



# A Guide to California's Diesel Truck Air Quality Rules



**For Educational Purposes Only  
California Trucking Association**

June 2011 Edition

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

Difficulty: **Easy**

California Domiciled Only?

PSIP: Yes

ECL/HDVIP: No

Applies to:

PSIP

California-based truck and bus fleets with 2 or more heavy duty diesel vehicles (14k+ lbs GVWR; except for 1998-older, the rating is over 6,000lbs)

ECL/HDVIP

Any commercial heavy duty vehicle traveling in California, irrespective of its country (e.g. Mexico or Canada) or state of origin, with a gross vehicle rate over 6,000 pounds is subject to inspection

# Heavy-Duty Vehicle Inspection Program (HDVIP)/Periodic Smoke Inspection (PSIP)

## What is HDVIP/PSIP/ECL?

### PSIP (smoke tests)

Every engine must be smoke tested year once it turn four years old. For example, a 2007 model year engine must be smoke tested some time during 2011 and annually thereafter. You can visit a certified smoke testing facility or test your own vehicles with conforming testing equipment and SAE procedures. PSIP records must be retained for two years.

### ECL (labels)

Each vehicle operating in California - including those in transit from Mexico, Canada, or any other state - must be equipped with engines that meet California and/or U.S.EPA or equivalent emission standards.

“Emission Control Label” or “ECL” means the label required by the “California Motor Vehicle Emission Control Label Specifications”. The ECL must be

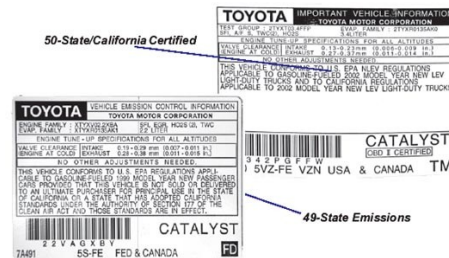
legible, maintained at the location originally installed by the engine manufacturer and correspond to the engine serial number stamped on the engine

If missing or damaged, you must obtain replacement ECLs from the engine manufacturer.

### HDVIP

Smoke testing and ECL compliance checks are also done at roadside facilities such as ports of entry and weight stations.

Penalties begin at a minimum \$300 per violation.



## Allowable Levels of Smoke Opacity

All 1991 or newer engines:  
40% or less smoke opacity

All pre-1991 engines:  
55% or less smoke opacity

## Resources

- [Find a smoke inspection facility](#)

## Periodic Smoke Inspection (PSIP) Cut Out

### Who Must Smoke Test?

California-based truck and bus fleets with two or more heavy duty diesel vehicles with gross vehicle ratings over 14,000 pounds

### Smoke Inspect every engine once it is four years old

Example: 2010 engines\* are exempt from being tested for the PSIP until January 1 of 2014. A 2010 model year engine must be tested sometime during 2014 or it will be in violation of PSIP.

\*Model year of **engine**, not truck!

### Can we self inspect?

Yes. A list of smoke meters can be found at <http://www.arb.ca.gov/enf/hdvip/smokemtr.htm>.

(All testing must conform to the Society of Automotive Engineers' (SAE) J1667 snap acceleration test procedure. All vehicles that do not pass the test must be repaired and retested. Non-retests are treated as fails and are subject to \$500 fines. All testing must be performed using an SAE J1667 smoke meter.)

All testing records must be maintained for a period of two years.

Each missing record is a \$500 fine.

### Where Can I Test My Vehicle?

For an updated list of current, certified smoke testing facilities within the state of California, please visit <http://www.arb.ca.gov/enf/hdvip/certstf06012010.pdf>

Pick a month every year that smoke inspections are performed! Post these reminders in your shop.

**Designated Smoke Inspection Month**

**Every**

**All 4+ year old engines must be smoke inspected**

Website: <http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm>

Difficulty: **Easy**

California Domiciled Only?: No

Applies to:

- Diesel Fueled Commercial Vehicles 10,000+ GVWR

Exceptions:

- You are stuck in traffic.
- When idling is necessary for inspecting or servicing your vehicle.
- You are operating a power take-off device.
- You cannot move because of adverse weather conditions or mechanical failure.
- You are queuing (must be beyond 100 feet from any residential area).
- Your truck's engine meets the optional NOx idling emission standard and your truck is located beyond 100 feet from any residential area.

# Heavy Duty Vehicle Idling Emission Reduction Program (5-Minute Idling)

## What is the Five Minute Idling Program?

One of CARB's simplest programs, the Heavy-Duty Vehicle Idling Emission Reduction Program simply restricts idle times to five minutes, one of 47 state or local ordinances to do so.

[The American Transportation Research Institute \(ATRI\) publishes a handy guide to idling restrictions.](#)

Still, despite this program's relative simplicity, motor carriers are regularly cited by CARB enforcement. Having an automatic shutdown is not a valid defense. Make sure that those engines equipped with automatic shutdowns are calibrated to shut-off by the fifth minute.

It is also important to note that there is no exception made for cab comfort technologies. Sleeper cabs trav-



ersing through extreme weather conditions must equip with Auxiliary Power Units which conform to CARB clean idle standards. Specifically, the regulation requires diesel APSs installed on trucks with 2007 and newer engines to control particulate matter (PM) emissions by either routing the APS exhaust through the PM trap of the truck engine or by retrofitting the diesel APS with a verified level 3

PM control device that reduces PM emissions by at least 85 percent.

## Resources

- [List of idle reduction technologies](#)
- [Idle Regulation Fact Sheet](#)

Website: <http://www.arb.ca.gov/diesel/tru/tru.htm>

Difficulty: **Hard**

California Domiciled Only?: No

Applies to:

- Diesel-fueled TRUs and TRU gen sets

Exemptions:

- Registration in ARBER database voluntary for out of state domiciled equipment, but these units still must comply with in-use requirements if traveling in California

# Transport Refrigerated Unit (TRU) ATCM

## What is the TRU ATCM?

The TRU Air Toxic Control Measure (ATCM) requires TRUs to meet certain emission standards. The terminology CARB uses are:

- Low Emission TRU (LETRU)
- Ultra Low Emission TRU (ULETRU)

Here's how you reach these standards:

### LETRU

- Level 2 Retrofit Device; or
- Tier 4i Engine

### ULETRU

- Level 3 Retrofit Device; or
- Tier 4 Final Engine

See the following page to find out when you need to reach the above standards.



## Reporting / Identification

All California domiciled TRUs are required to register in the [ARBER reporting system](#). New equipment must be registered within 30 days.

Upon registering equipment, you will be given TRU identification numbers called an IDNs. In-state TRUs are required to display this number on the housing of the TRU.

Operators of terminals located in California are required to submit an initial Operator Report to ARB that provides information about the terminal and lists the IDNs of all TRUs assigned to the terminal. Failure to register or properly identify your TRU may result in a fine.

## Resources

- [TRU Frequently Asked Questions \(warning: not all information up to date\)](#)
- [List of retrofit manufacturers and repowers](#)
- [Register your equipment](#)
- [Registration Help](#)
- [Instructions for affixing or painting IDN on TRU](#)
- [How to Non-Op a TRU for use as a dry van](#)
- [Responsibility for leased equipment](#)



Website: <http://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm>

Difficulty: **Hard**

California Domiciled Only?: No

#### Applies to:

- Trucks 26K+ GVWR used for transporting cargo, such as containerized, bulk, or break-bulk goods, that operates on or through port or intermodal rail yard property or,
- Off port or intermodal rail yard property transporting cargo or empty containers or chassis that originated from or is destined to a port or intermodal rail yard property. (aka "Dray Off")

#### Exemptions

- Trucks less than 26K+ GVWR
- Uni-body type trucks not used for transporting cargo containers. [CLICK HERE TO VIEW EXAMPLES](#)

#### Notes:

- [The Ports of Los Angeles and Long Beach have additional requirements.](#)
- "Ports" are defined as any facility which receives waterborne cargo. As a result, many private facilities have been designated as "ports" for the purpose of this rule.
- "VDECS" = Verified Diesel Emission Control System. VDECS can be other type of treatments as well, but typically are filters of some kind.



# Drayage Truck Rule



## What is the Drayage Truck Rule?

The Drayage Truck Rule consists of two compliance phases.

### Phase One

Currently, all Class 8 drayage trucks must be:

1. 1994-2003 model year engine certified to California or federal emission standards and a level 3 VDECS for PM emissions;

or,

2. 2004 or newer model year engine certified to California or federal emission standards;

After December 31, 2011, all drayage trucks with 2004 model year engines must be equipped with the highest level VDECS for PM emissions.

After December 31, 2012, all drayage trucks with 2005-2006 model year engines must be equipped with the highest level VDECS for PM emissions.

After December 31, 2011 all Class 7 Drayage Trucks operating in the South Coast basin must be equipped with the highest level VDECS for PM emissions.

### Phase Two

Both Class 7 and 8 Drayage Trucks must be 1994 or newer engines that meet or exceed 2007 EPA emissions standards.

This can be accomplished with a 1994-2006 engine through a series of filters although the technology which would allow this to occur is

not currently verified.

Most likely, Phase Two compliance will involve the purchase of a truck with a 2007 or newer OEM engine.

### Reporting Requirements

All Drayage Trucks need to be registered in the Drayage Truck Registry (DTR).

[CLICK HERE TO ACCESS THE DTR](#)

## Resources

- [Find a level 3 VDECS](#)
- [Find a certified VDECS installer](#)
- [Subscribe to the Prop 1B funding email list for the latest news.](#)

# Compliance Schedule for Class 7's

COMPLIANCE YEAR (By 1/1/20xx)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>MODEL</b>															
Pre-2007 Operating in South Coast	GREEN	GREEN	GREEN	YELLOW**	YELLOW**	RED	RED	RED	RED	RED	RED	RED	RED	RED	Subject to Statewide Truck and Bus Rule
<b>YEAR</b>															
Pre-2007 Other than South Coast	GREEN	GREEN	GREEN	GREEN	GREEN	RED	RED	RED	RED	RED	RED	RED	RED	RED	
<b>ENGINE</b>															
2007 - Newer*	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	

**Legend**

- GREEN** = Compliant Truck
- YELLOW\*\*** = Compliant Truck if retrofit for PM
- RED** = Non-compliant/Must Meet 2007 MY Engine Standards

**Notes**

- \* 2007 or Newer MY Engine must be OEM equipped with PM filter for the above to apply
- \*\* PM retrofits must be Level 3 Verified Diesel Emissions Control System (VDECS) to qualify

# Compliance Schedule for Class 8's

COMPLIANCE YEAR (By 1/1/20xx)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>MODEL</b>															
1993 & Older	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	Subject to Statewide Truck and Bus Rule
<b>YEAR</b>															
1994-2003	YELLOW**	YELLOW**	YELLOW**	YELLOW**	YELLOW**	RED	RED	RED	RED	RED	RED	RED	RED	RED	
<b>ENGINE</b>															
2004	GREEN	GREEN	GREEN	GREEN	YELLOW**	RED	RED	RED	RED	RED	RED	RED	RED	RED	
2005-2006	GREEN	GREEN	GREEN	GREEN	YELLOW**	RED	RED	RED	RED	RED	RED	RED	RED	RED	
2007 or Newer*	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	

**Legend**

- GREEN** = Compliant Truck
- YELLOW\*\*** = Compliant Truck if retrofit for PM
- RED** = Non-compliant/Must Meet 2007 MY Engine Standards

**Notes**

- \* 2007 or Newer MY Engine must be OEM equipped with PM filter for the above to apply
- \*\* PM retrofits must be Level 3 Verified Diesel Emissions Control System (VDECS) to qualify

Website: <http://www.arb.ca.gov/cc/hdghq/hdghq.htm>

Difficulty: **Hard**

California Domiciled Only?: No

#### Applies to:

- 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them

#### Exemptions:

- Less than 53ft trailers and non-box type vans i.e. flatbeds, curtain-sides, stepvans, etc.
- Short Haul Tractor
  1. Limit 50,000 miles/year
  2. 53ft trailer exempt if pulled by Short Haul Tractor
- Local Haul Tractor/Trailer
  1. Operates within 100 mile radius of local haul base
  2. Exempt from aerodynamic requirements but must install LRR tires
- Drayage Truck/Trailer
  1. Limit 50,000 miles/year
  2. 53ft trailer exempt if pulled by Short Haul Tractor

#### Notes:

- “LRR” = Low Rolling Resistance

# Tractor Trailer GHG Reduction Measure (Smartway Rule)

## What is the “Smartway Rule”?

The Tractor Trailer GHG Reduction Measure, otherwise known as the “Smartway Rule” requires aerodynamic retrofits on 53ft and longer box type trailers and Smartway approved tires on those trailers and the tractors that pull them.

#### Tractors

##### By 1/1/2010

- All Model Year (MY) 2011 and newer sleeper cabs pulling 53-foot trailers must be EPA SmartWay Approved.
- All MY 2011-newer tractors (including sleepers) pulling 53-foot trailers must be equipped with EPA Approved SmartWay tires.

##### By 1/1/2013

- No heavy duty tractor, regardless of MY, can pull a 53-foot trailer without being equipped with EPA Approved SmartWay tires.

#### Trailers

##### By 1/1/2010

All MY 2011-newer 53-foot dry van trailers must either be:

- Smartway Approved; or
- Be equipped with Smartway tires, skirts, and front or rear fairings; or
- Have Smartway tires and a combination of Smartway approved technology that gets a 5% reduction in fuel usage.

MY 2011 53-foot refers subject to same requirements as dry vans, except fairings not required and percentage reduction option is 4%.

##### By 1/1/2013

2010 or previous MY trailers must be

- an EPA SmartWay certified trailer; or
- equipped with aerodynamic technology that is SmartWay verified and exceeds a 5% fuel saving

Same requirements for 2010 or previous MY refers except fuel aerodynamics must exceed 4% fuel savings.

##### By 1/1/2017

All 53-foot trailers, regardless of MY must be equipped with tires that are US EPA SmartWay verified.

## Reporting

Those claiming short haul, long haul, or drayage truck exemptions must report to the ARB. If you operate 2011 or newer tractors or 2011 53ft trailers subject to this rule, you must report immediately. All others must report prior to 1/1/2013.

There is a large and small fleet compliance phase in which requires reporting which we will cover in more detail on the following page.

## Resources

- [Report to ARB](#)
- [CTA Smartway Rule PowerPoint](#)
- [CARB Fact Sheets](#)
- [CARB Smartway Rule Email List](#)
- [EPA Smartway Verified Aerodynamic Retrofits](#)
- [EPA Smartway Verified Low Roll Resistance Tires](#)

## PHASE-IN OPTIONS FOR 2010-OLDER TRAILERS

Large Fleets (21+ trailers) – Must Report by 7/1/2011

Compliance Year	Minimum Fleet Conformance Threshold	Conformance Threshold Deadline
2011	20%	January 1, 2012
2012	40%	January 1, 2013
2013	60%	January 1, 2014
2014	80%	January 1, 2015
2015	100%	January 1, 2016

Report at: <http://www.arb.ca.gov/msprog/onrdiesel/reporting.htm>

## PHASE-IN OPTIONS FOR 2010-OLDER TRAILERS

Small Fleets (20 or less) – Must Report by 7/1/2012

Compliance Year	Minimum Fleet Conformance Threshold	Conformance Threshold Deadline
2013	25%	January 1, 2014
2014	50%	January 1, 2015
2015	75%	January 1, 2016
2016	100%	January 1, 2017

Report at: <http://www.arb.ca.gov/msprog/onrdiesel/reporting.htm>

The above applies to the aerodynamic retrofit requirements only. Tire requires for trailers begin 1/1/2017. **UPDATE (6/2011): Please note that the Large Fleet Compliance Plans reporting deadline has been extended to August 1st, 2011.**

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

Difficulty: **Hardest**

California Domiciled Only?: No

#### Applies to:

- Trucks 14k+ GVWR, includes diesel-fuel, dual-fuel, or alternative diesel-fuel that are registered to be driven on public highways, were originally designed to be driven on public highways whether or not they are registered.
- Also includes yard trucks with on-road engines or yard trucks with off-road engines used for agricultural operations, both engines of two-engine sweepers

#### Exemptions

- Trucks operated less than 1,000 miles and 100hrs annually. These trucks must meet reporting and recordkeeping requirements.
- Trucks subject to Drayage Rule until 1/1/2023
- Generally, equipment subject to other rules (public utility, cargo handling, refuse, etc.)



# Statewide Truck and Bus Rule



## What is the Statewide Truck and Bus Rule?

The Statewide Truck and Bus Rule is a multi-billion dollar rule which affects all owners/operators of commercial diesel vehicles over 14,000lbs.

All fleets operating in or through California should immediately begin planning for this rule as major deadlines begin 1/1/2012. The average lead time for obtaining the retrofits required to comply can take several months.

On the following pages we'll discuss compliance options and the practical steps your fleet should take to cope with this rule.



## Resources

- [Find a level 3 VDECS](#)
- [Find a certified VDECS installer](#)
- [Subscribe to the Prop 1B funding email list for the latest news.](#)
- [Carl Moyer Program Contact List](#)
- [ARB's Fleet Compliance Calculator \(warning, not updated to reflect May 2011 changes\)](#)
- [Report to ARB \(Fall 2011\)](#)
- [Truck and Bus Rule Email List](#)

Compliance Option One: Best Available Control Technology Schedule (BACT)

This compliance option is the most cost-heavy, but does not require reporting to CARB which greatly eases your administrative burden. Realistically, there are very few fleets with trucks over 26,000lbs GVWR who have the capability to comply with this schedule from now until 2023.

**AMENDED BACT SCHEDULES  
AS OF JUNE 2011**

Class 4-6  
14,001-26,000lbs  
GVWR  
(14-20 Year  
Turnover)

<u>Compliance Date as of January 1</u>	<u>Existing Engine Model Year</u>	<u>BACT Requirements</u>
<u>2015</u>	<u>1995 &amp; older</u>	<u>2010 model year emission equivalent</u>
<u>2016</u>	<u>1996</u>	
<u>2017</u>	<u>1997</u>	
<u>2018</u>	<u>1998</u>	
<u>2019</u>	<u>1999</u>	
<u>2020</u>	<u>2003 &amp; older</u>	
<u>2021</u>	<u>2004-2006</u>	
<u>2022</u>	<u>N/A</u>	
<u>2023</u>	<u><del>2007-2009</del>All engines</u>	

Class 7-8  
26,001-33,000lbs  
GVWR

<u>Engine Model Year</u>	<u>Compliance Date Install PM Filter by</u>	<u>Compliance Date 2010 Engine by</u>
<u>1993 &amp; older</u>	<u>N/A</u>	<u>January 1, 2015</u>
<u>1994-1995</u>	<u>N/A</u>	<u>January 1, 2016</u>
<u>1996-1997</u>	<u>N/A</u>	<u>January 1, 2017</u>
<u>1998-2000 1996 – 1999</u>	<u>January 1, 2012</u>	<u>January 1, 2020</u>
<u>2001-2000 -2004</u>	<u>January 1, 2013</u>	<u>January 1, 2021</u>
<u>2005-2006</u>	<u>January 1, 2014</u>	<u>January 1, 2022</u>
<u>2007-2009 or newer</u>	<u>January 1, 2014 if not originally OEM equipped</u>	<u>January 1, 2023</u>

Alternate visual of BACT schedule for Class 7-8's on grid below.

		COMPLIANCE YEAR (By 1/1/20xx)											
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MODEL YEAR ENGINE	1993 & Older	GREEN	GREEN	GREEN	RED	RED	RED	RED	RED	RED	RED	RED	RED
MODEL YEAR ENGINE	1994-1995	GREEN	GREEN	GREEN	GREEN	RED	RED	RED	RED	RED	RED	RED	RED
MODEL YEAR ENGINE	1996-1999	YELLOW**	YELLOW**	YELLOW**	YELLOW**	YELLOW**	YELLOW**	YELLOW**	YELLOW**	RED	RED	RED	RED
MODEL YEAR ENGINE	2000-2004	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	YELLOW**	RED	RED	RED	RED
MODEL YEAR ENGINE	2005-2006	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	YELLOW**	YELLOW**	RED	RED	RED
MODEL YEAR ENGINE	2007 or Newer*	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	RED

**Legend**  
**GREEN** = Compliant Truck  
**YELLOW\*\*** = Compliant Truck if retrofit for PM  
**RED** = Replace with 2010 MY Engine

**Notes**  
 \* 2007 or Newer MY Engine must be OEM equipped with PM filter for the above to apply  
 \*\* PM retrofits must be highest level Verified Diesel Emissions Control System (VDECS) to qualify

## Compliance Option Two: Phase-In Compliance Schedule

Most fleets with trucks above 26,000lbs GVWR will use this schedule.

Table 3: Phase-in Compliance Schedule  
for Vehicles with GVWR greater than 26,000 lbs

<u>Compliance Date as of January 1</u>	<u>Percent of <del>Total</del> Fleet Complying with PM BACT</u>	<u>BACT Requirements</u>
<u>2012</u>	<u>30%</u>	<u>PM BACT</u>
<u>2013</u>	<u>60%</u>	
<u>2014</u>	<u>90%</u>	
<u>2015</u>	<u>90%</u>	
<u>2016</u>	<u>100%</u>	
<u><del>2016</del>2020</u>	<u>All vehicles must comply with section 2025(g)</u>	

This schedule allows you to phase-in PM filters or 2007 and newer model year engines into your fleet on a percentage per year basis. After 1/1/2020, trucks in your fleet must reference the Option One BACT Schedule on the previous page to determine when they must replace their trucks to meet 2010 model year engine standards.

This option also allows you to take advantage of the following credits:

### 1. Fleet Downsizing Credit

If your fleet is smaller now than it was on 10/1/2006, you may be eligible for a fleet downsizing credit. This credit allows you, until 1/1/2016, to reduce your percentage phase in obligation by the percentage your fleet has been downsized.

*Example: ABC Trucking owned 10 trucks on 10/1/2006. Today, it owns 7. ABC Trucking owns 30% less trucks now than in 2006. Their fleet downsize credit is as follows:*

<u>Compliance Date as of January 1</u>	<u>Percent of Fleet Complying with PM BACT</u>
2012	30% - 30% = <b>0%</b>
2013	60% - 30% = <b>30%</b>
2014	90% - 30% = <b>60%</b>
2015	90% - 30% = <b>60%</b>
2016 (credit expires)	<b>100%</b>
2020	All vehicles must comply with section 2025(g)

## **2. Early Retrofit Credit**

You are also eligible for a credit for every PM filter installed prior to 7/1/2011. You may also claim credits for PM filters installed by 10/1/2011 if you placed a purchase order and at least a 20% deposit for that filter by 5/1/2011. This credit allows you to treat one other vehicle as compliant until 1/1/2017.

*Example #1: ABC Trucking has 10 trucks. It installed 5 PM filters by 7/1/2011 and gets credit for 5 other trucks until 1/1/2017.*

*5 filters + 5 credits = 10 out of 10 compliant trucks*

*ABC Trucking is 100% compliant until 1/1/2017.*

*Example #2: ABC Trucking has 10 trucks. It installed 4 PM filters by 7/1/2011 and gets credit for 4 other trucks until 1/1/2017.*

*4 filters + 4 credits = 8 out of 10 compliant trucks. 2 noncompliant trucks.*

*80% of ABC Trucking's fleet complies with PM BACT. It is compliant until 1/1/2014 at which time it must retrofit or replace at least one more truck and retrofit or replace both remaining trucks by 1/1/2016.*

After 1/1/2017, trucks you have claimed an early retrofit credit for must either meet PM BACT or be replaced with a truck that is otherwise compliant. These trucks must be replaced with trucks that meet 2010 EPA Engine standards after 1/1/2020 based on the BACT schedule.

You may also earn this credit for any Hybrid Vehicles, Alternative Fueled Vehicles, and Vehicles with Heavy-Duty Pilot Ignition Engines purchased before 1/1/2017.

## **3. Early Purchase of New Trucks Credit**

If the average engine age of your fleet has gone down since 10/1/2006, you may be eligible for a credit. This credit is a percentage equal to five times the years you have reduced your average fleet age.

### **What is "PM BACT"?**

"PM BACT" is defined by CARB as "the technology employed on the highest level VDECS for PM or an engine that is equipped with an original equipment manufacturer (OEM) diesel particulate filter and certified to meet the 0.01 g/bhp-hr certification standard"

In other words, the highest level verified filter that will work for your engine or an OEM truck with an engine that meets 2007 EPA/CARB emission standards.

**Example**

Baseline Average Engine Age: 10 years

Average Engine Age in 2012: 7 years

Credit:

$$10 - 7 = 3$$

$$3 \times 5 = 15\%$$

<u>Compliance Date as of January 1</u>	<u>Percent of Fleet Complying with PM BACT</u>
2012	<b>30% - 15% = 15%</b>
2013	60%
2014	90%
2015	90%
2016	100%
2020	All vehicles must comply with section 2025(g)

To retain this credit after 2012, your average fleet age must either stay the same or be reduced. If your fleet age rises after 2012 (because, for instance, you have not purchased newer vehicles in 2012), the credit is recalculated based on your average fleet age in the compliance year.

**Example**

Baseline Average Engine Age: 10 years

Average Engine Age in 2013: 8 years

Credit:

$$10 - 8 = 2$$

$$2 \times 5 = 10\%$$

<u>Compliance Date as of January 1</u>	<u>Percent of Fleet Complying with PM BACT</u>
2012	30% - 15% = 15%
2013	<b>60% - 10% = 50%</b>
2014	90%
2015	90%
2016	100%
2020	All vehicles must comply with section 2025(g)

If you purchased newer vehicles for 2014 and your fleet's average engine age returned to 7 or fewer years you could still claim at 15% credit, but you can never claim a larger credit than you had in 2012.

## **Other Compliance Options**

The BACT and Phase In Compliance schedules will apply to most fleets with more than 3 trucks. However, there are other compliance options available to low mileage agricultural\*, log\*, construction and dump trucks, trucks that only operate in “NOx Exempt” areas, and fleets with 3 or fewer trucks. Reporting, recordkeeping and labeling requirements apply, [so please review the regulation prior to using any of these options](#).

\*Reporting for the Ag and Log Truck provisions has closed. [Click here for more information](#).

### **1. Small Fleet Provision**

<b>Compliance Date</b>	<b>Vehicles Meeting PM BACT</b>
January 1, 2014	1 Vehicle
January 1, 2015	2 Vehicles
January 1, 2016	3 Vehicles

Fleets with three or fewer vehicles can phase-in compliance on the following schedule. After 1/1/2020, small fleets must comply with the BACT schedule for 2010 replacements.

### **2. Low Mileage Construction and Dump Truck Provisions**

The following vehicles qualify:

A) A truck with a GVWR greater than 26,000 lbs that operates less than 20,000 miles per calendar year and is designed to transport construction materials such as dirt, asphalt, rock or construction debris including a transfer truck, or a tractor trailer combination used exclusively to pull bottom dump, end dump or side dump trailers, or

(B) A truck with a GVWR greater than 26,000 lbs that travels less than 15,000 miles per calendar year and is a concrete mixer truck, truck with a concrete placing boom, a water tank truck, a single engine crane with a load rating of 35 tons or more, a tractor that exclusively pulls a low-boy trailer, or a truck owned by a company that holds a valid license issued by the California Contractors State License Board.

Fleets with the above vehicles can claim up to ten trucks for a delayed phase in schedule. The rest of the fleet must otherwise comply with the general requirements of the regulation.

<b><u>Compliance Deadline, as of January 1</u></b>	<b><u>Percent of Fleet Complying with PM BACT</u></b>
<u>2014</u>	<u>33%</u>
<u>2015</u>	<u>66%</u>
<u>2016</u>	<u>100%</u>

Also, the owner operator of a single low mileage construction or dump truck may delay compliance until 1/1/2016.

### **3. “NOx Exempt” Provision**

Trucks over 26k GVWR that operate exclusively in the following counties may use this provision:

Alpine, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Monterey, Plumas, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Shasta, Sierra, Siskiyou, Trinity, Tehama, and Yuba

<u>Compliance Deadline, as of January 1</u>	<u>Percent of Fleet Complying with PM BACT</u>
<u>2014</u>	<u>33%</u>
<u>2015</u>	<u>66%</u>
<u>2016</u>	<u>100%</u>

Class 4-6 vehicles exclusively operated in NOx exempt counties may follow the BACT schedule, but must meet PM BACT instead of 2010 model year engine standards.

## **Frequently Asked Questions**

### **1. When/Where do I report?**

CARB's reporting system will be ready in the Fall of 2011. The reporting system will be at the following link: [https://secure.arb.ca.gov/ssltrucrs/trucrs\\_reporting/reporting.php](https://secure.arb.ca.gov/ssltrucrs/trucrs_reporting/reporting.php)

### **2. What are the fines?**

Fines can run up to \$10,000 per day out of compliance.

### **3. I bought a 2007 model year truck, but was told my engine was out of compliance with 2007 EPA standards. What gives?**

CARB's rules are based on engine model year emission standards, not the model year of the truck. For instance, a 2007 model year truck most likely has a 2006 model year engine that complies with 2004 EPA model year emission standards. Also, not every 2007 model year engine is originally equipped with a PM filter due to EPA's emission banking allowance for engine manufacturers. Bottom line is, be careful when purchasing to ensure that you are buying a compliant engine.

### **4. How much do retrofits cost?**

PM Filters typically range from \$10,000-\$20,000 and also carry additional maintenance costs.

### **5. How long does it take to get a retrofit?**

The retrofitting process can take several months to complete depending on the complexity of the retrofit project. Installers must run a series of tests to ensure compatibility and retrofit manufacturers take several weeks to fill each order.

### **6. Where do I get a retrofit?**

CARB keeps a list of verified installers.

### **7. Is there public funding available?**

As of the Summer of 2011, there is approximately \$200 Million public funding which is slated to be available. That funding may become available as early as Fall 2011/Winter 2012. Subscribe to CARB's email list or stay tuned to CTA's emails to keep up on the latest. The Carl Moyer/VIP Program continues to fund projects for fleets of ten or less trucks on a much smaller scale ([contact your local Air District for more details](#)). However, all sources of funding available to date comprises less than 10% of the total compliance costs to the commercial fleet. Nobody should expect public money to fund more than a fraction of their capital expenditures.

## **Frequently Asked Questions (continued)**

### **8. What do I do if the engine label on my truck is missing or damaged? How do I report?**

Engine Labels contain valuable information required for reporting. If your label is missing or damaged, you must contact your dealer/manufacturer to have the label replaced. You cannot report without the information contained on the label.

### **9. I use owner-operators. Who must comply?**

The registered owner, “as evidenced on the vehicle registration document carried in the vehicle”, is responsible for compliance with this rule. If your owner-operator registers the vehicle with the DMV for the purpose of IRP, but you lease the vehicle, the following may apply:

*“For vehicles that are rented or leased:*

*1. The owner shall be presumed to be the rental or leasing entity for purposes of compliance with section 2025(e), if:*

*a. The rental or lease agreement for the vehicle is for a period of less than one year; or*

*b. The rental or lease agreement for the vehicle is for a period of one year or longer, unless the terms of the rental or lease agreement or other equally reliable evidence identifies the party responsible for compliance with state laws for the vehicle to be the renting operator or lessee of the vehicle.*

*2. For purpose of enforcement, if at the time that the vehicle is inspected and cited for noncompliance with this regulation and neither the operator of the 11 vehicle nor the rental or leasing entity can produce evidence of the party responsible for compliance with state laws, the owner shall be presumed to be both the rental or leasing entity and the renting operator or lessees of the vehicle”*

If an owner-operator is considered part of your fleet, you must include them as part of your overall fleet count. You may not, for instance, use the small fleet compliance schedule.

### **10. Is CARB’s rule part of my BIT? Will the CHP pull me over if I am not compliant?**

At this time, the California Highway Patrol (CHP) has no official enforcement role for this rule. No additional requirements will be added to BIT inspections.

## **Frequently Asked Questions (continued)**

**11. There are so many CARB regulations. Is there a single place I can go to figure out what rules apply to me?**

ARB's Truck Stop page <http://www.arb.ca.gov/msprog/truckstop/truckstop.htm> is a good place to begin. Once you figure out your baseline compliance requirements, there are many consultants (many of which are CTA members) that can help you figure out the actual logistics of complying.