COMPLIANCE ADVISORY

February 6, 2012

Boiler Certification: Compliance Reminder

This Advisory is provided to inform you about Air District activities that may affect your operation. It will help you achieve and maintain compliance with applicable air quality rules and regulations.

ATTENTION: MANUFACTURERS AND DISTRIBUTORS OF BOILERS, STEAM GENERATORS AND PROCESS HEATERS

SUBJECT: AIR POLLUTION EMISSION LIMIT CERTIFICATION REQUIREMENT

This advisory is to remind manufacturers and distributors of boilers, steam generators and process heaters (collectively termed “boilers” or “devices”) of the certification requirements for new boilers that went into effect on January 1, 2012 and the application process for certification. The Bay Area Air Quality Management District (District) amended Regulation 9, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters on May 4, 2011 to simplify the emission limits certification requirements and to reduce the costs to certify boilers and/or devices.

Effective January 1, 2012, boilers with a rated heat input greater than 2 million and less than 10 million BTU per hour (MM BTU/hr) fired with natural gas or Liquefied Petroleum Gas (LPG) must be certified to meet the emission limits in Regulation 9, Rule 7 in order to be sold in the District. Note: This requirement does not apply to boilers that require a District Permit to Operate.

The following Nitrogen Oxides (NOx) and Carbon Monoxide (CO) emission limits went into effect on January 1, 2012 for boilers sold within the District, and will apply to existing boilers beginning on January 1, 2013:

<table>
<thead>
<tr>
<th>Heater Input Rating and Fuel</th>
<th>Emission Limits (at 3% oxygen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;2 to 5 million BTU/hr, natural gas or LPG</td>
<td>30 ppmv NOx, 400 ppmv CO</td>
</tr>
<tr>
<td>&gt;5 to &lt;10 million BTU/hr, natural gas or LPG</td>
<td>15 ppmv NOx, 400 ppmv CO</td>
</tr>
</tbody>
</table>

➢ To certify a device as meeting these limits, you must submit an application form and testing data to demonstrate that the device meets the emission limits. To obtain a Reg. 9-7, Boiler Certification Application form or see a list of certified boilers, go to: www.baaqmd.gov/boiler-cert. Note: Individual boilers using burner assembly retrofit packages must be tested using a portable analyzer to show compliance and are not required to be certified.

➢ See reverse side for certification guidelines for more information regarding certifying a boiler, steam generator or process heater.

➢ Boilers must be tested for the emission limits using any of the following three (3) test methods:

<table>
<thead>
<tr>
<th>NOx</th>
<th>CO</th>
<th>Oxygen (O2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Air Resources Board Method 100</td>
<td>Method 100</td>
<td>Method 100</td>
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<tr>
<td>US EPA Method 7E</td>
<td>EPA Method 10</td>
<td>EPA Method 3 or 3A</td>
</tr>
</tbody>
</table>

More information can be obtained from the following sources:

➢ For a copy of Regulation 9, Rule 7, please visit the District website at: http://www.baaqmd.gov/rules

➢ For questions regarding the Certification Application or this Advisory contact: Mike Wall, Supervising Air Quality Specialist at mwall@baaqmd.gov or (415) 749-4903.

➢ For compliance assistance call the Compliance Counselor Hotline at (415) 749-4999.

Brian Bateman
Director of Enforcement
The Source Test Section will evaluate source test reports submitted to the District. Provided that the requirements of Reg. 9-7 are met, that the source test report is complete (see ‘A’ below) and demonstrates that the device meets the applicable emissions limits, and the criteria listed in ‘B’ below are met, the Source Test Manager or his/her designee will recommend to Compliance and Enforcement that the application for the boiler certification can be approved.

A. Each source test report included with the District’s Boiler Certification Application Form1 cover sheet for each boiler model to be reviewed must include the following information:
   1) Test Date
   2) Test Company
   3) Boiler Manufacturer
   4) Boiler Model
   5) Heat Rating (in million BTU per hour; MMBTU/hr).

B. The Source Test Section will review the report and should verify that, at a minimum, the following criteria have been met:
   1) The report must be complete and include all raw and quality assurance data as required by the prescribed test method. Acceptable test methods are shown in the table on the previous page. Only the current and/or most recent versions of test methods will be deemed acceptable.
   2) The report shall include at least one test run at each of the following firing rates; Low (10% to 40% of maximum rating); Medium (greater than 40% to less than 70% of maximum rating); High (70% to 100% of maximum rating). Each test run shall be a minimum of 30 minutes and the minimum interval between tested firing rates shall be 10%.
   3) The applicant may request a conditional approval based on submittal of a test report for a single firing rate. The test shall consist of three test runs. Each test run shall be a minimum of 30 minutes, or a combined minimum of 90 minutes for the three runs. The conditional approval shall specify that certification is only valid at the tested firing rate plus or minus 20%. For example, if a boiler is tested at 40% of maximum rating, the certification of that boiler is valid from 20% through 60% of the maximum rating.
   4) Zero and span drifts during each test run meet the requirements of the methods.
   5) Calibrations are conducted before and after each run with National Institute of Standards and Technology (NIST) or NIST-traceable gases.

C. The Compliance and Enforcement Division will contact applicants with the certification determination. If the certification request has been approved, the boiler will be added to the District’s list of certified boilers.2

Source Test questions should be directed to: Source Test Section - Small Boiler Certifications at (415) 749-4612.

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1 The Boiler Certification Application form and instructions are located at: www.baaqmd.gov/boiler-cert
2 The District’s Certified Boiler List is located at: www.baaqmd.gov/boiler-cert