

RULE 401 Visible Emissions

(A) General Description

(1) Purpose:

The purpose of the Rule is to provide limits for the Visible Emissions from sources within the District.

(2) Applicability:

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

(3) Severability:

If any portion of this Rule shall be found to be unenforceable, such finding shall have no effect on the enforceability of the remaining portions of the Rule, which shall continue to be in full force and effect.

(B) Definitions

The definitions contained in District Rule 102 – *Definition of Terms* shall apply unless a term is otherwise defined herein. Terms that are defined within this rule, have been capitalized for ease of recognition.

- (1) Observer - A certified and trained human observer or an in-stack Opacity monitoring system calibrated in accordance with the test method specified in Section (E).
- (2) 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 (E) 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.
- (3) Ringelmann Chart - The chart used to designate shades of darkness of emissions as published by the United States Bureau of Mines.
- (4) Visible Emissions - Any Particulate or gaseous matter which can be detected by the human eye.

(C) Requirements

(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 (E):

- (a) 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
- (b) Of such Opacity as to obscure an Observer's view to a degree equal to or greater than 20% Opacity, or as described in Subsection (C)(1)(a) above.

(2) Equipment-Specific Visible Emission Limitations

(a) Abrasive Blasting

Notwithstanding the requirements of Subsection (C)(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 noncertified 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.

(b) Drinking Water Systems

Notwithstanding the requirements of Section (C)(1), emissions of Visible Emissions 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.

(c) Gas Turbines

Notwithstanding the requirements of Section (C)(1), Visible Emissions from gas-fired combustion turbines during Startup and Shutdown may exceed Ringelmann 1 (or equivalent 20% Opacity) for a period of not more than two hours, provided that Visible Emissions during such Startup and shutdown periods shall not exceed Ringelmann 2 (or equivalent 40% Opacity) for a period or periods aggregating more than three minutes in any one hour.

(d) Pile Drivers

Notwithstanding the requirements of Section (C)(1), Visible Emissions from pile driver operations shall not exceed 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.

(e) Federally Regulated Industries

In addition to the general Visible Emission limits of Section (C)(1) above, 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.

(D) Exemptions

(1) The provisions of this Rule shall not apply to the following:

- (a) Any open burning performed in compliance with Rule 444;
- (b) Visible Emissions which result from an Equipment Breakdown, contingent upon emissions event qualifying as a Breakdown, and contingent on timely reporting in accordance with District Rule 430 – *Breakdown Provisions*;
- (c) 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;
- (d) Agricultural Operations necessary for the growing of crops or raising of fowl or animals;
- (e) 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;
- (f) 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;
- (g) Fugitive Dust emissions from rock crushing facilities, where the facilities were in existence prior to January 1, 1970, at a location where the population density is less than 10 Persons per square mile in each square mile within a seven-mile radius of the facilities; provided, however, that under no circumstances shall the emission cause a measureable degradation of the ambient air quality or create a nuisance. This subdivision does not apply to any rock crushing facilities which:

- (i) Process in excess of 100 tons of rock in any 24-hour period, averaged over any period of 30 consecutive days;
 - (ii) Have 25 or more employees;
 - (iii) Fail to operate and maintain in good working order any emission Control Equipment installed prior to January 1, 1978, or;
 - (iv) Undergo a change of ownership after January 1, 1977.
- (h) Emissions from vessels during a Breakdown condition, as long as the discharge is reported in accordance with District requirements;
- (i) 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 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;
- (j) 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;
- (k) 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;
- (l) 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;

- (m) Fugitive Dust emissions generated for the purposes of training military personnel and the testing of military Equipment by the United States Department of Defense on any military reservation, within the boundaries of said military reservation;
- (n) 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.

(E) Test Methods for Compliance Verification

- (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
- (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.

See SIP Table at <http://www.mdaqmd.ca.gov/>