

CHAPTER Env-A 2300 MITIGATION OF REGIONAL HAZE

Statutory Authority: RSA 125-C:4, I(a), (b), (k)

PART Env-A 2301 PURPOSE; APPLICABILITY; DEFINITIONS

Env-A 2301.01 Purpose. The purpose of this chapter is to establish emission standards for sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and total suspended particulate matter (TSP) at certain fossil-fuel-fired and biomass-fired steam generating units in order to reduce emissions that contribute to regional haze. These rules are necessary to ensure compliance with §169A of the Act and regional haze program requirements established at 40 CFR 51.308, including but not limited to the provisions for best available retrofit technology (BART).

Source. #9846, eff 1-8-11; ss by #12766, eff 5-1-19; ss by #13254, eff 8-25-21

Env-A 2301.02 Applicability. This chapter shall apply to:

(a) Any fossil-fuel-fired steam generating unit having a maximum heat input rate of more than 1,000 million BTUs per hour that existed as of August 7, 1977 that has either a:

- (1) Cyclone-firing, wet-bottom boiler fueled by coal or any combination of fuels using coal; or
- (2) Tangential-firing, dry-bottom boiler fueled by oil or gas or any combination of oil or gas; and

(b) Any spreader stoker type, biomass boiler having a heat input rate of more than 400 million BTUs per hour that existed as of January 1, 1990, provided that compliance shall be determined beginning on the 2021 effective date of this chapter.

Source. #9846, eff 1-8-11; ss by #12766, eff 5-1-19; ss by #13254, eff 8-25-21

Env-A 2301.03 Definitions.

(a) “Best available retrofit technology (BART)” means “best available retrofit technology” as defined in 40 CFR 51.301, reprinted in Appendix B.

(b) “Biomass” means “biomass” as defined in RSA 125-C:2, III-a, reprinted in Appendix C.

(c) “Coal” means “coal” as defined in Env-A 1302, reprinted in Appendix C.

(d) “Gas” means “gas or gaseous fuel” as defined in Env-A 1302, reprinted in Appendix C.

(e) “Maximum heat input rate” means “maximum heat input rate” as defined in Env-A 1302, reprinted in Appendix C.

(f) “Oil” means any petroleum-based liquid fuel oil, including distillate and residual fuel oils.

(g) “Regional haze” means “regional haze” as defined in 40 CFR 51.301, reprinted in Appendix B.

(h) “Stack test” means the sampling, analysis, and reporting of emissions from a stationary point source in accordance with testing procedures specified in Env-A 800. The term includes “performance test”.

(i) “Total suspended particulate matter (TSP)” means particulate matter as measured by the “Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method)” specified in Appendix B of 40 CFR Part 50.

(j) “Visibility impairment” means “visibility impairment” as defined in 40 CFR 51.301, reprinted in Appendix B.

Source. #9846, eff 1-8-11; ss by #12766, eff 5-1-19; ss by #13254, eff 8-25-21

PART Env-A 2302 EMISSION STANDARDS FOR MITIGATION OF REGIONAL HAZE

Env-A 2302.01 Emission Standards Applicable to Cyclone-Firing, Wet-Bottom Boilers.

(a) For any cyclone-firing, wet-bottom boiler subject to this chapter whose maximum heat input rate is less than or equal to 3,000 million BTUs per hour, the following emission rates shall apply:

- (1) SO<sub>2</sub> emissions shall not exceed limitations specified in permit conditions established in accordance with Env-A 600, as recorded by a continuous emissions monitoring system (CEMS) as specified in Env-A 2303;
- (2) NO<sub>x</sub> emissions shall not exceed the limitations for wet-bottom utility boilers specified in Env-A 1303, as recorded by a CEMS as specified in Env-A 2303; and
- (3) TSP emissions shall not exceed 0.08 pound (lb.) per million BTUs, demonstrated by completion of periodic stack tests as specified in Env-A 2304.01(b) on the outlet side of the final emission control device.

(b) For any cyclone-firing, wet-bottom boiler subject to this chapter whose maximum heat input rate is greater than 3,000 million BTUs per hour, the following emission rates shall apply:

- (1) SO<sub>2</sub> emissions shall not exceed limitations specified in permit conditions established in accordance with Env-A 600, as recorded by a CEMS as specified in Env-A 2303;
- (2) NO<sub>x</sub> emissions shall not exceed the limitations for wet-bottom utility boilers specified in Env-A 1303, as recorded by a CEMS as specified in Env-A 2303; and
- (3) TSP emissions shall not exceed 0.08 lb. per million BTUs, demonstrated by completion of periodic stack tests as specified in Env-A 2304.01(b) on the outlet side of the final emission control device.

Source. #9846, eff 1-8-11; ss by #12766, eff 5-1-19; ss by #13254, eff 8-25-21

Env-A 2302.02 Emission Standards Applicable to Tangential-Firing, Dry-Bottom Boilers. For any tangential-firing, dry-bottom boiler subject to this chapter, the following emission rates shall apply:

(a) SO<sub>2</sub> emissions shall not exceed 0.50 lb. per million BTUs on a 30-day rolling average basis, as recorded by a CEMS as specified in Env-A 2303;

(b) NO<sub>x</sub> emissions shall not exceed limitations specified in permit conditions established in accordance with Env-A 600, as recorded by a CEMS as specified in Env-A 2303; and

(c) TSP emissions shall not exceed 0.04 lb. per million BTUs, demonstrated by completion of stack tests as specified in Env-A 2304.02.

Source. #9846, eff 1-8-11; amd by #10727, eff 11-22-14; ss by #12766, eff 5-1-19; ss by #13254, eff 8-25-21

Env-A 2302.03 Emission Standards Applicable to Spreader Stoker Type, Biomass Boilers. For any spreader stoker type, biomass boiler subject to this chapter, the following emission rates shall apply:

(a) NO<sub>x</sub> emissions shall not exceed 0.085 lb. per million BTUs on a 24-hr calendar day average basis, as recorded by a CEMS as specified in Env-A 2303; and

(b) NO<sub>x</sub> emissions shall not exceed 0.075 lb. per million BTUs on a 30-day rolling average basis, as recorded by a CEMS as specified in Env-A 2303.

Source. #13254, eff 8-25-21

#### PART Env-A 2303 CONTINUOUS EMISSIONS MONITORING SYSTEMS

Env-A 2303.01 Requirements for Continuous Emissions Monitoring Systems. The owner or operator of a source whose emissions are required to be monitored and recorded by a CEMS as provided in Env-A 2302.01, Env-A 2302.02, or Env-A 2302.03 shall:

(a) Install, calibrate, operate, maintain, and perform quality assurance testing of the CEMS in accordance with Env-A 800;

(b) For sources subject to a 30-day rolling average, calculate in accordance with the method specified in Env-A 800;

(c) Comply with methods of compliance determinations specified in permit conditions established in accordance with Env-A 600; and

(d) Comply with recordkeeping requirements for CEMS specified in Env-A 900.

Source. #9846, eff 1-8-11; ss by #12766, eff 5-1-19; ss by #13254, eff 8-25-21

#### PART Env-A 2304 PERFORMANCE TESTING

Env-A 2304.01 Performance Testing Requirements Applicable to Cyclone-Firing, Wet-Bottom Boilers. For any cyclone-firing, wet-bottom boiler subject to this chapter, performance tests for TSP emissions shall be conducted in accordance with Env-A 800, subject to the following:

(a) Beginning on the later of July 1, 2015 or the date a source becomes subject to this chapter, stack tests shall be conducted every 3 years; and

(b) At any facility where an affected unit shares a common stack with a second affected unit, the stack emissions shall be tested as from one source, by either of the following methods:

(1) With both units operating simultaneously, a stack test on the combined emissions from both units, or

(2) With one unit operating at a time, separate stack tests on the emissions from each unit.

Source. #9846, eff 1-8-11; ss by #12766, eff 5-1-19; ss by #13254, eff 8-25-21

Env-A 2304.02 Performance Testing Requirements Applicable to Tangential-Firing, Dry-Bottom Boilers. For any tangential-firing, dry-bottom boiler subject to this chapter, performance tests shall be conducted in accordance with Env-A 800.

Source. #9846, eff 1-8-11; ss by #12766, eff 5-1-19; ss by #13254, eff 8-25-21

**APPENDIX A: STATE STATUTES, FEDERAL STATUTES/REGULATIONS IMPLEMENTED**

<b>Rule Section(s)</b>	<b>State Statute(s) Implemented</b>	<b>Federal Statute/Regulation Implemented</b>
Env-A 2300	RSA 125-C:1;RSA 125-C:6, XIV	42 U.S.C. §7491; 40 CFR §51.308

**APPENDIX B: FEDERAL DEFINITIONS****40 CFR § 51.301**

*Best Available Retrofit Technology (BART)* means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

*Regional haze* means visibility impairment that is caused by the emission of air pollutants from numerous anthropogenic sources located over a wide geographic area. Such sources include, but are not limited to, major and minor stationary sources, mobile sources, and area sources.

*Visibility impairment* or *anthropogenic visibility impairment* means any humanly perceptible difference due to air pollution from anthropogenic sources between actual visibility and natural visibility on one or more days. Because natural visibility can only be estimated or inferred, visibility impairment also is estimated or inferred rather than directly measured.

**APPENDIX C: STATE DEFINITIONS****RSA 125-C: 2**

III-a. “Biomass” means organic matter used as a fuel, not including wood derived from construction and demolition debris, as defined in RSA 149-M:4, IV-a; wood which has been chemically treated; or agricultural crops or aquatic plants or byproducts from such crops or plants, which have been used to rehabilitate a contaminated or brownfields site through a process known as “phytoremediation.”

**Env-A 1302**

Env-A 1302.07 “Coal” means all solid fuels classified as anthracite, bituminous, lignite, or subbituminous according to the ASTM Standard Classification of Coals by Rank, ASTM D 388, coal refuse, and petroleum coke. The term includes coal-derived synthetic fuels, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures.

Env-A 1302.20 “Gas or gaseous fuel” means natural gas, liquid petroleum gas, or gaseous substances produced synthetically from coal or oil, or derived from the decomposition of organic matter, or derived as a by-product of a manufacturing process, and which can be used to create useful heat or mechanical energy, or a combination thereof.

Env-A 1302.30 “Maximum heat input rate” means the maximum steady state fuel firing rate, in Btu per hour of gross heat input, of fuel burning equipment as determined in the design rating of the equipment manufacturer and the characteristics of the fuel-burning devices.