

RULE 403 GENERAL LIMITATIONS ON THE DISCHARGE OF AIR CONTAMINANTS  
(Adopted 11/19/85; Revised 9/14/99; 7/24/01; 5/18/2004)

A. Applicability

This Rule applies to the discharge of Air Contaminants, Combustion Contaminants, and Particulate Matter into the Atmosphere

B. Requirements

- B.1 A Person shall not discharge into the Atmosphere from any single Emissions Unit, Particulate Matter, including lead and lead compounds, in excess of the rate shown in Table 403-1. For the purposes of this Rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period. Where the Process Weight Per Hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
- B.2 A Person shall not discharge into the Atmosphere from any single Emissions Unit, Air Contaminants in excess of the concentrations at Standard Conditions shown in Table 403-2. Where the volume discharged is between figures listed in the table, the exact concentration allowed to be discharged shall be determined by linear interpolation.
- B.3 A Person shall not discharge into the Atmosphere from any single Emissions Unit, constructed after July 1, 1972, Combustion Contaminants exceeding in concentration at the point of discharge of 0.2 grains per dry cubic foot of gas, calculated to 12 percent of carbon dioxide (CO<sub>2</sub>) at Standard Conditions averaged over 25 consecutive minutes. In measuring the Combustion Contaminants from Incinerators used to dispose of Combustible Refuse by burning, the carbon dioxide (CO<sub>2</sub>) produced by combustion of any liquid or gaseous fuels shall be excluded from the calculation to 12 percent of carbon dioxide (CO<sub>2</sub>).
- B.4 A Person shall not discharge Combustion contaminants from new or existing stationary electrical utility generating units, excepting Emergency Standby Generators, in concentrations at the point of discharge of 0.01 grains per dry standard cubic foot of gas, calculated to 3 percent O<sub>2</sub> for boilers, and 15 percent O<sub>2</sub> for gas turbines.
- B.5 A Person shall not discharge Combustion Contaminants derived from the fuel in excess of 10 pounds per hour from a new or existing stationary Fuel Burning Equipment other than electrical utility generating units.

C. Test Methods

Concentrations of Combustion Contaminants shall be determined using EPA Method 5, or any other applicable EPA approved test method, that has also been approved, for this application, by the APCO. Stack flow rate shall be measured using EPA Method 1 and 2 and concentrations of carbon dioxide and oxygen shall be determined using EPA Method 3A.

D. Test Procedures

D.1 All emission units operated at major sources covered under Sections B.3, B.4 and B.5 shall demonstrate compliance through emission compliance testing not less than once every 12 months. For emission units which operate less than 100 hours per 12 month period (as demonstrated by operational logs) testing shall be conducted not less than once every 36 months.

D.2 The results of all compliance and test reports shall be retained for five (5) years from the date of each entry and made available to Air Pollution Control District personnel upon request.

E. Exemptions:

Sources are exempt from the requirements specified in Section B.3 and B.4 during start-up or shutdown and during changes in load when bringing the combustion process up to operating levels. Start up or shutdown may not last longer than is necessary to reach stable temperatures. The start-up or shutdown may not exceed the following:

E.1 Eight (8) hours for boilers and process heaters of more than 40 MM Btu per hour.

E.2 Six (6) hours for boilers or process heaters of equal to or less than 40 MM Btu per hour.

E.3 Fifteen minutes for simple cycle stationary gas turbines and two hours for stationary combined cycle and cogeneration cycle gas turbines.

**Table 403-1**

Process Weight per hour (pounds/hour)	Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate discharged from all points of process pounds/hour)	Process Weight per hour (pounds/hour)	Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate discharged from all points of process pounds/hour)
50	0.24	12,000	10.1
100	0.46	14,000	10.8
150	0.66	16,000	11.2
200	0.85	18,000	11.5
250	1.00	20,000	11.8
300	1.10	25,000	12.4
350	1.23	30,000	13.0
400	1.34	35,000	13.5
450	1.44	40,000	13.9
500	1.54	45,000	14.3
600	1.73	50,000	14.7
700	1.90	60,000	15.3
800	2.07	70,000	15.9
900	2.22	80,000	16.4
1,000	2.38	90,000	16.9
1,200	2.66	100,000	17.3
1,400	2.93	120,000	18.1
1,600	3.19	140,000	18.8
1,800	3.43	160,000	19.4
2,000	3.66	180,000	19.9
2,500	4.21	200,000	20.4
3,000	4.72	250,000	21.6
3,500	5.19	300,000	22.5
4,000	5.64	350,000	23.4
4,500	6.07	400,000	24.1

**Table 403-1**

Process Weight per hour (pounds/hour)	Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate discharged from all points of process pounds/hour)	Process Weight per hour (pounds/hour)	Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate discharged from all points of process pounds/hour)
5,000	6.49	450,000	24.8
5,500	6.89	500,000	25.4
6,000	7.27	600,000	26.6
6,500	7.64	700,000	27.6
7,000	8.00	800,000	28.4
7,500	8.36	900,000	29.3
8,000	8.70	1,000,000 or more	30.0
8,500	9.04		
9,000	9.36		
9,050	9.68		
10,000	10.0		

**Table 403-2**

Volume Discharged Calculated as Dry Gas at Standard Conditions	Maximum Concentration of Air Contaminants Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	Volume Discharged Calculated as Dry Gas at Standard Conditions	Maximum Concentration of Air Contaminants Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions
Cubic Feet per Minute	Grains Per Cubic Foot	Cubic Feet Per Minute	Grains Per Cubic Foot
883 or less	.196	31780	.0515
1059	.183	35310	.0493
1236	.173	38850	.0476
1413	.165	42380	.0463
1589	.158	45910	.0445
1766	.152	49440	.0437
2119	.141	52970	.0424
2472	.134	61800	.0402
2825	.127	70630	.0380
3178	.122	79460	.0362
3531	.117	88290	.0349
4414	.107	105900	.0327
5297	.100	141300	.0293
6180	.0947	176600	.0271
7063	.0900	211900	.0253
8829	.0830	282500	.0227
10590	.0773	353100	.0210
12360	.0730	529700	.0179
14130	.0694	706300	.0162
15890	.0664	882900	.0148
17660	.0637	1059000	.0140
21190	.0598	1413000	.0122

**Table 403-2**

Volume Discharged Calculated as Dry Gas at Standard Conditions	Maximum Concentration of Air Contaminants Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	Volume Discharged Calculated as Dry Gas at Standard Conditions	Maximum Concentration of Air Contaminants Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions
24720	.0563	1766000	.0114
28250	.0537	2472000 or more	0100