

## Required Emission Limits for Major Source Boilers and Process Heaters

Subcategory	Hg, lb/TBtu	HCl, Lb/MMBtu	CO, ppm @ 3% O <sub>2</sub>	PM lb/MMbtu OR (TSM, lb/MMBtu)
All new and existing small units (<10 MMBtu/hr)	--	--	--	--
New Large Pulverized Coal	0.8	0.022	130 (stack test) <b>OR</b> 320 <sup>a</sup> (CEMS – 30-day rolling average)	0.0011 <b>OR</b> (0.000023)
New Large Coal-fired Stoker	0.8	0.022	130 (stack test) <b>OR</b> 340 <sup>a</sup> (CEMS – 30-day rolling average)	0.0011 <b>OR</b> (0.000023)
New Large Coal-fired Fluidized Bed	0.8	0.022	130 (stack test) <b>OR</b> 230 <sup>a</sup> (CEMS – 30-day rolling average)	0.0011 <b>OR</b> (0.000023)
New Large Coal-fired Fluidized Bed with integrated heat exchanger	0.8	0.022	140 (stack test) <b>OR</b> 150 <sup>a</sup> (CEMS – 30-day rolling average)	0.0011 <b>OR</b> (0.000023)
New Large Wet Biomass Stoker	0.8	0.022	620 (stack test) <b>OR</b> 390 <sup>a</sup> (CEMS – 30-day rolling average)	0.030 <b>OR</b> 0.000026
New Large Kiln-dried Biomass Stoker	0.8	0.022	460 (stack test)	0.030 <b>OR</b> 0.0040
New Large Biomass Fluidized Bed	0.8	0.022	230 (stack test) <b>OR</b> 310 <sup>a</sup> (CEMS – 30-day rolling average)	0.0098 <b>OR</b> 0.000083
New Large Biomass Suspension Burner	0.8	0.022	2,400 (stack test) <b>OR</b> 2,000 <sup>a</sup> (CEMS – 10-day rolling average)	0.030 <b>OR</b> 0.0065
New Large Biomass Dutch Oven/Pile Burner	0.8	0.022	330 (stack test) <b>OR</b> 520 <sup>a</sup> (CEMS – 10-day rolling average)	0.0032 <b>OR</b> 0.000039
New Large Biomass Fuel Cell	0.8	0.022	910 (stack test)	0.020 <b>OR</b> 0.000029

<b>Subcategory</b>	<b>Hg, lb/TBtu</b>	<b>HCl, Lb/MMBtu</b>	<b>CO, ppm @ 3% O2</b>	<b>PM lb/MMbtu OR (TSM, lb/MMBtu)</b>
New Large Biomass Hybrid Suspension Grate	0.8	0.022	1,100 (stack test) <b>OR</b> 900 <sup>a</sup> (CEMS – 30-day rolling average)	0.026 <b>OR</b> 0.00044
New Large Heavy Liquid	0.48	0.00044	130	0.013 <b>OR</b> 0.000075
New Large Light Liquid	0.48	0.00044	130	0.0011 <b>OR</b> 0.000029
New Large Liquid Non-continental <sup>b</sup>	0.48	0.00044	130	0.023 <b>OR</b> 0.00086
New Large Gas 2 (other) Gases <sup>c</sup>	7.9	0.0017	130	0.0067 <b>OR</b> 0.00021
Existing Large Pulverized Coal	5.7	0.022	130 (stack test) <b>OR</b> 320 <sup>a</sup> (CEMS – 30-day rolling average)	0.040 <b>OR</b> (0.000053)
Existing Large Coal-fired Stoker	5.7	0.022	160 (stack test) <b>OR</b> 340 <sup>a</sup> (CEMS – 30-day rolling average)	0.040 <b>OR</b> (0.000053)
Existing Large Coal-fired Fluidized Bed	5.7	0.022	130 (stack test) <b>OR</b> 230 <sup>a</sup> (CEMS – 30-day rolling average)	0.040 <b>OR</b> (0.000053)
Existing Large Wet Biomass Stoker	5.7	0.022	1,500 (stack test) <b>OR</b> 720 <sup>a</sup> (CEMS – 30-day rolling average)	0.037 <b>OR</b> 0.00024
Existing Large Kiln-dried Biomass Stoker	5.7	0.022	460 (stack test)	0.32 <b>OR</b> 0.0040
Existing Large Biomass Fluidized Bed	5.7	0.022	470 (stack test) <b>OR</b> 310 <sup>a</sup> (CEMS – 30-day rolling average)	0.11 <b>OR</b> 0.0012

Subcategory	Hg, lb/TBtu	HCl, Lb/MMBtu	CO, ppm @ 3% O2	PM lb/MMbtu OR (TSM, lb/MMBtu)
Existing Large Biomass Suspension Burner	5.7	0.022	2,400 (stack test) <b>OR</b> 2,000 <sup>a</sup> (CEMS – 10-day rolling average)	0.051 <b>OR</b> 0.0065
Existing Large Biomass Dutch Oven/Pile Burner	5.7	0.022	770 (stack test) <b>OR</b> 520 <sup>a</sup> (CEMS – 10-day rolling average)	0.28 <b>OR</b> 0.0020
Existing Large Biomass Fuel Cell	5.7	0.022	1,100 (stack test)	0.020 <b>OR</b> 0.0058
Existing Large Biomass Hybrid Suspension Grate	5.7	0.022	2,800 (stack test) <b>OR</b> 900 <sup>a</sup> (CEMS – 30-day rolling average)	0.44 <b>OR</b> 0.00045
Existing Large Heavy Liquid	2.0	0.0011	130	0.062 <b>OR</b> 0.00020
Existing Large Light Liquid	2.0	0.0011	130	0.0079 <b>OR</b> 0.000062
Existing Large Liquid Non-continental <sup>b</sup>	2.0	0.0011	130	0.27 <b>OR</b> 0.00086
Existing Large Gas 2 (other) Gases <sup>c</sup>	7.9	0.0017	130	0.0067 <b>OR</b> 0.00021

<sup>a</sup> To demonstrate compliance with the applicable alternative CO CEMS emission standard, you must install, certify, operate, and maintain a CO CEMS and an oxygen analyzer.

<sup>b</sup> A *non-continental unit* means an industrial, commercial, or institutional boiler or process heater meeting the definition of the unit designed to burn liquid subcategory located in the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

<sup>c</sup> Gas 2 (other) Gases are gaseous fuels other than burns only natural Gas and refinery gas.

**\*FOUND IN EPA'S SMALL ENTITY COMPLIANCE GUIDE FOR MAJOR SOURCE BOILERS AND PROCESS HEATERS**