation applies only to diesel trucks and buses in these fleets with a gross vehicle weight rating (GVWR) greater than 14,000 lbs.
- The Air Resources Board is making amendments to the regulation that would not require any other fleets to report until January 1, 2011.

What compliance options do fleets have?

In general, the regulation requires owners to reduce emissions in their fleet by upgrading existing vehicles one of three ways.

1. **BACT (Best Available Control Technology):** The first option is to install PM retrofits and replace vehicles (or engines) according to a prescribed schedule based on the existing engine model year.
2. **BACT Percentage Limit:** The second option is to retrofit a minimum number of engines each year with a high level PM exhaust retrofit and to replace a minimum number of older engines with newer engines meeting the 2010 new engine standards.
3. **Fleet Average:** The third option is to meet a fleet average. With this option, a fleet operator can use PM and NOx emission factors established by the regulation to calculate the average emissions of the fleet. Then, by the applicable compliance date each year, the owner can demonstrate that the fleet average emissions for PM and NOx do not exceed the PM and NOx fleet average emission rate targets set by the regulation. Fleets can also receive credit for using other methods that achieve the same emissions reductions from existing engines.

For more details on compliance options, please review the Truck and Bus Regulation Compliance Options factsheet at <http://www.arb.ca.gov/msprog/onrdiesel/documents/tboptionsfs.pdf>. This thoroughly explains the three compliance options and provides relevant schedules.

I drive my truck infrequently. Are there any special provisions for low-mileage vehicles?

Yes, truck tractors or vehicles with gross vehicle weight rating (GVWR) greater than 33,000 pounds that operate fewer than 7,500 miles per year are exempt from any replacement requirements until 2021; however, they do need to meet the PM filter requirements. If a truck uses power take off (PTO) to perform work while stationary, the annual engine hours would also need to stay below 250 hours to qualify. All other vehicles would be eligible for the same delay if operated less than 5,000 miles per year (and less than 175 hours per year if PTO is used while stationary). Vehicles that operate less than 1,000 miles per year AND less than 100 hours per year in California are exempt from any clean-up requirements. However, these vehicles must have functioning odometers and hour meters to qualify. Out-of-state vehicles may also qualify if the fleet owner can document vehicle usage in California. Once a year, out-of-state fleets can also apply for a pass to operate one truck not meeting the clean-up requirements.

Will I qualify for the small fleet provision?

A small fleet is any fleet operating in California with one to three vehicles. Small fleets are exempt from the clean-up requirements until January 1, 2014 and may keep one vehicle that has a 2004-2006 model year engine with a PM filter until January 1, 2019. Reporting requirements start in 2011. A small fleet may comply with the same compliance options and take advantage of special provisions as other fleets. This table shows various engine model years that meet the 2014 requirements and the earliest date the engine would need to be replaced or upgraded according to the best available control technology (BACT) compliance schedule for any fleet.

Engine Model Years	Complies Until
2003 – 2004 with PM filter	2016*
2005 – 2006 with PM filter	2017*
2007	2021
2008	2022
2009	2023
2010	Done

* Small fleets may keep one 2004-2006 engine with Particulate Matter (PM) filter until 2019.

Will incentive funding be available to help small fleets?

Yes, there are a number of incentives programs available for small fleets.

- California has the largest clean air incentive program in the nation, the Carl Moyer Program, with more than \$140 million available each year primarily through the local air districts for on-road, off-road, and other diesel engines.
 - Changes have been made to the Carl Moyer Program Guidelines to more effectively assist small fleets. These changes would make small fleets eligible for incentive funding to comply with the January 1, 2014 compliance deadline through the end of 2010.
 - Additionally, the first vehicle in a small fleet could be eligible for incentive funding up to January 1, 2014, if being replaced with one having a 2010 model year engine.
- Through the Goods Movement Emissions Reduction Program (created by Proposition 1B), \$360 million has been allocated to reducing emissions from trucks transporting goods through key transportation corridors (with another \$400 million for trucks going to ports and railyards). Small fleets may be eligible if replacing their truck two years in advance of regulatory requirements. Small fleets are also the focus of a grant and loan guarantee for truck owners.
- Many Federal and State programs are administered by local agencies so vehicle owners should check with their local air quality management district for funding opportunities. For information on your local air district, such as website and contact information: <http://www.arb.ca.gov/capcoa/roster.htm>.

To determine what funding or financial assistance you may qualify for, please use this helpful questionnaire from the Air Resources Board:

<http://www.arb.ca.gov/msprog/truckstop/questions.php?page=funding>.

What kinds of funding opportunities are available for large fleets?

Since large fleets are not eligible for as many programs as small fleets, they are expected to bear the majority of their own compliance costs. However, large fleets are still eligible for truck replacement and retrofit grant funding through the Proposition 1B Goods Movement Emission Reduction Program.

- Trucks that are 2003 or older are eligible for replacement funding of up to \$50,000 if they are operating in trade corridors.
- Up to \$5,000 is available for exhaust retrofits that reduce diesel particulates by at least 85 percent.
- In addition to grant funding, large fleets may be eligible for loan guarantees through the PLACE program to help provide financing for the balance of the cost to replace a truck.

To determine what funding or financial assistance you may qualify for, please use this helpful questionnaire from the Air Resources Board:

<http://www.arb.ca.gov/msprog/truckstop/questions.php?page=funding>.

Are there any provisions for vehicles that operate in parts of the state where the air is cleaner?

Yes. Any vehicle that operates exclusively in less polluted areas of the state is exempt from the replacement requirements until 2021, but remains subject to the PM filter requirements (meaning by 2014, all trucks would need PM filters).

- The areas are the counties of Alpine, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Monterey, Plumas, San Benito, San Luis Obispo, Santa Cruz, Shasta, Sierra, Siskiyou, Trinity, Tehama, and Yuba.
- There are no usage limits for this provision, but fleets must install GPS tracking systems on those vehicles for documentation purposes.

- To meet this provision, a GPS unit would need to be installed by your compliance deadline. If you have four or more trucks it needs to be installed by January 1, 2011, and by January 1, 2014, if you have three or fewer trucks. The TRUCRS reporting spreadsheet can be found at this link: <http://www.arb.ca.gov/msprog/onrdiesel/reporting.htm>.
- If your vehicles meet the short-haul or local-haul exemptions for the Greenhouse Gas Regulation or you have 21+ trailers and want to apply for option compliance, your reporting deadline is July 1, 2010. All other on-road reporting will need to be done in 2011. The deadline for reporting vehicle retirement or early PM action is January 1, 2011.

How will I do my reporting and when do I need to report?

There will be two options for reporting: Online reporting and printable forms.

- For the **online reporting**, you will need to sign-up for a login. This will enable you to download the excel spreadsheet, fill it out, and upload it to submit your information. For help on creating an account or filling out the spreadsheet, consult the *User Guide for Meeting 2010 Reporting Requirements* (available at <http://www.arb.ca.gov/msprog/onrdiesel/documents/TRUCRS2010Guide.pdf>).
- The other option is **printable forms** which you can mail in. Information on these two options and the needed forms are available on the Air Resources Board webpage at <http://www.arb.ca.gov/msprog/onrdiesel/reporting.htm>.

Fleets qualifying for agricultural vehicle provisions and fleets with two engine street sweepers with Tier 0 auxiliary engines report information about their vehicles by March 31, 2010. The Air Resources Board is making amendments to the regulation that would not require any other fleets to report until January 1, 2011, and Food Banks typically fall into this second category.

I have retired several vehicles from my fleet. Are there any provisions for this?

Yes, fleets that currently have fewer vehicles compared to July 1, 2008, may claim credit for each vehicle retired. The credit expires in 2014, and effectively delays the clean-up of another vehicle by one year.

I have a unique vehicle that cannot be replaced with a used one. Do I have to buy a new one?

No, if there isn't a used vehicle available with a 2007 model year engine or equivalent that performs a similar function, then the vehicle would not need to be replaced until 2021. The owner would need to install an exhaust retrofit that reduces NOx emissions, if available, and would need to meet the PM filter requirements. Cab-over engine truck tractors that exclusively pull 57 foot trailers can be operated until January 1, 2018, before having to be replaced, provided the engine is a 2004 model year engine and meets the PM filter requirements.

Is there any credit for hybrid or alternative fueled vehicle?

Yes. Although not required, a fleet can report alternative fueled vehicles in their fleet average to claim credit. Alternative fueled engines would have a PM emissions factor of zero and a NOx emissions factor consistent with the engine certification model year. Hybrid vehicles that achieve 20 percent fuel economy improvements, compared to a similar diesel vehicle, can receive double credit towards the PM and NOx requirements until 2017.

Will I be penalized if a replacement vehicle that I have ordered is delayed?

If the replacement vehicle, engine or exhaust retrofit is purchased 4 months before the compliance date, the fleet will be considered to be in compliance and will not be penalized.

Is there any benefit for installing a PM filter before the first compliance date?

Yes, a vehicle that has the best available PM exhaust retrofit installed prior to 2010 will be exempt from the NOx performance requirements until 2014.

If a PM filter is not available or cannot be installed safely, do I have to replace the engine?
For a given vehicle, if a PM exhaust retrofit cannot be installed safely, or is not available at least 10 months prior to the next compliance date it will not be required to be installed. If by 2018, there is still no verified exhaust retrofit, the engine will be required to be replaced.

Resources:

Fleet Calculator: <http://www.arb.ca.gov/msprog/onrdiesel/calculators.htm>

Upcoming and Webcast Trainings (including videos and PowerPoint slides from past trainings):
<http://www.arb.ca.gov/msprog/onrdiesel/training.htm>

Truck and Bus Regulation information and reporting documents: www.arb.ca.gov/dieseltruck

Listserv ("onrdiesel") to receive automatic updates about any changes:
http://www.arb.ca.gov/listserv/listserv_ind.php?listname=onrdiesel

Diesel Hotline: (866) 6-DIESEL (866-634-3735), Email: 8666diesel@arb.ca.gov

More questions or concerns? Contact the ARB with the Diesel Hotline (see above) or contact Eric Manke, Policy and Communications Manager, California Association of Food Banks at eric@cafoodbanks.org or (510) 272-4435 x 915.



TRACTOR/TRAILER GREENHOUSE GAS (GHG) REGULATION FACT SHEET

In December 2008 the California Air Resources Board (ARB) adopted a new regulation to reduce greenhouse gas emissions by improving the fuel efficiency of heavy-duty tractors that pull 53-foot or longer box-type trailers. Fuel efficiency is improved through improvements in tractor and trailer aerodynamics and the use of low rolling resistance tires. Over the 11 years between 2010, when the rule goes into effect, and the end of 2020, it is estimated that truckers and trucking companies will save about \$8.6 billion, when diesel fuel consumption is reduced by as much as 750 million gallons in California and 5 billion gallons across the nation. The tractors and trailers subject to this regulation must use U.S. Environmental Protection Agency SmartWaySM certified tractors and trailers, or retrofit their existing fleet with SmartWay verified technologies. The implementation timeline for this regulation depends on the equipment being used. See below for a detailed description of the regulation timeline. The Air Resources Board will be considering regulatory amendments in September 2010.

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. 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:

www.epa.gov/smartway/transport/what-smartway/tractor-trailer.htm

Does the Tractor/Trailer Greenhouse Gas Regulation apply to Food Banks?

This regulation applies to 53' or longer box-type trailers (dry van and refrigerated van) and tractors that pull them. Fleets with 21 or more box-type trailers may take advantage of a phase-in option by reporting trailer information. Fleets with 20 or fewer box-type trailers have until July 1, 2012 to report. Additionally, the regulation currently requires all 2011 model year tractors that pull 53' or longer box-type trailers and all 2011 model year 53' or longer box-type trailers to be Smartway certified or be retrofit to comply. Fleets that have 2011 model year equipment and qualify for the short haul or local haul exemptions must report information about their 2011 model year equipment now. Reporting of other tractors and trailers within the fleet is not required at this time.

What are the requirements of the regulation and when must I comply?

For tractors:

- 2011 and newer model year **sleeper-cab** tractors that pull affected trailers must be SmartWay certified, beginning January 1, 2010
- 2011 and newer model year **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

For trailers:

- 2011 and newer model year 53-foot or longer box-type trailers must be **either**
- SmartWay certified **or**

- Retrofitted with SmartWay verified technologies, as follows:
 - Low rolling resistance tires, **and**
 - Aerodynamic devices, beginning January 1, 2010
- Pre-2011 model year 53-foot or longer box-type trailers (with the exception of certain 2003 to 2008 model year refrigerated-van trailers) must **either**
- Meet the same requirements as 2011 and newer model year trailers by December 31, 2012, **or**
- Choose a compliance schedule based on fleet size and prepare and submit the appropriate compliance plan which allows them 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 have a compliance phase-in between 2017 and 2019.

The regulations do NOT apply to the following:

- Custom extended sleeper cab tractors
- Curtain side vans
- Military tactical vehicles
- Solid waste vehicles
- Authorized emergency vehicles
- Drayage tractors and trailers that operate within a 100 mile radius of a port or intermodal rail yard
- Drop frame vans
- Container chassis

Are there any special provisions?

Short-haul tractors that drive less than 50,000 miles per year are exempt.

- Short-haul tractors and trailers that operate within a 100 mile radius from a home base may be exempt from the aerodynamics requirements, but not from the tire requirements.
- *However, short-haul tractors and trailers will need to be registered with ARB in order to obtain this exemption.*

Small fleets may take advantage of special compliance opportunities for their pre-2011 model year trailers.

- While all 2011 and newer model year trailers must comply as of January 1, 2010, small fleets may choose to phase-in compliance of their 2010 and older model year trailers as shown in the table below using the small fleet compliance schedule (or they can choose the large fleet compliance schedule described in the large fleet fact sheet).
- Otherwise, they can choose to meet the deadlines described above for all fleets. The small fleet compliance schedule below identifies the total percentage of trailers in a small fleet that must meet the requirements for each of the phase-in years.
- In order to take advantage of this compliance option, small fleets must submit a Small Fleet Compliance Plan by July 1, 2012.

Small Fleet Compliance Schedule*

Must Comply Before January 1 of:	2014	2015	2016	2017
% of Trailer Fleet That Must Comply	25%	50%	75%	100%

*Applies to 2010 and older model year box-type trailers that travel in California

What kinds of equipment will meet the requirements of this regulation?

To comply with the regulation, you may purchase a SmartWay certified tractor and/or trailer, which will come equipped with the approved technologies. You may also comply by retrofitting your trailer with approved low rolling resistance tires and one or more of the following aerodynamic technologies:

- Trailer rear fairings
- Trailer front gap fairings
- Trailer side skirts
- Other SmartWay approved technologies

The type or number of technologies required will be based on the percentage of greenhouse gas emissions reduction of each device. These required percentages can be found in the regulation at:

www.arb.ca.gov/regact/2008/ghghdv08/ghghdv08.htm.

Is there financial assistance available for Food Banks for efforts to come into compliance with this regulation?

Financial assistance may be available for trucks subject to ARB's regulation through the ARB Providing Loan Assistance for California Equipment (PLACE) Program for On-Road Vehicles (information below and at <http://www.arb.ca.gov/ba/loan/on-road/on-road.htm>) and US EPA SmartWay Clean Diesel Finance Program (<http://www.epa.gov/smartway/transport/what-smartway/financing.htm>). To determine what funding or financial assistance you may qualify for, please use this helpful questionnaire from the Air Resources Board:

<http://www.arb.ca.gov/msprog/truckstop/questions.php?page=funding>.

Am I eligible for ARB loan assistance?

To be eligible, a fleet must meet all the following criteria:

- Company must be a small business—100 or fewer employees and less than \$10 million in annual revenue (averaged over three years);
- Company must have their primary economic effect in California (operate in California a minimum of 51% of total mileage); and
- Company must have a fleet of 20 or fewer heavy-duty trucks.

To find out if you qualify for the loan assistance program, please contact a local participant and ask about eligibility. Here is a list of participating financial institutions:

<http://www.treasurer.ca.gov/cpcfca/calcap/institutions.pdf>

What can I use my loan for?

Loans may only be used to purchase trucks and equipment for compliance with the Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Regulation (more information available at <http://www.arb.ca.gov/cc/hdghg/hdghg.htm>). Eligible purchases with loan proceeds include:

- New 2011 and later model year sleeper cab tractors that are U.S. EPA SmartWay certified (only applicable if the tractor will be used to haul a 53-foot or longer box-type trailer);
- New 2011 and later model year 53-foot or longer box-type trailers that are U.S. EPA SmartWay certified;
- U.S. EPA Approved SmartWay aerodynamic technologies (examples: trailer side skirts, front trailer fairings, rear tail fairings, dual- or single-wide low-rolling resistance tires). More information available at <http://www.epa.gov/smartway/transport/what-smartway/upgrade-kits-tech.htm>.

What are the steps for obtaining a loan through the program?

1. The borrower applies for a loan at a participating CalCAP lender by filling out the Borrower Eligibility Criteria and Certification Form (for a sample form: http://www.arb.ca.gov/ba/loan/on-road/documents/borrower_eligibility_form.pdf). A list of CalCAP lenders is available here:

<http://www.treasurer.ca.gov/cpcfafa/calcap/institutions.pdf>. CalCAP lenders and truck dealerships may be able to assist the borrower in completing this form. In addition, the borrower completes the lender's required loan application forms.

2. If the borrower qualifies based on the lender's loan underwriting standards, loan documents are prepared and signed by the borrower and lender.
3. Lender disburses funds to the borrower.

How will I do my reporting and when do I need to report?

There are two options for reporting: Online reporting and printable forms. Information on these options and the needed forms are available on the Air Resources Board webpage at <http://www.arb.ca.gov/msprog/onrdiesel/reporting.htm>. Fleets with 21 or more box-type trailers may take advantage of a phase-in option by reporting trailer information. Fleets with 20 or fewer box-type trailers have until July 1, 2012 to report. Additionally, the regulation currently requires all 2011 model year tractors that pull 53' or longer box-type trailers and all 2011 model year 53' or longer box-type trailers to be Smartway certified or be retrofitted to comply. Fleets that have 2011 model year equipment and qualify for the short haul or local haul exemptions must report information about their 2011 model year equipment now. Reporting of other tractors and trailers within the fleet is not required at this time.

Resources:

For additional information on the regulation, please call 866-6DIESEL (866-634-3735) or email at: 8666diesel@arb.ca.gov.

For more information on CalCAP go to: <http://www.treasurer.ca.gov/cpcfafa/calcap.asp>

For more information on ARB Loan Assistance (PLACE) go to: http://www.arb.ca.gov/msprog/truckstop/funding/loans_fa.htm

<p>More questions or concerns? Contact the ARB with the Diesel Hotline (see above) or contact Eric Manke, Policy and Communications Manager, California Association of Food Banks at eric@cafoodbanks.org or (510) 272-4435 x 915.</p>
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Glossary:

ARB: Air Resources Board.

BACT: Best Available Control Technology. Pollution control standard and in this case it means the exhaust PM and NO_x standards that must be met according to the requirements of the regulation.

GVWR: Gross Vehicle Weight Rating. The maximum allowable total mass of a road vehicle or trailer when loaded - i.e., including the weight of the vehicle itself plus fuel, passengers, cargo, and trailer tongue weight.

PM: Particulate Matter. A complex mixture of extremely small particles and liquid droplets.

NO_x: Oxides of Nitrogen. Compounds of nitric oxide, nitrogen dioxide, and other oxides of nitrogen. Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation and acid deposition, and to the formation of particulate matter.

PTO: Power Take Off. Some trucks use power take off to perform work while stationary.

GPS: Global Positioning System.

TRUCRS: Truck Regulation Upload, Compliance, and Reporting System.

GHG: Greenhouse Gases.

Short-haul: Short-haul tractors must drive less than 50,000 miles per year to qualify for the relevant exemption.

U.S. EPA: United States Environmental Protection Agency.

CalCAP: The California Capital Access Program encourages banks and other financial institutions to make loans to small businesses that fall just outside of most banks' conventional underwriting standards.