

**MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT  
REGULATION IV  
PROHIBITIONS**

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RULE 400    VISIBLE EMISSIONS

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*(Adopted July 1, 1969; Revised April 26, 1995, June 18, 1997, March 22, 2000, October 15, 2003, December 15, 2004; and August 15, 2012.)*

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**PART 1 GENERAL**

**1.1 Purpose**

The purpose of this Rule is to provide limits for the visible emissions from sources within the District.

**1.2 Applicability**

The provisions of this Rule shall apply to all sources of air pollutant emissions in the District.

**1.3 Exemptions**

The provisions of this Rule shall not apply to the following activities:

- 1.3.1 any open burning performed in compliance with Rule 438 {California Health and Safety Code (HSC) Sections 41704 (a), (b), (c), and (e)};
- 1.3.2 use of any aircraft to distribute seed, fertilizer, insecticides, or other agricultural aids over lands devoted to the growing of crops or raising of fowl or animals {HSC Section 41704 (d)};
- 1.3.3 agricultural operations necessary for the growing of crops or raising of fowl or animals {HSC Sections 41704 (g) and (h)};
- 1.3.4 the use of visible emission generating equipment in training sessions conducted by governmental agencies necessary for certifying persons to evaluate visible emissions for compliance with applicable District rules and regulations {HSC Section 41704 (l)};
- 1.3.5 emissions from vessels using steam boilers during emergency boiler shutdowns for safety reasons, safety and operational tests required by governmental agencies, and where maneuvering is required to avoid hazards {HSC Section 41704 (j)};
- 1.3.6 emissions from vessels during a breakdown condition, as long as the discharge is reported in accordance with District requirements {HSC Section 41704 (k)};
- 1.3.7 smoke emissions from teepee burners during the disposal of forestry and agricultural residues or forestry and agricultural residues with supplementary fossil fuels when the emissions result from the startup or shutdown of the combustion process or from

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the malfunction of emission control equipment. This exemption does not apply to emissions which exceed a period or periods of time aggregating more than 30 minutes in any 24 hour period, nor to emissions which result from the failure to operate and maintain in good working order any emission control equipment {HSC Section 41704 (m)};

- 1.3.8 smoke emissions from burners used to produce energy and fired by forestry and agricultural residues with supplementary fossil fuels when the emissions result from the startup or shutdown of the combustion process or from the malfunction of emission control equipment. This exemption does not apply to emissions which exceed a period or periods of time aggregating more than 30 minutes in any 24 hour period, nor to emissions which result from the failure to operate and maintain in good working order any emission control equipment {HSC Section 41704 (n)};
- 1.3.9 emissions from methanol fuel manufacturing plants which manufacture not more than 2,000,000 gallons of methanol fuel per day from wood, agricultural waste, natural gas, or coke (exclusive of petroleum coke). As used in this Subsection, "manufacturing plant" includes all necessary support systems, including field operations equipment that provide feedstock. However, this exemption shall be available to only one methanol fuel manufacturing plant in the District, and is effective only when the District is designated as an "attainment area" pursuant to the Federal Clean Air Act (42 U.S.C. Sec. 7401 *et seq.*) This exemption shall remain in effect with respect to a plant until five years after construction of the plant and shall have no force and effect with respect to the plant on and after that date {HSC Section 41704 (o)};
- 1.3.10 the use of an obscurant for the purposes of training military personnel and the testing of military equipment by the United States Department of Defense on any military reservation {HSC Section 41704 (p)};
- 1.3.11 wet plumes where the presence of uncombined water is the only reason for the failure of an emission to meet the limitations of Section 3.1 of this Rule. The burden of proof which establishes the application of this exemption shall be upon the person seeking to benefit from its provisions;
- 1.3.12 the use of an orchard, field crop, or citrus grove heater which does not produce unconsumed solid carbonaceous material at a rate in excess of that allowed by State law, which is 1 gram per minute of unconsumed solid carbonaceous material. {HSC Sections 41704 (f) and 41860}

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1.4 Effective Dates

This Rule, as most recently revised, is effective on August 15, 2012.

1.5 References

- 1.5.1 The requirements of this Rule arise from the provisions of: California Health & Safety Code Sections 39043.5, 41701.5, 41701.6, 41704 and 41860; Title 17 Section 92000 *et seq.* of the California Code of Regulations, and the Code of Federal Regulations (CFR) Part 60, Part 61, and Part 63.
- 1.5.2 Other related rules include: Rule 403 (Particulate Matter), Rule 404 (Sulfur Compounds and Nitrogen Oxides), Rule 423 (New Source Performance Standards), Rule 424 (National Emission Standards for Hazardous Air Pollutants), and Rule 438 (Open Outdoor Fires).

PART 2 DEFINITIONS

2.1 Abrasives Certified for Permissible Dry Outdoor Blasting

The abrasive blasting material defined in Title 17 of the California Code of Regulations Sections 92000 *et seq.*

2.2 Obscurant

Fog oil released into the atmosphere during military exercises which produces a smoke screen designed to eliminate the detection of persons or objects by visual or electronic means of observation within a localized area. {HSC Section 39043.5}

2.3 Opacity

The degree to which light is prevented from passing through an emission plume. Its measure is expressed as one (1.0) minus the optical transmittance of a smoke plume, screen target, etc. as determined by the test methods in Section 4.1 below. Dark plumes are expressed as numbers 1 through 5 on the Ringelmann chart, while light plumes are expressed as equivalent percentages. Thus, Ringelmann 1 corresponds to 20% opacity, Ringelmann 2 corresponds to 40% opacity, Ringelmann 3 to 60% opacity, Ringelmann 4 to 80% opacity, and Ringelmann 5 corresponds to 100% opacity.

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2.4 Ringelmann Chart

The chart used to designate shades of darkness of emissions as published by the United States Bureau of Mines.

2.5 Startup

The period of time when the equipment goes from a non-operational to a fully operational state.

Good engineering practices shall be used to the fullest extent practicable during startup to minimize pollutant emissions.

2.6 Teepee Burner

A conical shaped device used to burn flammable forestry and agricultural product waste material in an enclosed fixture effective in preventing the spread of sparks or fire, situated in an area cleared of grass, grain, brush, slash, litter, and snags for a distance of 100 feet surrounding the device or by landfill or other methods which meet applicable state and local fire safety, air, and water quality standards. A burn permit pursuant to Rule 438 must be obtained for use of such device.

**PART 3 REQUIREMENTS AND STANDARDS**

3.1 General Visible Emission Limitations

A person shall not discharge into the atmosphere from any emission source whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour, which is as observed using the appropriate test method referenced in Section 4.1:

3.1.1 as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

3.1.2 of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection 3.1.1 above.

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3.2 Industry-Specific Visible Emission Limitations

3.2.1 Abrasive Blasting

Notwithstanding the requirements of Subsection 3.1 above, abrasive blasting operations shall not exceed visible emissions limits set by Sections 92000 *et seq.* of Title 17 of the California Code of Regulations, which are 20% opacity (or equivalent Ringelmann 1) for indoor operations using non-certified abrasive blasting material and 40% opacity (or equivalent Ringelmann 2) for more than 3 minutes in any hour for outdoor operations using the following methods: wet abrasive blasting, hydroblasting, vacuum blasting, or abrasives certified for permissible dry outdoor blasting.

3.2.2 Drinking Water Systems

Notwithstanding the requirements of Section 3.1, emissions of visible smoke from any diesel auxiliary engine or generator used exclusively to operate a drinking water system shall not exceed Ringelmann 2 (or equivalent 40% opacity), when operated under emergency circumstances, or operated not more than 30 minutes each week, or two hours each month, under non-emergency circumstances. {HSC Section 41701.6}

3.2.3 Gas Turbines

Notwithstanding the requirements of Section 3.1, visible emissions from gas-fired combustion turbines during startup may exceed Ringelmann 1 (or equivalent 20% opacity) for a period of not more than two hours, provided that visible emissions during such startup periods shall not exceed Ringelmann 2 (or equivalent 40% opacity) for a period or periods aggregating more than three minutes in any one hour.

3.2.4 Pile Drivers

Notwithstanding the requirements of Section 3.1, pile driver operations shall not exceed the visible emission limits set by Health and Safety Code Sections 41701.5, which are Ringelmann 1 (or equivalent 20% opacity) for no more than 4 minutes per pile, or Ringelmann 2 (or equivalent 40% opacity) for no more than 4 minutes per pile if operating on kerosene, smoke suppressing additives and synthetic lubricating oil.

3.2.5 Federally Regulated Industries

In addition to the general visible emission limits of Section 3.1 above,

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industries subject to any visible emission limit codified in 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63 shall comply with those limits. For reference, District Rules 423 (New Source Performance Standards) and 424 (National Emission Standards for Hazardous Air Pollutants) include lists of the industry-specific standards which have been promulgated in 40 CFR Parts 60 and 61 respectively.

**PART 4 ADMINISTRATIVE REQUIREMENTS**

**4.1 Test Methods**

- 4.1.1 Except for any visible emission limits codified in 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63, all visible emissions determinations shall be in accordance with EPA Method 9 (Visual Determination of the Opacity of Emissions from Stationary Sources) except for the data reduction procedures. Data reduction shall consist of counting the number of observations above the applicable standard and multiplying that number by 0.25 to determine the minutes of emissions above an applicable standard.
  
- 4.1.2 Visible emissions for any visible emission limit codified in 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63 shall be observed in accordance with the observation procedure contained within EPA Method 9 or Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares), as applicable, codified as Appendix A of 40 CFR Part 60.

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