



Air Pollution Control Board

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April 25, 2008

COMPLIANCE ADVISORY

IMPLEMENTATION OF AMENDMENTS TO THE AIRBORNE TOXIC CONTROL MEASURE (ATCM) FOR PORTABLE DIESEL-FUELED ENGINES

On February 26, 2004, CARB adopted the Airborne Toxic Control Measure (ATCM) for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater (Section 93116, Title 17, California Code of Regulations). This Statewide regulation is designed to phase out older, higher-polluting portable diesel-fueled engines and replace them with newer, cleaner-burning equipment to reduce public exposure to diesel particulate matter. ARB identified diesel particulate matter as a toxic air contaminant based on its potential to cause cancer and other adverse health effects. Accordingly, actions to reduce emissions of diesel particulate matter from portable diesel-fueled engines and numerous other diesel-fueled engine categories are being instituted.

This ATCM became effective on March 11, 2005, and applies to portable diesel-fueled engines operating in California, except engines propelling vehicles or mobile equipment, military tactical support equipment, and dual-fueled diesel pilot engines. Among other requirements, the ATCM required all portable diesel engines not registered or permitted with the State or a local district by December 31, 2005, to meet the current year emission standard at the time they are registered or permitted; thus, not allowing engines which did not meet the current year standard and which had not been registered before the December 31, 2005, deadline to legally operate. During an ARB emergency hearing in December 2006, the ARB Board received public testimony concerning financial hardships resulting from the inability to legally operate unregistered or unpermitted portable engines. In response, ARB adopted emergency amendments extending the deadline for initially registering or permitting certain portable engines not meeting the current emission standard. On March 22, 2007, the emergency amendments were adopted permanently, and then became effective September 12, 2007.

Specifically, the amendments allow portable diesel-fueled engines that were operating in California at any time between March 1, 2004, and October 1, 2006, that are certified to meet Tier 1 or Tier 2 federal or California diesel-fueled non-road engine emission standards, to be initially registered in the Statewide Portable Equipment Registration

Program (PERP) or initially permitted or registered with the local air district until December 31, 2009. Such engines may then continue to operate, subject to registration or permit conditions and annual registration or permit renewal, provided that fleet wide emission standards in the ATCM are met beginning in 2013.

The amended ATCM allows local air districts the discretion to locally permit or register Tier 1 and Tier 2 portable diesel-fueled engines, as described above. The District has chosen not to locally permit or register these engines. Rather, Tier 1 and 2 engines may be registered with ARB in the Statewide PERP, as described above. The District will continue to register Tier 2 engines with a rated brake horsepower greater than or equal to 750 because Tier 2 is the current off-road engine certification standard for this engine size range.

Uncertified (Tier 0) portable diesel-fueled engines are not eligible for registration in the Statewide PERP. Nevertheless, the amended ATCM allows local air districts the discretion to permit or register Tier 0 engines that were operating in California at any time between March 1, 2004, and October 1, 2006. The District has chosen to not permit or register Tier 0 engines. However, Tier 0 engine owners, with engines that meet certain criteria, may enter into a Stipulated Order of Abatement with the District, which – if approved by the Hearing Board – allows the engine to continue operation in San Diego County for up to one year while the owner or operator works toward replacing it. Importantly, the ATCM prohibits operation of all Tier 0 engines in California (including those subject to a Stipulated Order of Abatement and those already registered) after December 31, 2009.

In addition, the ATCM includes fleet average diesel particulate matter standards; fuel requirements; monitoring, recordkeeping, and reporting requirements; and certain limited exceptions that allow short-term operation.

Copies of the amended ATCM may be downloaded from the District's website <http://www.sdapcd.org> under Rules and Regulations, then Rules and Regulations Appendices, or you may call Janet McCue at (858) 586-2712 to obtain a copy. If you have any questions concerning District implementation or requirements of the amended ATCM, please contact Cara Bandera at (858) 586-2751, John Annicchiarico at (858) 586-2733, or Jorge López at (858) 586-2682.

JL:jlmm

California Air Resources Board (ARB)
Off-Road Compression Ignition Engine Standards – g/bhp-hr (g/kwh)

Engine Power	Tier	Year	CO	HC	NMHC + NOx	NOx	PM
hp < 11 (kW < 8)	Tier 1	2000	6.0 (8.0)	-	7.8 (10.5)	-	0.75 (1.0)
	Tier 2	2005	6.0 (8.0)	-	5.6 (7.5)	-	0.6 (0.8)
	Tier 4	2008	6.0 (8.0)	-	5.6 (7.5)	-	0.3 (0.4)
11 ≤ hp < 25 (8 ≤ kW < 19)	Tier 1	2000	4.9 (6.6)	-	7.1 (9.5)	-	0.6 (0.8)
	Tier 2	2005	4.9 (6.6)	-	5.6 (7.5)	-	0.6 (0.8)
	Tier 4	2008	4.9 (6.6)	-	5.6 (7.5)	-	0.3 (0.4)
25 ≤ hp < 50 (19 ≤ kW < 37)	Tier 1	2000	4.1 (5.5)	-	7.1 (9.5)	-	0.6 (0.8)
	Tier 2	2004	4.1 (5.5)	-	5.6 (7.5)	-	0.45 (0.6)
	Tier 4	2008	4.1 (5.5)	-	5.6 (7.5)	-	0.22 (0.3)
		2013	4.1 (5.5)	-	3.5 (4.7)	-	0.022 (0.03)
50 ≤ hp < 100 (37 ≤ kW < 75)	Tier 1	2000	-	-	-	6.9 (9.2)	-
	Tier 2	2004	3.7 (5.0)	-	5.6 (7.5)	-	0.3 (0.4)
	Tier 3	2008	3.7 (5.0)	-	3.5 (4.7)	-	0.3 (0.4)
50 ≤ hp < 75 (37 ≤ kW < 56)	Tier 4	2008	3.7 (5.0)	-	3.5 (4.7)	-	0.22 (0.3)
		2013	3.7 (5.0)	-	3.5 (4.7)	-	0.022 (0.03)
100 ≤ hp < 175 (75 ≤ kW < 130)	Tier 1	2000	-	-	-	6.9 (9.2)	-
	Tier 2	2003	3.7 (5.0)	-	4.9 (6.6)	-	0.22 (0.3)
	Tier 3	2007	3.7 (5.0)	-	3.0 (4.0)	-	0.22 (0.3)
75 ≤ hp < 175 (56 ≤ kW < 130)	Tier 4	2012	3.7 (5.0)	0.14 (0.19)	-	0.3 (0.4)	0.015 (0.02)
175 ≤ hp < 300 (130 ≤ kW < 225)	Tier 1	1996	8.5 (11.4)	1.0 (1.3)	-	6.9 (9.2)	0.4 (0.54)
	Tier 2	2003	2.6 (3.5)	-	4.9 (6.6)	-	0.15 (0.2)
	Tier 3	2006	2.6 (3.5)	-	3.0 (4.0)	-	0.15 (0.2)
300 ≤ hp < 600 (225 ≤ kW < 450)	Tier 1	1996	8.5 (11.4)	1.0 (1.3)	-	6.9 (9.2)	0.4 (0.54)
	Tier 2	2001	2.6 (3.5)	-	4.8 (6.4)	-	0.15 (0.2)
	Tier 3	2006	2.6 (3.5)	-	3.0 (4.0)	-	0.15 (0.2)
600 ≤ hp < 750 (450 ≤ kW < 560)	Tier 1	1996	8.5 (11.4)	1.0 (1.3)	-	6.9 (9.2)	0.4 (0.54)
	Tier 2	2002	2.6 (3.5)	-	4.8 (6.4)	-	0.15 (0.2)
	Tier 3	2006	2.6 (3.5)	-	3.0 (4.0)	-	0.15 (0.2)
175 ≤ hp < 750 (130 ≤ kW < 560)	Tier 4	2011- 2014	2.6 (3.5)	0.14 (0.19)	-	0.3 (0.4)	0.015 (0.02)
hp ≥ 750 (kW ≥ 560)	Tier 1	2000	8.5 (11.4)	1.0 (1.3)	-	6.9 (9.2)	0.4 (0.54)
	Tier 2	2006	2.6 (3.5)	-	4.8 (6.4)	-	0.15 (0.2)
hp ≥ 750 (kW ≥ 560) generator sets	Tier 4	2011- 2014	2.6 (3.5)	-	0.3 (0.4)	0.5 (0.67)	0.07 (0.1)
		2015	2.6 (3.5)	-	0.14(0.19)	0.5 (0.67)	0.022 (0.03)
hp ≥ 750 (kW ≥ 560) all other engines	Tier 4	2011- 2014	2.6 (3.5)	-	0.3 (0.4)	2.6 (3.5)	0.07 (0.1)
		2015	2.6 (3.5)	-	0.14(0.19)	2.6 (3.5)	0.03 (0.04)

1 – The standards are for carbon monoxide (CO), hydrocarbons (HC), non-methane hydrocarbons, (NMHC), nitrogen oxides (NOx), and particulate matter (PM) expressed in units of grams per brake horsepower per hour (g/bhp-hr) and grams per kilowatt per hour (g/kw-hr).

2 – Power is maximum rated power expressed in horsepower (hp) or kilowatts (kw).