

**CHAPTER 6 PARTICULATES****Section**

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**600 FUEL-BURNING PARTICULATE EMISSION**

600.1 The emission of particulate matter from any fuel burning equipment shall not be in excess of the rate determined by the following formula:

$$E = 0.17455 H^{0.23522}$$

Where:

E = Allowable emissions in pounds per million British Thermal Units (BTUs) of heat input; and

H = Heat input to the fuel-burning equipment in millions of BTU per hour;

provided, that:

- (a) Nothing in § 600.1 shall be construed to allow the emission of particulate matter from any fuel-burning equipment in excess of the rate of thirteen hundredths pounds per million (0.13 ppm) BTU of heat input; and
- (b) Nothing herein shall be construed to require the emission of particulate matter from any fuel-burning equipment to be lower than the rate of two-hundredths pounds per million (0.02 ppm) BTU of heat input.

600.2 Compliance with or violation of § 600.1 shall be determined by performance tests conducted when the fuel-burning equipment (from now on referred to as “equipment”) is operating under conditions encountered in normal operation that create the worst emissions in relation to allowable emissions. Tests shall be conducted at the maximum continuous operating capacity of the equipment unless the Mayor has reason to believe that the worst emissions in relation to allowable emissions occur under other conditions.

- 600.3 For equipment equipped for the blowing of soot, the frequency of soot blowing during performance tests shall be proportioned to the frequency of soot blowing during the conditions at which the equipment is tested.
- 600.4 Equipment shall not be specially tuned or optimized immediately before performance testing unless the owner or operator of the equipment represents in writing to the Mayor that the equipment will be maintained in an optimized condition subsequent to performance testing.
- 600.5 The conditions for testing may be modified by the Mayor to suit specified sampling conditions or needs based on good practice, judgment and experience; provided, that no such modification shall have the effect of increasing the stringency of the standard.
- 600.6 When determining compliance with or violation of § 600.1 by performance tests, the test results shall be calculated using the method described in § 60.45(f)(5) of Title 40 CFR, revised as of July 1, 1982.
- 600.7 The blowing of soot from any fuel-burning equipment fired by solid fuels shall be prohibited except during the hours of 10 a.m to 4 p.m.; provided, that the Mayor may allow the blowing of soot during other periods upon a finding that the blowing of soot is desirable for the efficient operation of the fuel-burning equipment or for the safety of personnel or equipment.

**AUTHORITY:** Unless otherwise noted, the authority for this chapter is § 412 of the District of Columbia Self-Government and Governmental Reorganization Act, as amended, 87 Stat. 790, Pub. L. No. 93-198 codified at D.C. Official Code § 1-204.04(a) (2001); and § 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C Act 5-230) codified at D.C. Official Code § 8-101.06 (2001); and Mayor's Order 93-12 dated February 16, 1993.

**SOURCE:** Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 565, 607 (February 1, 1985).

## **601 ROTARY CUP BURNERS**

- 601.1 The sale, installation, or use of a rotary cup burner or the replacement of any existing burner with a rotary cup burner shall be prohibited.
- 601.2 The sale for use or use of fuel oil in any rotary cup burner shall be prohibited.

**SOURCE:** Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 565, 608 (February 1, 1985).

## **602 INCINERATORS**

- 602.1 The use of single chamber and flue-fed incinerators shall be prohibited. No person

shall be permitted to use an incinerator unless it is of multiple chamber design, and is otherwise in compliance with this subtitle.

- 602.2 Operation of any incinerator built after July 7, 1972, shall be prohibited if the incinerator emits more than three hundredths (0.03) grains of particulate matter per dry standard cubic foot of exhaust gas corrected to twelve percent (12%) carbon dioxide, without the contribution of carbon dioxide from auxiliary fuel.
- 602.3 Use of any incinerator which was in existence on July 7, 1972, is prohibited, if the incinerator has a capacity of more than four hundred (400) pounds per hour, or emits more than eight one hundredths (0.08) grains of particulate matter per dry standard cubic foot of exhaust gas corrected to twelve percent (12%) carbon dioxide, without the contribution of carbon dioxide from auxiliary fuel.
- 602.4 The District facility known as Solid Waste Reduction Center No. 1 shall be operated so as not to discharge into the atmosphere particulate matter which is in excess of eight one hundredths (0.08) grains of particulate matter per dry standard cubic foot of exhaust gas corrected to twelve percent (12%) carbon dioxide, without the contribution of carbon dioxide from auxiliary fuel.
- 602.5 No new incinerator shall commence operation except for an incinerator to be operated by or for the District of Columbia Government and except where the Mayor shall find that any other system of waste disposal would endanger the public health. These incinerators shall be subject to § 602.2.
- 602.6 An incinerator shall operate only between the hours of 10 a.m. and 4 p.m. This restriction shall not apply to incinerators with a refuse-burning capacity of five (5) tons per hours or more.

**SOURCE:** Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165, §602, 32 DCR 565, 608 (February 1, 1985).

### **603 PARTICULATE PROCESS EMISSIONS**

- 603.1 The discharge of particulate matter into the atmosphere from any process shall not exceed the emission limits set forth in Appendix 6-1. The allowable limits shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust gas.
- 603.2 Where the process or the design of the equipment permits more than one (1) interpretation of this section, the interpretation that results in the minimum value of allowable emissions shall apply.
- 603.3 Adding diluted air to the exhaust gas stream for the purpose of complying with the provisions of §§ 603.1 through 603.2 shall be prohibited.

**SOURCE:** Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 565, 609 (February 1, 1985).

**604 OPEN BURNING**

604.1 Open fires shall be prohibited, except as otherwise provided by § 604.2.

604.2 Open fires may be permitted for one (1) or more of the following reasons or purposes:

- (a) The performance of an official duty by any public health or public safety officer, after notification to the Mayor;
- (b) Prevention of a fire hazard which cannot be abated by other means;
- (c) Instruction of public fire fighters under the supervision of a designated fire marshal;
- (d) Recreational purposes, including the cooking of food for human consumption on other than commercial premises; or
- (e) Providing warmth for construction or other workers by use of Salamander heaters or other heating devices approved by the Mayor.

**SOURCE:** Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 565, 609 (February 1, 1985).

**605 CONTROL OF FUGITIVE DUST**

605.1 Reasonable precautions shall be taken to minimize the emission of any fugitive dust into the outdoor atmosphere. The reasonable precautions shall include, but not be limited to, the following:

- (a) In the case of unpaved roads, unpaved roadways, and unpaved parking lots;
  - (1) Use of binders, chemicals, or water in sufficient quantities and at sufficient frequencies to prevent the visible emission of dust due to the movement of vehicles or of the wind; and
  - (2) Prompt clean-up of any dirt, earth, or other material from the vicinity of the road, roadway, or lot which has been transported from the road, roadway, or lot due to anthropogenic activity or due to natural forces.
- (b) In the case of paved roads, paved roadways, and paved parking lots: Maintenance of the road, roadway, lot, or paved shoulder in a reasonably clean condition through reasonably frequent use of water, sweepers, brooms, or other means, through reasonably frequent removal of accumulated dirt

from curb-side gutters, through reasonably prompt repair of pavement, or through any other means;

- (c) In the case of vehicles transporting dusty material or material which is likely to become dusty:
  - (1) Fully covering the material in question, with a tarpaulin or other material; and
  - (2) Operation, maintenance, and loading of the vehicle, distribution of the loaded material on or in the vehicle, and limiting the quantity of material loaded on or in the vehicle, so that there will be no spillage of the material onto the roads;
- (d) In the case of vehicles which accumulate dirt on the wheels, undercarriages, and other parts of the vehicle, due to the movement of the vehicle on dusty, dirty or muddy surfaces: Water washing of all of the dirty parts of the vehicle to thoroughly remove the dirt before or immediately after the vehicle leaves the dusty, dirty, or muddy surface;
- (e) In the case of the demolition of buildings or structures: Use, to the extent possible, of water;
- (f) In the case of removal of demolition debris which is dusty or likely to become dusty: Use of water to thoroughly wet the material before moving or removing the material and keeping it wet or otherwise in a dust-free condition until eventual disposal;
- (g) In the case of loading and unloading of dusty material and in the case where dry sand-blasting or dry abrasive cleaning is necessary: Use of enclosed areas or hoods, vents, and fabric filters. If it is shown to the satisfaction of the Mayor that use of enclosed areas, hoods, vents, and fabric filters is not possible, alternate control techniques acceptable to the Mayor and designed to minimize the emissions to the extent possible shall be utilized; and
- (h) In the case of stockpiles of dusty material: Use, where possible, of closed silos, closed bins or other enclosures which are adequately vented to fabric filters. Where the use of closed silos, closed bins, or other enclosures is not possible, thorough wetting of the material before loading onto the stockpile and keeping the stockpile wetted, covered, or otherwise in a non-dusty condition.

605.2

The emission of fugitive dust from the following is prohibited:

- (a) Any material handling, screening, crushing, grinding, conveying, mixing, or other industrial-type operation or process;

- (b) Heater-planers in repairing asphaltic concrete pavements;
- (c) Portable tar-melters, unless close-fitting lids, in good repair, for the tar-pots are available and are used;
- (d) The ventilation of any tunnelling operation; or
- (e) The cleaning of exposed surfaces through the use of compressed gases.

605.3 All persons shall comply with the provisions of this section and those of the Soil Erosion and Sedimentation Control Act of 1977 (D.C. Law 2-23).

605.4 In those circumstances where it is not possible to comply with specific provisions of both this section and the Soil Erosion and Sedimentation Control Act of 1977 (D.C. Law 2-23), the provisions of the Soil Erosion and Sedimentation Control Act of 1977 (D.C. Law 2-23), shall prevail.

**SOURCE:** Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 565, 610 (February 1, 1985).

## 606 VISIBLE EMISSIONS

606.1 Except as otherwise provided in this subtitle, visible emissions shall not be emitted into the outdoor atmosphere from stationary sources (excluding fuel-burning equipment placed in initial operation before January 1, 1977); provided, that discharges not exceeding forty percent (40%) opacity (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minute period and for an aggregate of twelve (12) minutes in any twenty-four hour (24 hr.) period during start-up, cleaning, soot blowing, adjustment of combustion controls, or malfunction of equipment.

606.2 Except as otherwise provided in this subtitle, visible emissions whose opacity is in excess of ten percent (10%) (unaveraged), at any time shall not be emitted into the outdoor atmosphere, from any fuel-burning equipment placed in initial operation before January 1, 1977; provided, that:

- (a) Opacity not in excess of forty percent (40%) (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minute period and for an aggregate of twelve (12) minutes in any twenty-four hour (24 hr.) period other than during start-up of equipment;
- (b) During start-up of equipment, opacity not in excess of forty percent (40%) (averaged over six (6) minutes) shall be permitted for an aggregate of five (5) times per start-up; and
- (c) In addition to the emissions permitted under § 606.2(a), during shutdown of equipment, opacity not in excess of fifteen percent (15%) (unaveraged) shall

be allowed and in addition, opacity not in excess of thirty percent (30%) (averaged over three (3) minutes) shall be permitted for an aggregate of three (3) times per shutdown.

- 606.3 At all times, including periods of start-up and malfunction, owners and operators of stationary sources and fuel-burning equipment shall, to the extent practicable, maintain and operate stationary sources and fuel-burning equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.
- 606.4 Violation of standards set forth in this section, as a result of unavoidable malfunction, despite the conscientious employment of control practices, shall constitute an affirmative defense on which the discharger shall bear the burden of proof. Periods of malfunction shall cease to be unavoidable malfunctions if reasonable steps are not taken to eliminate the malfunction within a reasonable time.
- 606.5 Owners and operators of stationary sources and fuel-burning equipment shall ensure that persons actually participating in the maintenance and operation of sources and equipment are adequately trained and supervised so as to minimize the production of emissions during operation.
- 606.6 Where the presence of uncombined water is the only reason for failure of an emission to meet the requirements of this section, this section shall not be applicable.
- 606.7 The provisions of this section shall not apply to visible emissions from interior fire places, or from sources set forth in § 604.2, or when steam is used to blow oil from a burner as the last phase of shutting down the burner.
- 606.8 Whoever shall violate any provision of this section shall suffer the criminal sanctions prescribed in § 105; provided, that, where the violation is shown by the discharger to be the result of simple negligence, no criminal sanction other than a fine not exceeding one thousand dollars (\$1,000) and not less than one hundred dollars (\$100) shall be imposed.
- 606.9 In the event of any violation of, or failure to comply with, this section, each day of the violation or failure shall constitute a separate offense and the penalties described shall be applicable to each separate offense. As used in this section, simple negligence does not include the following:
- (a) Willful and wanton actions leading to violations of the requirements of this section; and
  - (b) An extreme want of care and regard or an indifference for the duty to comply with the requirements of this section.

**SOURCE:** Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 565, 612 (February 1, 1985).

**699            DEFINITIONS AND ABBREVIATIONS**

699.1            The meanings ascribed to the definitions and abbreviations appearing in §§ 199.1 and 199.2 respectively of Chapter 1 shall apply to the terms and abbreviations in this chapter.

**SOURCE:** Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 565, 614 (February 1, 1985).



## APPENDIX 6-1

Process Weight* Per Hour in Pounds	Process Maximum Weight of Parti- culate Discharge Per Hour in Pounds	Process Weight* Per Hour in Pounds	Process Maximum Weight of Parti- culate Discharge Per Hour in Pounds
50	.24	3000	5.10
100	.46	3100	5.18
150	.66	3200	5.27
200	.85	3300	5.36
250	1.03	3400	5.44
300	1.20	3500	5.52
350	1.35	3600	5.61
400	1.50	3700	5.69
450	1.63	3800	5.77
500	1.77	3900	5.85
550	1.89	4000	5.93
600	2.01	4100	6.01
650	2.12	4200	6.08
700	2.24	4300	6.15
750	2.34	4400	6.22
800	2.43	4500	6.30
850	2.53	4600	6.37
900	2.62	4700	6.45
950	2.72	4800	6.52
1000	2.80	4900	6.60
1100	2.97	5000	6.67
1200	3.12	5500	7.03
1300	3.26	6000	7.37
1400	3.40	6500	7.71
1500	3.54	7000	8.05
1600	3.66	7500	8.39
1700	3.79	8000	8.71
1800	3.91	8500	9.03
1900	4.03	9000	9.36
2000	4.14	9500	9.67
2100	4.24	10000	10.00
2200	4.34	11000	10.63
2300	4.44	12000	11.28

## Appendix 6-1 (Continued)

Process Weight* Per Hour in Per Pounds	Process Maximum Weight of Parti- culate Discharge Per Hour in Pounds	Process Weight* Per Hour in Per Pound	Process Maximum Weight of Parti- culate Discharge Per Hour in Pounds
2400	4.55	13000	11.89
2500	4.64	14000	12.50
2600	4.74	15000	13.13
2700	4.84	16000	13.74
2800	4.92	17000	14.36
2900	5.02	18000	14.97
19000	15.58	50000	34.30
20000	16.19	60000	40.00
30000	22.22	or more	
40000	28.30		

\*Where the process weight per hour falls between two (2) values in the table, the maximum weight per hour shall be determined by linear interpolation.

**SOURCE:** Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 565, 650-51 (February 1, 1985).