

CLARK COUNTY

AIR QUALITY REGULATIONS

SECTION 49 - COMPLIANCE REQUIREMENTS FOR BOILERS AND STEAM GENERATORS

49.1 Purpose:

This Section sets requirements for performance testing, burner efficiency testing, record keeping and reporting for boilers and steam generators. The OWNER AND/OR OPERATOR of a boiler or steam generator subject to this Section shall also comply with all applicable requirements of the Clark County Air Quality Regulations, including but not limited to, Sections 12, 13, 14, 20, and 55.

49.2 Definitions:

49.2.1 "Boiler and Steam Generator" (hereinafter referred to as "Boiler") means a heating device that combusts fuel to produce steam, to heat water or to heat any other liquid heat transfer medium.

49.3 Applicability:

49.3.1 This Section applies only to:

49.3.1.1 Any new or existing Boiler, with a maximum heat input rating equal to or greater than 4.0 MMBtu/hr, on which CONSTRUCTION commenced after January 1, 1992.

49.3.1.2 Any existing Boiler, with a maximum heat input rating equal to or greater than 4.0 MMBtu/hr, installed prior to January 2, 1992, that is MODIFIED or RECONSTRUCTED after January 1, 2006.

49.3.2 Combined Heat and Power Units and supplementary duct-fired heat recovery steam generators are exempt from this Section.

49.4 Performance Testing:

49.4.1 Initial Performance Test: The OWNER AND/OR OPERATOR of a new, MODIFIED, or RECONSTRUCTED Boiler with a maximum heat input rating equal to or greater than 10.0 MMBtu/hr shall conduct an initial performance test within 60 days after achieving the maximum production

rate at which the Boiler will be operated, but not later than 180 days after initial startup of such Boiler, and shall demonstrate compliance pursuant to Subsection 49.4.3.1.

49.4.2 Periodic Performance Tests: The OWNER AND/OR OPERATOR of a Boiler with a maximum heat input rating equal to or greater than 10.0 MMBtu/hr shall conduct periodic performance testing, at least once during every 5-year period beginning from the date of the initial performance test and at least once at 5-year intervals thereafter, on each Boiler to demonstrate compliance pursuant to Subsection 49.4.3.1.

49.4.2.1 The OWNER AND/OR OPERATOR of a Boiler with a maximum heat input rating equal to or greater than 10.0 MMBtu/hr who has not conducted a performance test on that Boiler within 5 years prior to January 1, 2006 shall conduct a performance test on that Boiler to demonstrate compliance pursuant to Subsection 49.4.3.1 no later than July 1, 2006 and at a minimum of 5-year intervals thereafter.

49.4.3 The OWNER AND/OR OPERATOR of a Boiler with a maximum heat input rating equal to or greater than 10.0 MMBtu/hr who conducts a performance test on that Boiler in accordance with Subsections 49.4.1 and 49.4.2 shall comply with the following requirements:

49.4.3.1 Conduct a performance test: (1) in accordance with the EPA Test Methods listed in Table 49.4.3.1 or (2) upon prior approval by the CONTROL OFFICER and in accordance with 40 C.F.R. § 60.8(b) - to demonstrate compliance with the emission limitations established in the operating permit for the Boiler;

49.4.3.2 Submit a performance test protocol in accordance with Subsections 14.10 and 14.11; and

49.4.3.3 Furnish the CONTROL OFFICER with a written report containing the results of the performance test within 60 days after conducting such test in accordance with Subsection 14.12.

Table 49.4.3.1 EPA Test Methods

Test Method ^{a, b}	Pollutant Or Parameter
1	Sample and Velocity Traverses for Stationary Sources
2	Determination of Stack Gas Velocity and Volumetric Flow Rate
3A	Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)
4	Determination of Moisture Content in Stack Gases
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)
10	Determination of Carbon Monoxide Emissions from Stationary Sources

^a does not preclude the use of methods for small diameter stacks

^b As outlined in 40 C.F.R. Part 60

49.5 Burner Efficiency Tests:

- 49.5.1 Initial Burner Efficiency Test: The OWNER AND/OR OPERATOR of a new, MODIFIED, or RECONSTRUCTED Boiler with a maximum heat input rating equal to or greater than 4.0 MMBtu/hr shall conduct an initial burner efficiency test within 180 days after initial startup of such Boiler.
- 49.5.2 The OWNER AND/OR OPERATOR of a Boiler with a maximum heat input rating equal to or greater than 4.0 MMBtu/hr shall conduct burner efficiency tests (boiler tune-ups) on that Boiler. Burner efficiency tests shall be conducted in accordance with the manufacturer's recommendations and specifications for good combustion practices. If the manufacturer's recommendations and specifications are unavailable, the OWNER AND/OR OPERATOR may use an alternative method to perform the boiler efficiency test upon prior approval from the CONTROL OFFICER.
- 49.5.3 For a Boiler with a maximum heat input rating of 10.0 MMBtu/hr or greater, the OWNER AND/OR OPERATOR shall perform a burner efficiency test two times each year in accordance with Subsection 49.5.1. The OWNER AND/OR OPERATOR shall conduct the tests at least 5 months but no more than 7 months apart during each calendar year. If the Boiler has a permitted hourly limit of less than 2,000 hours per year, then the OWNER AND/OR OPERATOR may perform a burner efficiency test one time each calendar year beginning with the year 2006.
- 49.5.4 For a Boiler with a maximum heat input rating of 4.0 MMBtu/hr but less than 10.0 MMBtu/hr, the OWNER AND/OR OPERATOR shall perform a burner efficiency test in accordance with Subsection 49.5.1 one time each calendar year beginning with the year 2006.
- 49.5.5 If the documented actual hours of operation of a Boiler with a maximum heat input rating equal to or greater than 4.0 MMBtu/hr are zero during a calendar year, the OWNER AND/OR OPERATOR may choose not to perform a burner efficiency test on that Boiler during that calendar year. To document that the actual hours of operation for that Boiler are zero during a calendar year, the OWNER AND/OR OPERATOR shall install an hour meter prior to the beginning of that calendar year and maintain written records to verify the actual hours of operation during that calendar year.
- 49.5.6 If the documented actual hours of operation of a Boiler with a maximum heat input rating of equal to or greater than 10.0 MMBtu/hr are less than 50 hours during a calendar year, the OWNER AND/OR OPERATOR may perform a burner efficiency test on that Boiler only once during that calendar year. To document that the actual hours of operation for that Boiler are less than 50 hours, the OWNER AND/OR OPERATOR shall install an hour meter prior to the beginning of that calendar year and maintain

written records to verify the actual hours of operation during that calendar year.

49.5.7 A performance test conducted in accordance with Subsection 49.4 may replace a required burner efficiency test.

49.6 Record Keeping:

49.6.1 The OWNER AND/OR OPERATOR of a Boiler with a maximum heat input rating equal to or greater than 4.0 MMBtu/hr shall:

49.6.1.1 Maintain a written log of the type of fuel consumed and, on a quarterly basis, either the amount of fuel consumed or the hours of operation;

49.6.1.2 Maintain a copy of the burner efficiency test on-site and make such documentation available for inspection upon request of the CONTROL OFFICER; and

49.6.1.3 Maintain all written records on-site for a minimum of 5 years.

49.7 Reporting and Notifications:

49.7.1 The OWNER AND/OR OPERATOR of a Boiler with a maximum heat input rating equal to or greater than 10.0 MMBtu/hr shall provide notice of any performance test to the CONTROL OFFICER at least 45 days prior to the anticipated test date, but no more than 90 days prior to the anticipated test date.

49.7.2 The OWNER AND/OR OPERATOR of a Boiler with a maximum heat input rating of equal to or greater than 4.0 MMBtu/hr shall submit an annual report of the type of fuel consumed and, for each quarter of the year, either the amount of fuel consumed or the hours of operation. The OWNER AND/OR OPERATOR shall submit the annual report to the CONTROL OFFICER no later than March 31 of each calendar year.

History: Initial adoption:
Amended: April 23, 1992; May 17, 2001; December 16, 2003; July 1, 2004; December 20, 2005.