
TITLE 326 AIR POLLUTION CONTROL BOARD

LSA Document #98-69(F)

DIGEST

Amends 326 IAC 5-1-1 and 326 IAC 5-1-2 to clarify that the rule applies to sources of opacity. Amends 326 IAC 5-1-3 to clarify the amount of time a source may exceed applicable opacity limitations during startup and shutdown of boilers and certain boiler maintenance activities and to establish provisions for granting exemptions of a longer duration and greater opacity than is currently allowed. Amends 326 IAC 5-1-4 to give the agency authority to initiate an enforcement action based on visible emissions readings where there is a conflict between visible emissions readings and continuous opacity monitor data. Amends 326 IAC 5-1-5 to require a series of 3 performance

First Notice of Comment Period, #95-15(APCB): June 1, 1995, Indiana Register (18 IR 2340).

First Notice of Comment Period, #95-25(APCB): October 1, 1995, Indiana Register (19 IR 98).

Second Notice of Comment Period and Notice of First Hearing: June 1, 1997, Indiana Register (20 IR 2596).

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326 IAC 5-1-1

326 IAC 5-1-4

326 IAC 5-1-2

326 IAC 5-1-5

326 IAC 5-1-3

326 IAC 5-1-7

SECTION 1. 326 IAC 5-1-1 IS AMENDED TO READ AS FOLLOWS:

326 IAC 5-1-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12

Affected: IC 13-11; IC 13-17

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Sec. 1. (a) This rule applies to visible emissions opacity, not including condensed water vapor, emitted by or from a facility or source. The limitations set forth in section 2 of this rule shall not apply to facilities for which specific visible emission opacity limitations have been established in 326 IAC 6, 326 IAC 11, 326 IAC 12, ~~326 IAC 6~~; or a Part 70 permit pursuant to 326 IAC 2-7-24.

(b) Section 2(1) of this rule applies to sources or facilities located in areas not listed in this section.

(c) Section 2(2) of this rule applies to sources or facilities located in the following areas:

- (1) Clark County, Jeffersonville Township.
- (2) Dearborn County, Lawrenceburg Township.
- (3) Dubois County, Bainbridge Township.
- (4) Lake County, an area bounded on the north by Lake Michigan, on the west by the Indiana-Illinois state line, on the south by U.S. 30 from the state line to the intersection of I-65 to the intersection of I-94 then following I-94 to the Lake-Porter county line, and on the east by the Lake-Porter county line.
- (5) Marion County, except the area of Washington Township east of Fall Creek and the area of Franklin Township south of Thompson Road and east of Five Points Road.
- (6) St. Joseph County, the area north of Kern Road and east of Pine Road.
- (7) Vanderburgh County, the area included in the city of Evansville and Pigeon Township.
- (8) Vigo County, the area within a five-tenths (0.5) kilometer radius circle centered at UTM Coordinates Zone 16 East four thousand three hundred sixty-four and fifty-two hundredths (464.52) kilometers North four thousand three hundred sixty-nine and twenty-one hundredths (4,369.21) kilometers.

(Air Pollution Control Board; 326 IAC 5-1-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2421; filed May 12, 1993, 11:30 a.m.: 16 IR 2364; filed Jun 19, 1996, 9:00 a.m.: 19 IR 3049; filed Apr 22, 1997, 2:00 p.m.: 20 IR 2366; filed Oct 9, 1998, 3:56 p.m.: 22 IR 426)

SECTION 2. 326 IAC 5-1-2 IS AMENDED TO READ AS FOLLOWS:

326 IAC 5-1-2 Opacity limitations

Authority: IC 13-14-8; IC 13-17-3-4

Affected: IC 13-11; IC 13-17

Sec. 2. Visible emissions Opacity from a source or facility shall not exceed any of the following limitations, and, unless otherwise stated, all visible emissions opacity levels shall be observed in accordance with the procedures set forth in section 4 of this rule:

- (1) Sources or facilities of visible emissions opacity located in areas not listed in section 1(c) of this rule shall meet the following limitations:
 - (A) Visible emissions Opacity shall not exceed an average

of forty percent (40%) opacity in twenty-four (24) consecutive readings: any one (1) six (6) minute averaging period.

(B) Visible emissions Opacity shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9* or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

(2) Sources or facilities of visible emissions opacity located in the areas listed in section 1(c) of this rule shall meet the following limitations:

(A) Visible emissions Opacity shall not exceed an average of thirty percent (30%) opacity in twenty-four (24) consecutive readings any one (1) six (6) minute averaging period.

(B) Visible emissions Opacity from a facility located in Lake County shall not exceed an average of twenty percent (20%) opacity in twenty-four (24) consecutive readings any one (1) six (6) minute averaging period unless otherwise specified in 326 IAC 6-1-10.1. This visible emission opacity limit shall supersede the visible emissions opacity limit contained in clause (A).

(C) Visible emissions Opacity shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9* or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

(3) Visible emissions Opacity from Richmond Power & Light's Coal Boiler No. 1 and Coal Boiler No. 2 shall not exceed an average of thirty percent (30%) opacity in twenty-four (24) consecutive readings any one (1) six (6) minute averaging period. Effective May 1, 1999, visible emissions opacity from Richmond Power & Light's Coal Boiler No. 1 and Coal Boiler No. 2 shall not exceed an average of twenty-five percent (25%) opacity in twenty-four (24) consecutive readings any one (1) six (6) minute averaging period.

(4) Sources and facilities of visible emissions opacity, for which an alternate visible emission opacity limitation has been established under section 5(b) of this rule, shall comply with the limitations in section 5(b) of this rule instead of the limitations in subdivisions (1) and (2).

*Copies of the Code of Federal Regulations (CFR) referenced in this section may be obtained from the Government Printing Office, Washington, D.C. 20402 or are available for copying at the Indiana Department of Environmental Management, Office of Air Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Board; 326 IAC 5-1-2; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2421; filed May 12, 1993, 11:30 a.m.: 16 IR 2364; filed Jun 15,*

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1995, 1:00 p.m.: 18 IR 2727; errata filed Jul 6, 1995, 5:00 p.m.: 18 IR 2795; filed Jun 19, 1996, 9:00 a.m.: 19 IR 3049; filed Oct 9, 1998, 3:56 p.m.: 22 IR 427)

SECTION 3. 326 IAC 5-1-3 IS AMENDED TO READ AS FOLLOWS:

326 IAC 5-1-3 Temporary alternative opacity limitations

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12
Affected: IC 13-11; IC 13-17

Sec. 3. (a) The following applies, except as otherwise provided in subsections (c) through (e). When building a new fire in a boiler, or shutting down a boiler, visible emissions opacity may exceed the applicable opacity limit established in section 2 of this rule; however, visible emissions opacity levels shall not exceed an average of sixty percent (60%) opacity. Visible emissions for any six (6) minute averaging period. Opacity in excess of the applicable opacity limit established in section 2 of this rule shall not continue for more than twelve (12) continuous minutes on one (1) occasion two (2) six (6) minute averaging periods in any twenty-four (24) hour period.

(b) The following applies, except as otherwise provided in subsections (c) through (e). When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, visible emissions opacity may exceed the applicable opacity limit established in section 2 of this rule; however, visible emissions opacity shall not exceed sixty percent (60%) opacity for any six (6) minute averaging period and visible emissions opacity in excess of the applicable opacity limit shall not continue for more than six (6) continuous minutes on one (1) occasion six (6) minute averaging period in a any sixty (60) minute period. The visible emissions averaging periods shall not be permitted on for more than three (3) occasions six (6) minute averaging periods in a twelve (12) hour period.

(c) Facilities not temporarily exempted by subsections (a) and (b); For sources that are not boilers and are not located in Lake County, may be granted special temporary exemptions by the commissioner of the same duration and type authorized in subsections may grant the same temporary alternative opacity limitation with the same opacity level and duration as is granted to boilers under subsection (a) and or (b) provided that the facility proves to the satisfaction of the commissioner that the exemptions are temporary alternative opacity limitation is needed and that during periods of startup and shutdown or when removing ashes or blowing tubes, owners and operators shall, to the extent practicable, maintain and operate an affected facility, including air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will shall be based on information provided to the commissioner upon request, which may include, but is not limited to, the following:

- (1) Monitoring results.
- (2) Opacity observations.
- (3) Review of operating and maintenance procedures.
- (4) Inspection of the source.

The commissioner may require a source to install a certified opacity emissions monitor, where technically feasible, operate the certified opacity emissions monitor in accordance with procedures specified in 326 IAC 3, and maintain other records needed to verify compliance with the temporary exemption alternative opacity limitation.

(d) For sources or facilities that cannot meet the alternative opacity limitation requirements of subsection (a), (b), or (c), the commissioner may grant a temporary alternative opacity limitation of longer duration and greater opacity than provided under subsections (a) and (b) under this subsection in accordance with the following:

- (1) The source or facility burns the following fuels alone or in combination with each other or with any other fossil fuel:
 - (A) Coal.
 - (B) Wood.
 - (C) #4, #5, or #6 fuel oil.
 - (D) Tire-derived fuel.
 - (E) Petroleum coke.

The commissioner may approve a temporary alternative opacity limitation based on the combustion of other types of fuels as long as the source demonstrates that the combustion of the fuel is necessary, alternative fuels are not available or cost-efficient, and the fuels are identified in the submittal to the U.S. EPA required under section 7 of this rule.

(2) The source or facility owner or operator demonstrates that the temporary alternative opacity limitation is needed and justifiable during periods of startup and shutdown or when removing ashes from the fuel bed or furnace in a boiler or blowing tubes by providing a written petition that does the following:

(A) Requests a state implementation plan (SIP) revision to establish a temporary alternative opacity limitation under this subsection. Sources subject to 326 IAC 2-7 or 326 IAC 2-8 shall include the petition for a SIP revision with the initial permit application, permit revision application, or permit renewal application.

(B) Demonstrate that during periods of startup and shutdown, or when removing ashes from the fuel bed or furnace in a boiler or blowing tubes, the limits of subsections (a) through (c) cannot be met and that the owners and operators shall, to the extent practicable, maintain and operate an affected facility, including air pollution control equipment, in a manner consistent with good air pollution control practice by doing the following:

- (i) Minimizing emissions.
- (ii) Minimizing duration of startups and shutdowns.

(iii) Minimize the excess emissions caused by the startups and shutdowns.

(C) Demonstrate that during periods of startup and shutdown the temporary alternative opacity limitation will not impact the maintenance of the National Ambient Air Quality Standards (NAAQS).

(D) Demonstrate that during routine operations the source is in compliance with the applicable opacity limitation under section 2 of this rule.

(3) A determination of whether acceptable operating and maintenance procedures are being used shall be based on information provided to the commissioner. The information concerning emissions and operating procedures may include, but is not limited to, the following:

- (A) Monitoring results.
- (B) Opacity observations.
- (C) Review of operating and maintenance procedures.
- (D) Inspection of the source.

(4) As a condition of the temporary alternative opacity limitation, the commissioner may require a source to do the following:

(A) Install a certified opacity emissions monitor. The requirement to install a certified opacity emissions monitor shall be based on, but not limited to, the type and size of the emission unit, the normal operating schedule, normal operating conditions, and the availability of alternative monitoring methods, and other relevant site-specific information.

(B) Operate the certified opacity emissions monitor in accordance with procedures specified in 326 IAC 3.

(C) Maintain other records needed to verify compliance with the temporary alternative opacity limitation.

(5) For sources required to install a continuous opacity monitor (COM) that do not have previous opacity monitor data, the temporary alternative opacity limitation shall be reviewed by the commissioner after two (2) years of monitoring. The duration of the temporary alternative opacity limitation may be adjusted based on the monitoring data.

(6) The commissioner shall reserve the authority to do the following:

(A) Require a source that has been granted a temporary alternative opacity limit under this subsection to install a COM at a later date if it is determined the COM is necessary to demonstrate compliance with the temporary alternative opacity limit.

(B) Deny a request for a temporary alternative opacity limit if economically and technically feasible means are available to meet a limit that is less than the limit requested.

(7) The temporary alternative opacity limit established for a source shall be submitted to the U.S. EPA as a state implementation plan (SIP) revision in accordance with section 7 of this rule.

(c) Notwithstanding the provisions in subsections (a)

through (d), this subsection applies to sources existing on the effective date of this rule located in counties other than Lake County. If, on the effective date of this rule, an existing source has different startup and shutdown conditions from those in subsection (a) or (b) in a valid operating permit, those conditions shall remain in effect until the department issues a final, effective Part 70 operating permit under 326 IAC 2-7 or a final, effective federally enforceable state operating permit under 326 IAC 2-8 for the source that does one (1) of the following:

(1) Makes the startup and shutdown conditions consistent with subsection (a) or (b).

(2) Incorporates startup and shutdown conditions that are at least as stringent as those conditions in the operating permit in effect as of the effective date of this rule. The conditions shall not be less stringent than the following:

(A) During the startup of the following equipment, burning fuels identified in subsection (d)(1):

(i) For equipment that is equipped with baghouses or electrostatic precipitators, the opacity limitation in section 2 of this rule shall not apply until the exhaust gases have achieved a temperature of two hundred fifty (250) degrees Fahrenheit at the inlet of the baghouses or electrostatic precipitators.

(ii) For equipment that is either uncontrolled or that is equipped solely with mechanical collectors (including mechanical collectors that are equipped with sidestream separators or similar devices) for the control of particulate emissions, the opacity limitation in section 2 of this rule shall not apply for a period of not more than three (3) hours from the moment of startup.

(B) During the shutdown of the following equipment, burning fuels identified in subsection (d)(1):

(i) For equipment that is equipped with baghouses or electrostatic precipitators, the opacity limitation in section 2 of this rule shall not apply after the exhaust gases have dropped below temperature of two hundred fifty (250) degrees Fahrenheit at the inlet of the baghouses or electrostatic precipitators.

(ii) For equipment that is either uncontrolled or that is equipped solely with mechanical collectors (including mechanical collectors that are equipped with sidestream separators or similar devices) for the control of particulate emissions, the opacity limitation in section 2 of this rule shall not apply for a period of not more than three (3) hours from the moment of shutdown.

The source shall include with a permit application, permit revision application, permit renewal application, or a supplement to such application, documentation including, but not limited to, historical opacity information during periods of startup and shutdown and other pertinent information and proposed permit conditions that limit the duration and extent of excess emissions to the greatest

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extent practicable. The commissioner shall incorporate permit conditions that are necessary for safe and proper operation of equipment and minimize the duration and extent of excess emissions. Such conditions shall require the source to keep records of times of startups, shutdowns, and ash removals and may be more stringent than the operating permit conditions in effect as of the effective date of this rule.

(3) Provides an alternative temporary opacity limit in accordance with subsection (d). If the source requests such an alternative temporary opacity limit, the source shall demonstrate that the alternative limit is needed and justifiable in accordance with subsection (d)(2) through (d)(7).

(Air Pollution Control Board; 326 IAC 5-1-3; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2422; filed May 12, 1993, 11:30 a.m.: 16 IR 2365; filed Oct 9, 1998, 3:56 p.m.: 22 IR 428)

SECTION 4. 326 IAC 5-1-4 IS AMENDED TO READ AS FOLLOWS:

326 IAC 5-1-4 Compliance determination

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12

Affected: IC 13-11; IC 13-17

(b) If the compliance determination procedures set forth in

Section (a)(2) result in a conflict in visible emission readings, the determination made in accordance with subsection (a)(2) shall prevail for the purpose of compliance; provided that it can be shown that the opacity continuous emissions monitor meets the performance specifications set forth in the 40 CFR 60; specifically Performance Specification 1. This subsection applies in the event of a conflict between the opacity readings obtained under subsection (a)(1) and those obtained under subsection (a)(2) for the same time period. If the conflict occurs, the commissioner may require that the source perform an audit on the opacity monitoring system consistent with 326 IAC 3-5-2(7)(B). After reviewing the results of the audit, if performed, enforcement action may be taken based on the opacity readings obtained under subsection (a)(1) or the opacity readings obtained under subsection (a)(2). This does not preclude a source from using the opacity readings obtained under subsection (a)(2) or other relevant information to refute the findings of the commissioner.

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SECTION 5. 326 IAC 5-1-5 IS AMENDED TO READ AS FOLLOWS:

326 IAC 5-1-5 Violations

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12
 Affected: IC 13-11; IC 13-17

(b) If a source or facility believes it can operate in compliance with the applicable mass emission limitation, but exceeds the

limits specified in section 2 of this rule, the owner or operator may submit a written petition to the commissioner requesting that an alternate opacity limitation (AOL) be established. This alternate limit shall be based upon both a mass emission performance test conducted according to procedures specified in 326 IAC 3 and a visible emission test conducted simultaneously; according to section 4 of this rule. Demonstration that the facility is in compliance with the applicable mass emission limit is a requirement prior to establishing an alternative opacity limit. Where the commissioner determines there is no acceptable test method available, a request for an alternate visible emission limit shall be denied. As a condition of approving an alternative opacity limit, the commissioner may require a source to install a continuous opacity emissions monitor; operate the continuous opacity emissions monitor in accordance with procedures specified in 326 IAC 3; and maintain other records needed to verify compliance with the temporary exemption alternative opacity limits. The commissioner may also establish an alternative opacity limit different from the limit that the source requested in the petition. However, in that case, the limit established by the commissioner shall be equal to the lowest opacity that can be continuously achieved at the mass emission level achieved in the performance test:

(1) Compliance with 326 IAC 6-1; 326 IAC 6-2; 326 IAC 6-3; 326 IAC 11-1; and other applicable rules shall be demonstrated by the performance test.

(2) An alternate visible emission limit shall be established on a source or facility specific basis. No limitation for a facility or source shall be established by referring to a similar or identical facility or source.

(3) An alternate visible emission limit established for a source or facility shall be incorporated, by amendment, into the operating permit for the source or facility after a public comment period and submitted to the U.S. EPA as a SIP revision. The limitation shall not become effective until approved as a SIP revision by the U.S. EPA.

(4) Where a visible emission limitation is based upon a new source performance standard, a new limitation shall comply with the provisions of the standard. Nothing in this rule shall be construed as allowing an exception or exemption from a requirement in a state or federal new source performance standard without approval as a SIP revision by the U.S. EPA.

(1) The petition must be submitted to the commissioner, and a copy submitted to the local air pollution control agency, if applicable, no later than sixty (60) days prior to the scheduled performance test date. The petition must contain, contain, at a minimum, the following information:

- (A) Source name and address.
- (B) Address of affected source if different from clause (A).
- (C) List of potentially affected parties.
- (D) Identification of control device or devices and typical operating parameters.
- (E) Applicable particulate matter (PM or PM₁₀) and opacity limits.

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- (F) Other applicable rule requirements or permit conditions.
- (G) Proposed alternative opacity limit.
- (H) The reason or reasons for requesting the alternative opacity limit.
- (1) Complete test protocol in accordance with 326 IAC 3-6.
- (2) The alternative opacity limit shall be based upon a series of three (3) complete mass emission tests (nine (9) sample runs) conducted according to the procedures specified in 326 IAC 3 and three (3) opacity tests conducted simultaneously, according to section 4 of this rule. Where the commissioner determines there is no acceptable test method available, a request for an alternative opacity limit shall be denied.
- (3) The performance tests must be witnessed by the commissioner, U.S. EPA, the local air pollution control agency, or their authorized representatives unless other arrangements are made in advance of the start of the testing that will allow the testing to proceed without agency staff present to observe the tests.
- (4) The owner or operator must demonstrate that the following conditions were met during the performance test:
- (A) The source or emissions unit was operated according to its permitted conditions and under normal or representative operating conditions.
- (B) The associated air pollution control system was installed and was being operated as specified in any applicable permit condition or conditions.
- (C) The air pollution control equipment was properly maintained and in good operating condition, and was operated according to the manufacturer's recommended operating conditions to minimize emissions and opacity.
- (D) The affected emissions unit and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity limit, except during:
- (i) periods when the control equipment is not operating properly; or
- (ii) other exempt periods under section 3 of this rule.
- (E) Each test was conducted under reasonably similar operating conditions.
- (F) Any other conditions as required by the commissioner or the U.S. EPA.
- (5) The commissioner may require one (1) or more of the following:
- (A) The installation of a continuous opacity monitoring system that meets the requirements of 326 IAC 3.
- (B) Monitoring sufficient to demonstrate compliance with the alternative opacity limit.
- (C) Regular reporting to verify compliance with the alternative opacity limit.
- (6) The alternative opacity limit shall only apply to the emissions unit for which the alternative opacity limit was originally established and shall not be extended to any other unit or units.
- (7) For multiple units or processes with a common stack, all units must be in operation during the entire test series unless operational limitations are specified in the operation permit or simultaneous operation does not conform with the source's operating procedures.
- (8) The alternative opacity limit shall be determined based on the results of the performance tests.
- (9) The particulate matter test results for each sample run must demonstrate compliance with all applicable particulate matter limits or standards. If noncompliance is demonstrated during any sample run, the test series is not valid for an alternative opacity limit determination.
- (10) The alternative opacity limit established for a source shall be incorporated by amendment into the source's operating permit and submitted to the U.S. EPA in accordance with section 7 of this rule.
- (11) If the alternative opacity limit exceeds an applicable new source performance standard (NSPS) opacity limit, the provisions in 40 CFR 60.11* must be satisfied in addition to the procedures in this rule. The procedures shall be approved by the U.S. EPA, the commissioner, and the local air pollution control agency as appropriate.

*Copies of the Code of Federal Regulations (CFR) referenced in this section may be obtained from the Government Printing Office, Washington, D.C. 20402 or are available for copying at the Indiana Department of Environmental Management, Office of Air Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204. (*Air Pollution Control Board; 326 IAC 5-1-5; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2423; filed May 12, 1993, 11:30 a.m.: 16 IR 2366; filed Oct 9, 1998, 3:56 p.m.: 22 IR 431*)

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