

# Air Quality Update

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## December 1, 2011 - SCAQMD

### CARB'S TRUCK AND BUS REGULATION; ON-ROAD HEAVY-DUTY DIESEL VEHICLES

In 2008, the California Air Resources Board (CARB) approved the Truck and Bus regulation aimed at reducing particulate matter (PM) and nitrogen oxides (NOx) from existing vehicles operating in California. The first implementation date begins January 1<sup>st</sup> 2012.

The regulation applies to lighter diesel fueled trucks and buses with a gross vehicle weight rating (GVWR) between 14,001 pounds to 26,000 pounds and heavier diesel fueled trucks and buses, those with a GVWR exceeding 26,000 pounds both privately or federally owned, and includes school buses. Public fleets, solid waste collection trucks and transit buses are already subject to other regulations and are not part of the truck and bus regulation.

**Table 1 – Engine Model Year Schedule**

Engine Year	Requirement From January 1 (Heavier Trucks)
Pre-1994	No requirements until 2015, then 2010 engine
1994-1995	No requirements until 2016 then 2010 engine
1996-1999	PM filter from 2012 to 2020, then 2010 engine
2000-2004	PM filter from 2013 to 2021, then 2010 engine
2005-2006	PM filter from 2014 to 2022, then 2010 engine
2007-2009	No requirements until 2023, then 2010 engine
2010	Meets final requirements

Compliance requirements along with the associated implementation timeline outlined is different depending on whether a truck is classified as a lighter truck or heavier truck. Lighter trucks and buses do not have to meet compliance requirements until 2015.

Heavier trucks have two ways of complying with the regulation. Fleets can comply with the compliance schedule by engine model year or they could use a phase-in option that allows greater flexibility.

**Table 2 – Phase-In Option (Heavier Trucks)**

Compliance Date	Vehicles With PM Filters
January 1, 2012	30%
January 1, 2013	60%
January 1, 2014	90%
January 1, 2015	90%
January 1, 2016	100%

Beginning January 1, 2012, heavier trucks are required to meet the outlined engine model year schedule in **Table 1**. PM filter installation would be required on 1996 model year and newer engines and would be replaced on the vehicles eight years later. Trucks with 1995 model year and older engines would require engine replacement starting in 2015.

A phase-in option is the other compliance alternative outlined in **Table 2**. This option allows fleets to decide which vehicles to retrofit or replace, regardless of engine model year. Fleets must report information about all of their heavier trucks by January 31, 2012 to utilize this option. Fleets can comply by demonstrating they have met the

percentage requirements outlined within the table. Therefore, by 2012 the fleet would need to have PM filters on 30% of the heavier vehicles within their fleet. This option counts 2007 model year and newer engines originally equipped with PM filters toward compliance. Any engine with a PM filter regardless of age would be compliant until at least 2020.

### Air Quality Tip

*SCAQMD's amnesty for unpermitted equipment which saves money on fees & avoids fines is fast approaching; the deadline is December 31<sup>st</sup> 2011.*

### Upcoming Training Offered by UCI or Yorke Engineering:

South Coast Air Quality Regulations and Permitting Compliance Seminar: May 8<sup>th</sup> and 9<sup>th</sup>, 2012

<http://www.yorkeengr.com/classes.htm>

### Selected Upcoming Due Dates:

- SCAQMD Rule 1147 - 12/31/11 Alternate Compliance Plan
- SCAQMD Rule 310.1 12/31/11 Amnesty Deadline
- CARB Truck and Bus 1/1/12 (Earliest Compliance Date)
- SCAQMD Rule 1146 1/1/12 (Many Boilers ≥ 5MMBTU/hr. need to submit permit applications for Rule 1146 NOx limits)
- SCAQMD Rule 1146.1 1/1/12 (Most Boilers between 2 and 5MMBTU/hr. need to meet new Rule 1146.1 NOx Limits)

All due dates listed are the statutory dates; sometimes dates are extended when they fall on weekend/holiday.

## SOUTH COAST AQMD RULE CHANGES ADOPTED

For full details on rule adoption changes below go to: <http://aqmd.gov/rules/recentrules.html>

- Rule 310.1: **Amnesty for Unpermitted Equipment and Small Business Discount for Control Equipment** - The adopted rule will exempt owners and operators of unpermitted equipment meeting certain conditions from civil and criminal penalties if the necessary permit applications and fees are voluntarily filed and paid during the amnesty period from July 1<sup>st</sup> through December 31<sup>st</sup>, 2011. The rule waives the 50% penalty for permit application fees for existing equipment operating without a permit. There are exceptions for Title V facilities.
- Rule 1147: **NO<sub>x</sub> Reductions from Miscellaneous Sources (ovens, furnaces, etc.)**: The amended rule delayed the effective compliance deadlines in the original rule by one to two years. Other changes in the amended rule include: Requirements for installation of time meters have been removed, and the installation of fuel meters is now limited to units where owners elect to demonstrate compliance with the pound per million BTU standard versus parts per million (ppm) concentration standard; fuel meters or timers are necessary to document daily use to be classified as a low emitter. Compliance flexibility has been provided to small emitters (one pound per day or less) by extending the compliance date by five years as long as daily records are kept to document fuel use or time showing less than one pound per day of NO<sub>x</sub>. Facilities with five or more units that require burner

modifications may submit an Alternate Compliance Plan to phase in compliance of all units; plans are due by January 1, 2012. Another option is to delay the compliance date by three years by paying a Mitigation Fee along with the Alternate Compliance Plan. Streamlined source testing requirements allow greater compliance flexibility while reducing costs to businesses. Note: RECLAIM facilities are Exempt

## SOUTH COAST AQMD RULE CHANGES PROPOSED

For full details on proposed rule changes below go to:

<http://www.aqmd.gov/rules/proposed.html>

- Rule 1470: **Diesel-Fueled Internal Combustion and Other Compression Ignition Engines** – The proposed amendments would revise the limits for NO<sub>x</sub> and hydrocarbon (HC) emissions for new emergency diesel standby engines, eliminating the requirement to install after-treatment controls for NO<sub>x</sub> and HC. The proposed amendments would provide an extension for particulate matter (PM) emission requirements for emergency standby engines, but in many cases PM after-treatment (e.g., diesel particulate filters) may be required. Requirements for stationary diesel-fueled engines less than or equal to 50 bhp would be eliminated (leaving only CARB requirements). Also, an alternative compliance option would be offered to diesel engines used at

research, development and educational facilities with district approval.

- Rule 463: **Organic Liquid Storage** Proposed Amended Rule 463 is aimed at emission reductions of volatile organic compounds (VOC) from the storage of organic liquids in stationary above-ground tanks. Applicable to any aboveground stationary tank with a tank capacity of 19,815 gallons or greater used for the storage of organic liquids, and any aboveground tank with a capacity between 251 gallons and 19,815 gallons used for the storage of gasoline. The proposed amendment incorporates alternative test methods, ASTM Method D-93 and ASTM Method D-86 aligning with Rule 1178 in determining vapor pressure for heavier petroleum products. Vapor tightness will be aligned with Rule 1178 and reflect current detection methods and limits, reduced from 1000 to 500 ppmv.
- Rule 1177: **Liquefied Petroleum Gas Transfer and Dispensing** – The proposed rule targets a reduction in Volatile Organic Compounds (VOC) associated with the transfer and dispensing of liquefied petroleum gas (LPG). The rule applies to the transfer of LPG from any cargo tank, stationary storage tank, or portable storage tank with a water capacity of four gallons or more.

*Yorke Engineering, LLC specializes in air quality and environmental consulting for stationary and mobile sources including dispersion modeling, health risk assessments, permitting, emission inventories, air quality compliance systems, etc. Yorke Engineering has assisted over 200 customers including a wide variety of industrial facilities and government organizations throughout California.*