Compliance Advisory

June 10, 2008

ATTENTION: STATIONARY INTERNAL COMBUSTION ENGINE OWNERS AND OPERATORS

SUBJECT: NEW EMISSION LIMITS FOR STATIONARY INTERNAL COMBUSTION (IC) ENGINES (REGULATION 9, RULE 8)

On July 25, 2007 the Bay Area Air Quality Management District (Air District) amended Regulation 9, Rule 8 (Reg. 9-8). The amendments expand the scope of the rule to regulate Nitrogen Oxide (NOx) or Carbon Monoxide (CO) emissions from gaseous-fueled stationary IC engines that are larger than 50 brake horsepower (bhp), from liquid-fueled engines larger than 50 bhp, and establish more stringent emission limits for all affected stationary IC engines.

• New Emission Limits effective January 1, 2012: The following table outlines the new emissions standards for all stationary IC engines, which vary depending on the type of engine and fuel.

<table>
<thead>
<tr>
<th>Section</th>
<th>Engine Type</th>
<th>Fuel Type or Rating</th>
<th>NOx PPMVD *</th>
<th>CO PPMVD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>301.1</td>
<td>Spark-Ignited: Rich Burn</td>
<td>Fossil-derived</td>
<td>25</td>
<td>2000 (no change)</td>
</tr>
<tr>
<td>301.2</td>
<td>Spark-Ignited: Lean Burn</td>
<td>Fossil-derived</td>
<td>65</td>
<td>2000 (no change)</td>
</tr>
<tr>
<td>302</td>
<td>Spark-Ignited: Rich and Lean Burn</td>
<td>Waste-derived</td>
<td>70</td>
<td>2000 (no change)</td>
</tr>
<tr>
<td>304.1</td>
<td>Compression-Ignited</td>
<td>51-175 bhp</td>
<td>180</td>
<td>440</td>
</tr>
<tr>
<td>304.2</td>
<td>Compression-Ignited</td>
<td>&gt; 175 bhp</td>
<td>110</td>
<td>310</td>
</tr>
<tr>
<td>306</td>
<td>Compression-Ignited: Duel Fuel</td>
<td>Waste-derived gas with &lt;5% diesel fuel</td>
<td>70</td>
<td>2000</td>
</tr>
</tbody>
</table>

*PPMVD = Parts Per Million, Volume, corrected to 15% O₂, Dry basis.

• Delayed Compliance Options Available: Persons operating IC engines needing to meet emission standards found in Sections 301, 302 and 304 (listed in the table above), have the option to delay compliance until January 1, 2016, subject to the following criteria:

  ➢ Existing Spark-Ignited Engines (Reg. 9-8-303) shall:
    • Be rated between 51 and 250 bhp, or be model year 1996 or later;
    • Comply with Best Available Control Technology (BACT) requirements no later than January 1, 2016, (see Reg. 2-2-206 for definition of BACT);
    • Be identified in a delayed compliance option report submitted no later than January 1, 2012.

  ➢ Existing Compression-Ignited Engines, model year 1996 or later (Reg. 9-8-305) shall:
    • Meet one of the following conditions:
      ▪ NOx emissions shall not exceed 22 ppmvd corrected to 15% O₂ and CO emissions shall not exceed 310 ppmvd corrected to 15% O₂, or
      ▪ NOx and CO emissions shall not exceed BACT limits no later than January 1, 2016 (see Reg. 2-2-206 for definition of BACT)
    • Be identified in a delayed compliance option report submitted no later than January 1, 2012.
Any written delayed compliance option report shall specify that the owner or operator of a stationary engine has elected to delay compliance. The report shall include the following information about the engine: Air District plant and source number; facility name, contact name, phone number, address; and engine make, model, model year and size. All delayed compliance reports must be sent to:

**BAAQMD Compliance and Enforcement Division**

MAIL STOP: REPORTS
939 Ellis Street, San Francisco, CA 94109

- **Exemptions May Apply:** The following IC engines have full or limited exemption from Reg. 9-8:
  - Until January 1, 2012, engines fired exclusively by liquid fuels including, but not limited to, diesel fuel, gasoline and methanol (Reg. 9-9-110.3).
  - Engines used exclusively for the growing of crops or raising of animals (Reg. 9-8-110.4).
  - Emergency Standby Engines (Reg. 9-8-110.5).
  - Until January 1, 2012, engines < 1000 bhp can operate fewer than 200 hours annually, and engines ≥ 1000 bhp can operate fewer than 100 hours annually (Reg 9-8-111.1 and 111.2).
  - After January 1, 2012, any engine can qualify for exemption if it operates fewer than 100 hours in a 12-consecutive-month period (Reg. 9-8-111.3).
  - Portable Engines registered with the Statewide Portable Engine and Equipment Registration Program (PERP) (Reg. 9-8-112).

- **Quarterly Demonstration of Compliance:** Any IC engine that is not exempt or is not an Emergency Standby Engine shall conduct a quarterly test for NOx and CO using a portable analyzer (Reg. 9-8-503), as follows:
  - Emission readings shall be averaged over a continuous 15-minute period during normal engine operation;
  - Readings shall be taken with the engine operating either at conditions representative of normal operations or conditions specified in the permit-to-operate;
  - The portable analyzer should be calibrated, maintained and operated according to the manufacturer’s specifications;
  - Readings with a portable analyzer are not required in any quarter when a source test is conducted.

The methods specified in Sections 601 and 602 should be used for source tests only. Those methods are not intended to be requirements for quarterly monitoring. Quarterly monitoring using a portable analyzer may not substitute for initial source test requirements.

More Information can be obtained from the following sources:

- For questions about this Advisory, contact Magen Harris, Air Quality Specialist, at mharris@baaqmd.gov or (415) 749-4785.
- For a copy of the above listed rule, see www.baaqmd.gov/dst/regulations/index.htm.
- For compliance assistance, call (415) 749-4999, the Compliance Counselor Hotline.
- For assistance regarding BACT applicability call (415) 749-4990, Engineering Services.

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