

**Control of visible particulate emissions from stationary sources.**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see the last paragraph of rule 3745-17-01 of the Administrative Code titled "Incorporation by reference."]

(A) Visible particulate emission limitations for stack emissions:

(1) General limitations:

- (a) Except as otherwise specified in paragraphs (A)(1)(b), (A)(2) and (A)(3) of this rule, visible particulate emissions from any stack shall not exceed twenty per cent opacity, as a six-minute average.
  - (b) Except as otherwise specified in paragraphs (A)(2) and (A)(3) of this rule, visible particulate emissions from any stack may exceed twenty per cent opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed sixty per cent opacity, as a six-minute average, at any time.
- (2) It shall be deemed not to be a violation of this rule where the presence of uncombined water is the only reason for failure of a stack emission to meet the requirements of this rule.
- (3) The visible particulate emission limitations established in paragraph (A)(1) of this rule shall not apply to the following:
- (a) The start-up of the following fuel burning equipment:
    - (i) For any fuel burning equipment which are equipped with baghouses or electrostatic precipitators, until the exhaust gases have achieved a temperature of two hundred fifty degrees Fahrenheit at the inlet of the baghouses or electrostatic precipitators, provided that the director may incorporate a higher start-up temperature in the permit or variance for such source for which an applicant demonstrates to the satisfaction of the director that the higher temperature is needed for safety considerations or to prevent damage to the control equipment.
    - (ii) For any fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are equipped with sidestream separators or similar devices) for the control of particulate emissions, for a period of not more than three hours from the moment of start-up, provided that the director may incorporate a longer start-up time period in the permit or

variance for such source for which an applicant demonstrates to the satisfaction of the director that the longer time period is required.

- (b) The shutdown of the following fuel burning equipment:
- (i) For any fuel burning equipment which are equipped with baghouses or electrostatic precipitators, after the temperature of the exhaust gases has dropped below two hundred fifty degrees Fahrenheit at the inlet of the baghouses or electrostatic precipitators, provided that the director may incorporate a higher shutdown temperature in the permit or variance for such source for which an applicant demonstrates to the satisfaction of the director that the higher temperature is needed for safety considerations or to prevent damage to the control equipment.
  - (ii) For any fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are equipped with sidestream separators or similar devices) for the control of particulate emissions, for a period of not more than three hours, provided that the director may incorporate a longer shutdown time period in the permit or variance for such source for which an applicant demonstrates to the satisfaction of the director that the longer time period is required.
- (c) The malfunction of any air contaminant source or the malfunction/shutdown of air pollution control equipment associated with any air contaminant source, if the owner or operator of said air contaminant source or air pollution control equipment complies with the requirements of rule 3745-15-06 of the Administrative Code and none of the conditions listed in paragraph (C) of rule 3745-15-06 of the Administrative Code exists.
- (d) Intermittent soot-blowing operations (the cleaning of heat transfer surfaces with pressurized air or steam) for fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are equipped with sidestream separators or similar devices) for the control of particulate emissions, provided that the owner or operator of such fuel burning equipment maintains a daily record which clearly documents the date, beginning time and ending time for all intermittent soot-blowing operations.
- (e) Salt glazing operations conducted in a gas-fired periodic brick or tile kiln, for a period of not more than two hours during any twenty-one consecutive days of operation of said kiln.
- (f) Intermittent ash removal operations (the dumping or pulling of ash) for fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are

equipped with sidestream separators or similar devices) for the control of particulate emissions, provided that the owner or operator of such fuel burning equipment maintains a daily record which clearly documents the date, beginning time and ending time for all intermittent ash removal operations.

- (g) The commencement of increased coal firing from a banked condition for fuel burning equipment, for a period not to exceed thirty minutes.
- (h) Any air contaminant source which is not subject to any mass emission limitation in paragraphs (B)(3) and (B)(4) of rule 3745-17-08 of the Administrative Code, or rule 3745-17-09, 3745-17-10 or 3745-17-11 of the Administrative Code.
- (i) Any air contaminant source for which an equivalent visible particulate emission limitation has been established by the director pursuant to paragraph (C) of this rule.
- (j) The following kiln operations at the facility (OEPA premise number 0372000127) located at 755 Lime Road, Woodville, Ohio, provided that "Martin Marietta Magnesia Specialties, Inc.," or any subsequent owner or operator of such facility, maintains daily records that clearly document the dates, beginning times, and ending times for the operations:
  - (i) The start-up of any kiln equipped with a baghouse, until the time stone feed to the kiln begins.
  - (ii) The start-up of any kiln equipped with an electrostatic precipitator, from the time the stone feed to the kiln begins until the time a stable firing condition for the solid fuel is achieved, but not longer than six hours from the time firing with the solid fuel begins.
  - (iii) The shutdown of any kiln equipped with a baghouse, after the time the temperature of the exhaust gases from the kiln has dropped below two hundred fifty degrees Fahrenheit at the inlet of the baghouse.

For the purposes of this paragraph, "start-up" shall be defined as the point of commencement of firing the kiln until such time as the process is operating in a steady-state condition using its primary fuel. A steady-state condition is present when the throughputs of process material, fuel and combustion air have been stabilized in a manner that demonstrates the combustion process will be consistently complete and safe, with an exhausted combustibles concentration within established safety limits.

(B) Visible particulate emission limitations for fugitive dust:

- (1) Except as provided in paragraphs (B)(2) to (B)(11) of this rule, visible particulate emissions from any fugitive dust source shall not exceed twenty per cent opacity as a three-minute average.
- (2) Except as provided in paragraph (B)(11) of this rule, visible particulate emissions from the fugitive dust sources associated with a coke oven battery shall comply with the following:
  - (a) There shall be no visible particulate emissions from any charging operations except for a period of time not to exceed one hundred twenty-five seconds during any five consecutive charges. One charge, which represents the charge with the highest visible particulate emissions value of twenty consecutive charges observed, may be exempted from this visible particulate emission limitation.
  - (b) At no time shall there be visible particulate emissions from more than ten per cent of the offtake piping.
  - (c) At no time shall there be visible particulate emissions from more than five per cent of the charging hole lids.
  - (d) For visible particulate emissions from oven doors:
    - (i) For the Still coke oven battery (OEPA source number B919) at the "Armco Steel Company, L.P., Middletown Works" (OEPA premise number 1409010006), located on Crawford street, Middletown, Ohio, at no time shall there be visible particulate emissions from more than sixteen per cent of the oven doors.
    - (ii) For all other coke oven batteries, at no time shall there be visible particulate emissions from more than ten per cent of the oven doors. Two oven doors, which represent the last oven charged prior to the commencement of visible particulate emission readings performed in accordance with paragraph (B)(2)(c) of rule 3745-17-03 of the Administrative Code, shall be exempted from this visible emission limitation.
    - (iii) For purposes of this paragraph, an oven door and the associated chuck door on the pusher side of the battery shall be considered as one door.
  - (e) Visible particulate emissions during any pushing operations shall not exceed an average of twenty per cent opacity read above the battery top. For purposes of this paragraph, the duration of a pushing operation shall commence with the moving (or pushing) of the coke mass from an oven and shall conclude when the quench car enters the quench tower.

- (3) Except as provided in paragraph (B)(11) of this rule, visible particulate emissions of fugitive dust from electric arc furnace shop roof monitors, argon-oxygen decarburization shop roof monitors, blast furnace casthouses and sintering operations shall not exceed twenty per cent opacity as a six-minute average.
- (4) Except as provided in paragraphs (B)(7), (B)(8), and (B)(11) of this rule, there shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed six minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of rule 3745-17-03 of the Administrative Code.
- (5) Except as provided in paragraphs (B)(7), (B)(8), and (B)(11) of this rule, there shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of rule 3745-17-03 of the Administrative Code.
- (6) Except as provided in paragraphs (B)(7) to (B)(11) of this rule, there shall be no visible particulate emissions from any material storage pile except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of rule 3745-17-03 of the Administrative Code.
- (7) Except as provided in paragraph (B)(11) of this rule, visible particulate emissions from any roadway, parking area, material handling operation, or coal storage pile located at facilities owned or operated by "Buckeye Power, Inc., Cincinnati Gas & Electric Company, The Cleveland Electric Illuminating Company, Columbus Southern Power Company, Dayton Power & Light Company, Ohio Edison Company, Ohio Power Company, and The Toledo Edison Company" or any subsequent owners or operators of such facilities shall not exceed any of the following limitations:
  - (a) For any paved or unpaved roadway or parking area:
    - (i) Ten per cent opacity, as determined in Accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code, for the following facilities:

[reserved]
    - (ii) No visible particulate emissions from any paved roadway or parking area, except for a period of time not to exceed six minutes during any sixty-minute observation period, or from any unpaved roadway or parking area, except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of rule 3745-17-03 of the

Administrative Code, for all other facilities not identified in paragraph (B)(7)(a)(i) of this rule.

- (b) Twenty per cent opacity for any material handling operation (including loading coal into or loading coal out of any coal storage pile), as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code;
  - (c) Twenty per cent opacity from the operation of vehicles on top of any coal storage pile (emissions from the combustion of fuels in such vehicles are not subject to this limitation), as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code; and
  - (d) No visible particulate emissions from any coal storage pile due to wind erosion, except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of rule 3745-17-03 of the Administrative Code.
- (8) Except as provided in paragraph (B)(11) of this rule, visible particulate emissions from any roadway, parking area, or material storage pile located at iron and steel production facilities owned and operated by "Empire Detroit Steel Company, LTV Steel Company, Republic Engineered Steels, Incorporated, The Timken Company, or USS/KOBE Steel Company" or any subsequent owner or operator of such facilities shall not exceed any of the following limitations:
- (a) Ten per cent opacity for any paved or unpaved roadway or parking area, as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code;
  - (b) Twenty per cent opacity for any material handling operation (including loading coal into or loading coal out of any coal storage pile), as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code;
  - (c) Ten per cent opacity from the operation of vehicles on top of any material storage pile, where such vehicles are employed for the purpose of compacting, grading or transporting materials (emissions from the combustion of fuels in such vehicles are not subject to this limitation), as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code; and
  - (d) Ten per cent opacity from wind erosion of any material storage pile, as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code.

- (9) Within thirty days after the effective date of this rule, the "Ford Motor Company, Cleveland Casting Plant" (OEPA premise number 1318120180) or any subsequent owner or operator of the "Ford Motor Company, Cleveland Casting Plant" located at 5600 Henry Ford Boulevard, Brook Park, Ohio shall submit a written notification to the director which indicates whether, for the control of fugitive dust generated from any material storage pile located at such facility, it will comply with either the visible particulate emission limitation in paragraph (B)(6), or the visible particulate emission limitation in paragraph (B)(6) except that fugitive dust emissions from loading material into or out of any material storage pile shall not exceed a visible particulate emission limitation of twenty per cent opacity, as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code. In such notification, "Ford Motor Company, Cleveland Casting Plant" or any subsequent owner or operator of such facility shall choose between the visible particulate emission limitations. Except as otherwise provided in paragraph (B)(10) of this rule, after submitting such written notification indicating which visible particulate emission limitation it will comply with, "Ford Motor Company, Cleveland Casting Plant" or any subsequent owner or operator of such facility will be subject to and shall comply with such visible particulate emission limitation(s).
- (10) After selecting a visible particulate emission limitation(s) option pursuant to paragraph (B)(9) of this rule, in the event that "Ford Motor Company, Cleveland Casting Plant" or any subsequent owner or operator of the "Ford Motor Company, Cleveland Casting Plant" subsequently desires to be subject to and to comply with the other identified visible particulate emission limitation(s) option identified in paragraph (B)(9) of this rule, "Ford Motor Company, Cleveland Casting Plant" or any subsequent owner or operator of such facility may so notify the director by submitting a written notification which clearly indicates that "Ford Motor Company, Cleveland Casting Plant" or any subsequent owner or operator of such facility desires to be subject to and shall comply with the alternative visible particulate emission limitation(s) option. To be effective, any such written notification shall expressly identify the specific date on which "Ford Motor Company, Cleveland Casting Plant" or any subsequent owner or operator of such facility desires to be subject to the alternative option and shall be submitted no later than thirty days prior to such date. In the event that "Ford Motor Company, Cleveland Casting Plant" or any subsequent owner or operator of such facility complies with the written notification provisions contained in this paragraph, "Ford Motor Company, Cleveland Casting Plant" or any subsequent owner or operator of such facility shall become subject to and shall comply with the alternative visible particulate emission limitation(s) option as of the date specifically identified in the written notification.
- (11) The visible particulate emission limitations specified in paragraphs (B)(1) to (B)(9) of this rule shall not apply to the following:
- (a) Ship loading spouts at grain terminals;

- (b) Blasting at mineral extraction operations;
  - (c) Blowing taps, poling and oxygen lancing of the tap hole and casting operations associated with ferroalloy electric arc furnaces;
  - (d) Any fugitive dust source which is exempted from the requirements of paragraph (B) of rule 3745-17-08 of the Administrative Code;
  - (e) Any fugitive dust source which is not located within the geographical areas specified in appendix A of rule 3745-17-08 of the Administrative Code, unless the director, in accordance with paragraph (A)(2) of rule 3745-17-08 of the Administrative Code, requires the owner or operator to submit and implement a control program which will bring the fugitive dust source into compliance with the requirements of paragraph (B) of rule 3745-17-08 of the Administrative Code; and
  - (f) The malfunction of any air contaminant source or the malfunction/shutdown of air pollution control equipment associated with any air contaminant source, if the owner or operator of said air contaminant source or air pollution control equipment complies with the requirements of rule 3745-15-06 of the Administrative Code and none of the conditions listed in paragraph (C) of rule 3745-15-06 of the Administrative Code exists.
  - (g) Any fugitive dust for which a visible particulate emission limitation has been established in rule 3745-17-12 or 3745-17-13 of the Administrative Code.
- (12) It shall be deemed not to be a violation of this rule where the presence of uncombined water is the only reason for failure of a fugitive dust emission to meet the requirements of this rule.

(C) Equivalent visible particulate emission limitations:

- (1) For the purpose of establishing an equivalent visible particulate emission limitation for stack emissions subject to a mass-based, particulate emission limitation, any owner or operator of an air contaminant source which is subject to the requirements of paragraph (A)(1) of this rule may request the director to determine the average opacity of the emissions from said source during any performance test(s) conducted pursuant to paragraph (B) of rule 3745-17-03 of the Administrative Code. Any such request shall be made in writing at the time the test specifications and procedures are submitted to the director pursuant to paragraph (B)(6) of rule 3745-17-03 of the Administrative Code.
- (2) If, upon review of such owner's or operator's written report of the results of the performance test(s), it is the director's judgment that the air contaminant source is in compliance with all applicable emission limitations for which the

performance tests were conducted, but fails to comply with the requirements of paragraph (A)(1) of this rule, the director shall notify the owner or operator as expeditiously as practicable that he may request the director to establish an equivalent visible particulate emission limitation for the source. Such request shall be made in writing within thirty days following receipt of the notification from the director.

- (3) Any written request for an equivalent visible particulate emission limitation from an owner or operator of an air contaminant source shall include information which demonstrates the following:
    - (a) That the performance tests were conducted in accordance with the conditions and procedures accepted by the director pursuant to paragraph (B)(6) of rule 3745-17-03 of the Administrative Code; and
    - (b) That the air contaminant source and any associated air pollution control equipment were operated and maintained in a manner so as to minimize the opacity of the emissions during the performance test(s).
  - (4) If an owner or operator of an air contaminant source complies with the requirements of paragraphs (C)(1) to (C)(3) of this rule, the director may establish an equivalent visible particulate emission limitation for said source in accordance with the procedures described in the Ohio EPA, Division of Air Pollution Control documents entitled "Engineering Guide #13" and "Engineering Guide #15." Any such equivalent visible particulate emission limitation shall be specified in the terms and conditions of the permit, variance or order issued by the director for said source.
- (D) Any revision approved by the director in accordance with paragraphs (A)(3)(a)(i), (A)(3)(a)(ii), (A)(3)(b)(i), and (A)(3)(b)(ii) of this rule shall not revise the federally enforceable requirements of the state implementation plan until approved by the United States environmental protection agency.

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