SOUTH CAROLINA
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

AIR POLLUTION CONTROL REGULATIONS AND STANDARDS

REGULATION 61-62.5
AIR POLLUTION CONTROL STANDARDS

STANDARD NO. 1
EMISSIONS FROM FUEL BURNING OPERATIONS

SECTION I - VISIBLE EMISSIONS

A. Existing Sources

No one shall discharge to the ambient air from any existing source constructed prior to February 11, 1971, smoke which exceeds opacity of forty (40) percent. The forty (40) percent opacity limit may be exceeded for soot blowing, but may not be exceeded for more than six (6) minutes in a one hour period nor be exceeded for more than a total of twenty-four (24) minutes in a twenty-four (24) hour period. Emissions caused by soot blowing shall not exceed sixty (60) percent.

B. New Sources

No one shall discharge to the ambient air from any source constructed on or after February 11, 1971, smoke which exceeds opacity of twenty (20) percent. The twenty (20) percent opacity limit may be exceeded for soot blowing, but may not be exceeded for more than six (6) minutes in a one hour period nor be exceeded for more than a total of twenty-four (24) minutes in a twenty-four (24) hour period. Emissions caused by soot blowing shall not exceed sixty (60) percent.

C. Special Provisions

Owners and operators shall, to the extent practicable, maintain and operate any source including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. In addition, the owner or operator of fuel burning sources except natural gas and propane fired units, shall maintain a log of the time, magnitude, duration, and any other pertinent information to determine periods of startup and shutdown and make available to the Department upon request.

D. Test Method

The method which is approved by the Department for determining compliance with opacity limitations under this Section is EPA Reference Method 9 (40 Code of Federal Regulations (CFR) 60, Appendix A, as revised July 1, 1986). Alternate methods may be utilized only if approved in advance by the Department and by the Environmental Protection Agency (EPA).

SECTION II - PARTICULATE MATTER EMISSIONS

A. Allowable Discharge

The allowable discharge of particulate matter resulting from fuel burning operations shall be limited to

the values obtained by use of Figure 1 and/or Part B. (For the purpose of determining heat input, total equipment capacity refers to total equipment capacity discharging through each stack. If a boiler has more than one (1) stack the total rated capacity will be the boiler rated capacity discharging to these stacks). Interpolation of Figure 1 for fuel burning operations of 1300 million British thermal units (Btu) per hour (Btu/hr) heat input and larger shall be accomplished by use of the equation:

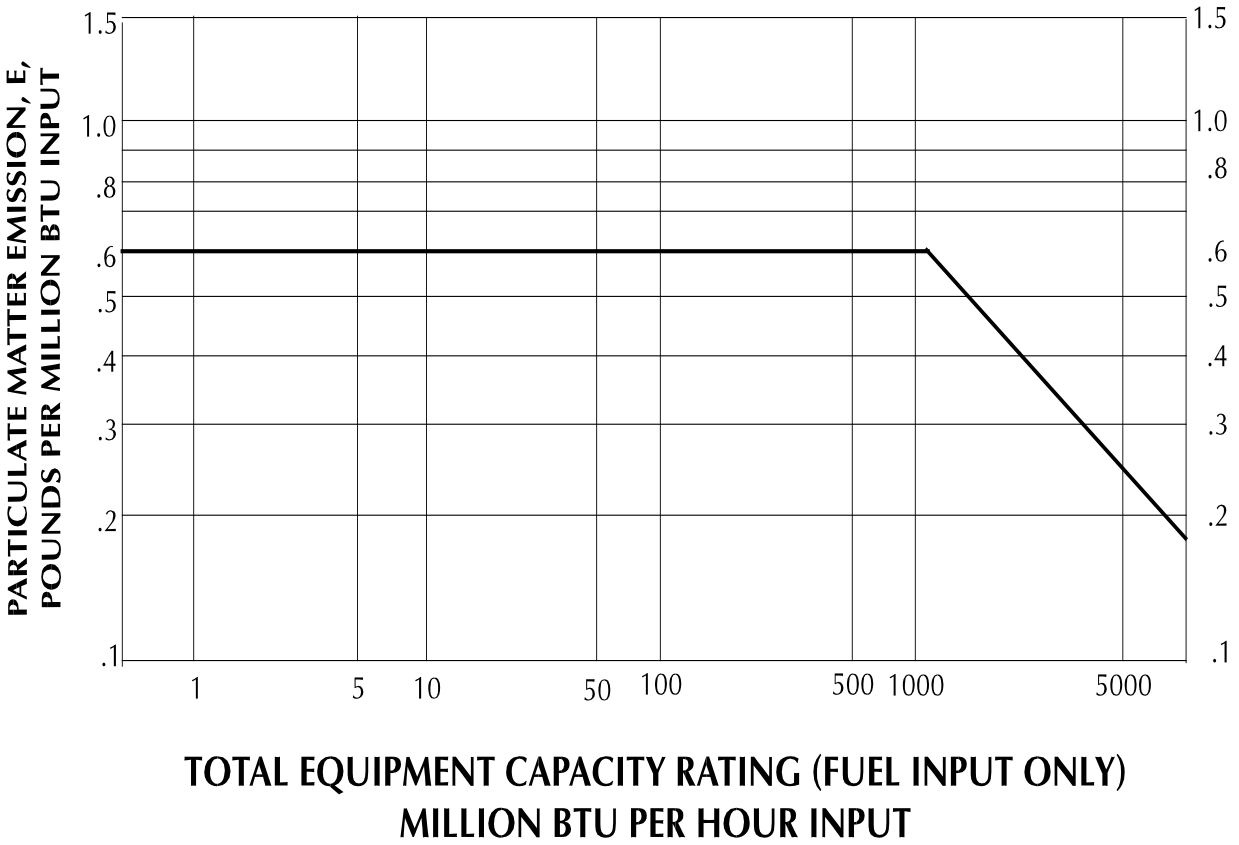
$$E = 57.84\ P^{-0.637}$$

where E = the allowable emission rate in pounds per million Btu heat input,
and P = million Btu/hr heat input

B. Special Provisions

All fuel burning operations of 10 million Btu/hr heat input and smaller constructed prior to February 11, 1971, shall be allowed 0.8 pounds (lbs) per million Btu input.

Figure 1



SECTION III - SULFUR DIOXIDE EMISSIONS

The maximum allowable discharge of sulfur dioxide (SO_2) from fuel burning operations shall be 2.3 lbs

SO_2 per million Btu input.

SECTION IV - OPACITY MONITORING REQUIREMENTS

A. Applicable Sources

1. Fossil Fuel Fired Boilers

The owner or operator of any fossil fuel-fired steam generator of more than 250 million Btu/hr heat input capacity shall install, calibrate, operate, and maintain no later than June 14, 1978, continuous monitoring system(s) for the measurement of opacity which meets the performance specifications of Section IV.D except where:

a. Gaseous fuel is the only fuel burned.

b. Oil or a mixture of gas and oil are the only fuels burned and the steam generator is able to comply with the provisions of Sections I and II of this standard without utilization of particulate matter collection equipment, and where the steam generator has never been found, through any administrative or judicial proceedings, to be in violation of Section I of this standard.

c. The steam generator operates with an annual average capacity factor of thirty (30) percent or less, as reported to the Federal Power Commission for calendar year 1974 or otherwise adequately demonstrated to the Department; and has not subsequently increased this factor to more than thirty (30) percent.

2. Woodwaste Boilers

The owner or operator of any woodwaste boiler, not equipped with a wet scrubber, will be required to install, calibrate, operate, and maintain continuous monitoring system(s) approved by the Department for the measurement of opacity, if it meets one or more of the criteria listed in items A.2.a and A.2.b. If a boiler is fired on more than one fuel, the total capacity will determine the applicability.

a. Any woodwaste boiler of at least 100×10^6 Btu/hr rated heat input.

b. Any woodwaste boiler, regardless of size, that has been operating in noncompliance with any applicable state air pollution control regulations and standards.

B. Continuous Opacity Monitor Reporting Requirements

1. The owner or operator of any fossil fuel-fired steam generator subject to the provisions of Section IV.A shall submit a written Continuous Opacity Monitor report to the Department semi-annually or more often if requested. All semi-annual reports must be postmarked by the 30th day following the end of each semi-annual period. The report shall include, at a minimum, the information in items B.1.a through B.1.c below. A letter shall be sent in lieu of a semi-annual report if no incidences occurred during the reporting period.

a. All integrated six (6) minute opacity measurements for periods during which the applicable provisions of Section I have been exceeded, together with their nature and cause.

b. For periods of monitoring system malfunction:

(i) The date and time identifying each period during which the monitoring system was inoperative, except for zero and span checks.

(ii) The nature of monitoring system repairs or adjustments.

(iii) Proof of opacity monitoring system performance may be required by the Department whenever repairs or adjustments have been made.

c. Boiler system repairs or adjustments made to correct violations of the provisions of Section I.

2. Alternative data reporting procedures may be allowed if the owner or operator shows, to the satisfaction of the Department, that these procedures are at least as accurate as those described.

3. The owner or operator shall maintain a file of all information contained in the semi-annual reports, calibration data for the opacity monitoring system(s), relevant records of adjustments and maintenance performed on such system(s), and all other data generated by the continuous opacity monitoring system(s), for a minimum of two (2) years from the date of submission of such reports or collection of such data. The information contained on file must be made available for review by Department personnel upon request.

C. Exemption from Reporting Requirements

A temporary exemption from the opacity monitoring and reporting requirements of Section IV may be granted during any period of monitoring system(s) malfunction, provided the owner or operator shows, to the satisfaction of the Department, that the malfunction was unavoidable and is being repaired as expeditiously as possible.

D. Equipment Performance Specifications

1. The continuous opacity monitoring system(s) required by Section IV.A.1 (for fossil fuel fired steam generators) shall conform with the performance specifications set forth in 40 CFR 60, Appendix B, Performance Specification 1, as revised July 1, 1986, which is incorporated by reference as a part of this standard except that where the term “Administrator” is used the term “Department” shall be substituted. In addition, the opacity monitoring system(s) shall complete a minimum of one (1) cycle of operation for each successive 10-second period, be installed such that representative measurements of opacity from the affected steam generator are obtained, and have an instrument span of approximately eighty (80) percent opacity.

2. The owner or operator shall record the zero and span drift in accordance with the method prescribed by the manufacturer of such opacity monitoring system(s); subject the system(s) to the manufacturer’s recommended zero and span check at least once daily unless the manufacturer has recommended adjustments at shorter intervals, in which case such recommendations shall be followed; adjust the zero and span whenever the 24-hour zero drift or 24-hour calibration drift limits of 40 CFR 60, Appendix B, Performance Specification 1, as revised July 1, 1986, are exceeded; adjust the opacity monitoring system(s) purchased prior to September 11, 1974, whenever the 24-hour zero drift or 24-hour calibration drift exceeds four (4) percent opacity for those generators constructed prior to February 11, 1971, and two (2) percent opacity for those generators constructed after February 11, 1971.

3. The monitoring systems must be approved by the Department prior to installation.

E. Monitor Location

When the effluents from two (2) or more affected steam generators of similar design and operating characteristics are combined before released to the atmosphere, the opacity monitoring system(s) shall be installed on the combined effluent. When the affected steam generators are not of similar design and operating characteristics, or when the effluent from one (1) affected steam generator is released to the atmosphere through more than one (1) point, the owner or operator shall apply for an alternate procedure to comply with the requirements of Section IV.

F. Exemptions from Monitoring Requirements

Whenever the requirements for continuous opacity monitoring cannot be implemented by the owner or operator due to physical source limitations, extreme economic burden, or infrequent steam generator operation of less than thirty (30) days per year, or when the specified monitoring procedure would not provide accurate opacity determinations, alternate monitoring and reporting requirements may be approved on a case-by-case basis provided the owner or operator submits a written request to the Department which includes, but is not limited to:

1. The basis or reason(s) that alternate requirements are necessary;

2. A proposal of the alternate monitoring and reporting requirements; and

3. Any other information needed by the Department to make a determination that the alternate requirements are adequate to meet the intent of Section IV.

SECTION V - EXEMPTIONS

The following sources shall be exempt from the provisions of this standard:

A. Residences of four (4) families or less.

B. Ocean-going vessels actually engaged in the physical process of national or international trade or defense.

SECTION VI - PERIODIC TESTING

An owner or operator of any source listed below shall ensure that scheduled periodic tests for particulate matter emissions are conducted every two (2) years or as required by permit conditions and are performed in accordance with the provisions of Regulation 61-62.1, Section IV, Source Tests. An owner or operator shall demonstrate compliance with SO_2 emissions by source testing, continuous monitoring, or fuel analysis as required by permit conditions.

A. Oil-fired boilers greater than 250×10^6 Btu/hr rated input.

B. Coal-fired boilers greater than 50×10^6 Btu/hr rated input.

C. Woodwaste or combination woodwaste boilers greater than 20×10^6 Btu/hr rated input.

SECTION VII - [RESERVED]

R. 61-62.5, Standard No. 1 History - *South Carolina State Register*:

Vol. 7, Issue No. 2, (Doc. No. ?), February 25, 1983;
Vol. 9, Issue No. 5, (Doc. No. 457), May 24, 1985;
Vol. 13, Issue No. 2, (Doc. No. 868), February 24, 1989;
Vol. 12, Issue No. 4, (Doc. No. 970), April 22, 1988;
Vol. 22, Issue No. 6, (Doc. No. 2244), June 26, 1998;
Vol. 25, Issue No. 10, (Doc. No. 2648), October 26, 2001;
Vol. 35, Issue No. 5, (Doc. No. 4130), May 27, 2011;
Vol. 36, Issue No. 5, (Errata), May 25, 2012;
Vol. 36, Issue No. 9, (Errata), September 28, 2012;
Vol. 38, Issue No. 6, (Doc. No. 4388), June 27, 2014;
Vol. 39, Issue No. 6, (Doc. No. 4481), June 26, 2015.
Vol. 40, Issue No. 9, (Doc. No. 4650), September 23, 2016.