

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities\***

10-20-2000 Rev. 0

6-2-2006 Rev. 1

Equipment or Process: I.C. Engine, Portable

		Criteria Pollutants					
Subcategory/	Rating/Size	VOC	NO <sub>x</sub>	NO <sub>x</sub> + NMHC <sup>1)</sup>	SO <sub>x</sub>	CO	PM <sub>10</sub>
Compression-Ignition <sup>2)</sup>	50 ≤ HP < 100			<u>Tier 2:</u> 7.5 grams/kW-hr (5.6 grams/bhp-hr) <u>Tier 3 (After 12/31/2007):</u> 4.7 grams/kW-hr (3.5 grams/bhp-hr) (6-2-2006)	Diesel fuel with a sulfur content no greater than 0.0015% by weight (Rule 431.2). (6-6-2003)	<u>Tier 2 or Tier 3:</u> 5.0 grams/kW-hr (3.7 grams/bhp-hr) (6-2-2006)	<u>Tier 2 or Tier 3:</u> 0.40 grams/kW-hr (0.30 grams/bhp-hr) and CARB ATCM for portable diesel engines <sup>3)</sup> (6-2-2006)
	100 ≤ HP < 175			<u>Tier 2:</u> 6.6 grams/kW-hr (4.9 grams/bhp-hr) <u>Tier 3 (After 12/31/2006):</u> 4.0 grams/kW-hr (3.0 grams/bhp-hr) (6-2-2006)		<u>Tier 2 or Tier 3:</u> 5.0 grams/kW-hr (3.7 grams/bhp-hr) (6-2-2006)	<u>Tier 2 or Tier 3:</u> 0.30 grams/kW-hr (0.22 grams/bhp-hr) and CARB ATCM for portable diesel engines <sup>3)</sup> (6-2-2006)
	175 ≤ HP < 750			<u>Tier 3:</u> 4.0 grams/kW-hr (3.0 grams/bhp-hr): (6-2-2006)		<u>Tier 2 or Tier 3:</u> 3.5 grams/kW-hr (2.6 grams/bhp-hr) (6-2-2006)	<u>Tier 2 or Tier 3:</u> 0.20 grams/kW-hr (0.15 grams/bhp-hr) and CARB ATCM for portable diesel engines <sup>3)</sup> (6-2-2006)
	≥750 HP			<u>Tier 2::</u> 6.4 grams/kW-hr (4.8 grams/bhp-hr) (6-2-2006)		<u>Tier 2:</u> 3.5 grams/kW-hr (2.6 grams/bhp-hr) (6-2-2006)	<u>Tier 2:</u> 0.20 grams/kW-hr (0.15 grams/bhp-hr) and CARB ATCM for portable diesel engines <sup>3)</sup> (6-2-2006)
(Continued on Next Page)							

\* Means those facilities that are not major polluting facilities as defined by Rule 1302 – Definitions

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities\***

Spark Ignition	All	1.5 grams/bhp-hr, or 240 ppmvd as methane @ 15% O2 (4-10-1998)	1.5 grams/bhp- hr, or 80 ppmvd @ 15% O2 (4-10-1998)			2.0 grams/bhp-hr, or 176 ppmvd @ 15% O2 (4-10-1998)	
----------------	-----	--	--	--	--	--	--

Notes:

- 1) NMHC + NO<sub>x</sub> means the sum of non-methane hydrocarbons and oxides of nitrogen emissions.
- 2) Limits with an associated “after” date are required for an engine for which the application is deemed complete after that date. Limits without an associated “after” date are required now. The engine must be certified by U.S. EPA or CARB to meet the Tier 2 or 3 emission requirements of 40 CFR Part 89 – Control of Emissions from New and In-use Nonroad Compression-Ignition Engines shown in the table– or otherwise demonstrate that it meets the Tier 2 or 3 emission limits shown in the table. If, because of the averaging, banking, and trading program, there is no new engine from any manufacturer that meets the above standards, then the engine must meet the family emission limits established by the manufacturer and approved by U.S. EPA. Engines included in equipment built under the flexibility provisions of Part 89 may be certified to an earlier tier than that required in the table.
- 3) The CARB Air Toxic Control Measure for Portable Diesel Engines (see <http://www.arb.ca.gov/diesel/peatcm/peatcm.htm>) also requires in-use portable diesel engines to 1) be certified to Tier 1, 2 or 3 by 1/1/2010; and 2) meet fleet-average PM standards beginning 1/1/2013.

\* Means those facilities that are not major polluting facilities as defined by Rule 1302 – Definitions