ARTICLE 8. VOLATILE ORGANIC COMPOUND RULES

Rule 1. General Provisions

326 IAC 8-1-0.5 Definitions

Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-12-3-1

Sec. 0.5. (a) The definitions in this section apply throughout this article.

(b) "Coating" means the application of protective, functional, or decorative films.

(c) "CTG" means a control technique guideline. A CTG is a U.S. EPA guidance document that triggers a responsibility under Section 182(b)(2) of the Clean Air Act regarding certain nonattainment areas for states to submit reasonably available control technology (RACT) rules for stationary sources of VOC emissions as part of their state implementation plans. *(Air Pollution Control Division; 326 IAC 8-1-0.5; filed Sep 23, 1988, 11:59 a.m.: 12 IR 256; filed Oct 28, 1993, 5:00 p.m.: 17 IR 331; filed Sep 18, 1995, 3:00 p.m.: 19 IR 202; filed Nov 3, 2009, 3:29 p.m.: 20091202-IR-326090220FRA)*

326 IAC 8-1-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12
Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule contains general provisions applicable to all other rules in this article. Once a facility becomes subject to a rule within this article under any rule applicability section in this article, such facility shall remain subject to such rule notwithstanding any subsequent decrease in VOC emissions unless the provisions of subsections (b) through (d) are met. Any proposal to establish an alternative limitation or requirement other than the streamlining of multiple requirements shall be in accordance with section 5 of this rule.

(b) A facility subject to this article may be exempted by the commissioner from any of these applicability sections if the facility has an enforceable permit issued under 326 IAC 2 or a federally-approved SIP revision that permanently restricts one (1) or more facility activities that result in VOC emissions, such as production, hours of operation, or capacity utilization, such that restrictions lower actual emissions before add-on controls to a level below fifteen (15) pounds per day. Upon expiration of any facility's permit, such exemption shall also expire, and such facility shall be subject to the requirements of all applicable rules within this article, unless a renewed permit containing such exemption is issued pursuant to 326 IAC 2.

(c) The permit or other enforceable document referenced in subsection (b) shall also require a facility owner or operator to keep records to demonstrate compliance with the permit or document restrictions. If the restriction is based on actual emissions or operations, the facility owner or operator shall keep records of throughput or actual coating usage to determine compliance. If the applicability level of the rule is in terms of actual emissions per day, the facility owner or operator shall be required to keep, at a minimum, daily consumption records, certification of VOC emission rates, and daily calculation of VOC emissions. If the rule specifies an applicability level based on potential emissions per year, the permit or enforceable document shall restrict actual production, hours of operation, and/or capacity utilization on a monthly basis, and the facility owner or operator shall be required to keep, at a minimum, daily consumption records, certification of VOC emission rates, and monthly calculations of VOC emissions.

(d) All permits, renewed permits, and other enforceable documents referenced in subsection (b) shall be submitted to the U.S. EPA as SIP revisions. *(Air Pollution Control Division; 326 IAC 8-1-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2527; filed May 6, 1991, 4:45 p.m.: 14 IR 1712; filed Apr 22, 1997, 2:00 p.m.: 20 IR 2369; filed Dec 20, 2001, 4:30 p.m.: 25 IR 1601)*

326 IAC 8-1-2 Compliance methods

Authority: IC 13-14-8
Affected: IC 13-17

Sec. 2. (a) The emission limitations specified in this article shall be achieved through one (1) or any combination of the following:

(1) Carbon adsorption.

(2) Thermal or catalytic incineration. The owner or operator of a source using a natural gas afterburner incineration method may petition the commissioner for permission to not operate the natural gas afterburner during the months of November,

December, January, February, and March. The commissioner may allow such exemption if the owner or operator adequately demonstrates that the operation of the natural gas afterburner is not required for control of toxic substances or odor.

(3) Higher solids (low solvent) coatings, including powder, ultraviolet, and electron beam coatings.

(4) Waterborne coatings.

(5) Equivalent emission limitations based on an actual measured transfer efficiency greater than the specified baseline transfer efficiency as follows:

(A) This subdivision is applicable only to the following:

(i) 326 IAC 8-2-2(b)(2), automobiles and light duty truck assembly operations.

(ii) 326 IAC 8-2-6, metal furniture coating operations.

(iii) 326 IAC 8-2-7, large appliance coating operations.

(iv) 326 IAC 8-2-9, miscellaneous metal coating operations.

(B) For metal furniture coating operations, large appliance coating operations, or miscellaneous metal coating operations, this subdivision and the equivalent emission limits it contains may not be used to determine compliance unless a test method for determining actual measured transfer efficiency has been specified by U.S. EPA or submitted to U.S. EPA and approved as a SIP revision.

(C) The equivalent emission limitations in units of kilograms of volatile organic compounds (VOC) per liter solids deposited (pounds of VOC per gallon solids deposited), baseline transfer efficiencies, and baseline volume percent solids content of the coating are specified below:

Category	Equivalent Emission Limit	Baseline Transfer Efficiency	Baseline Volume Percent Solids
Automobiles and light duty trucks assembly (topcoat)	1.83 (15.1)	30	62.0
Metal furniture	1.01 (8.4)	60	59.2
Large appliances	0.91 (7.4)	60	62.0
Miscellaneous metal coating category			
Clear coatings	2.08 (17.3)	60	41.6
Air dried up to 90°C	1.34 (11.2)	60	52.4
Extreme performance coatings	1.34 (11.2)	60	52.4
All other coatings and coating systems	1.01 (8.4)	60	59.2

(D) Compliance with an equivalent emission limit shall be determined as follows:

(i) For automobile and light duty topcoating operations and combined primer-surfacer and topcoat operations, use procedures found in "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations"; EPA-453/R-08-002; September 2008*.

(ii) For metal furniture coating operations, large appliance coating operations, or miscellaneous metal coating operations use the following equation:

$$E = \frac{L}{[(1 - (L / D)) \times (T)]}$$

Where:
- E = Actual emissions in pounds of VOC per gallon of coating solids deposited.
- L = Actual VOC content in pounds of VOC per gallon of coating, as applied, excluding water and nonphotochemically reactive hydrocarbons.
- D = Actual density of the VOC in the coating in pounds per gallon of VOC.
- T = Actual measured transfer efficiency.

(6) The use of nonphotochemically reactive hydrocarbons as defined in 326 IAC 1-2-48.

(7) A daily volume-weighted average of all coatings applied in a coating line or printing line subject to the requirements in 326 IAC 8-2 or 326 IAC 8-5-5. Records of daily usage of gallons solids coating and VOC content of each coating, ink, and solvent shall be maintained and made available upon request. Also, records of daily emissions in pounds VOC shall be maintained and made available upon request. If daily records sufficient to determine an accurate daily weighted average are not available, each coating, ink, and solvent shall meet the requirements of the applicable section.

(8) The use of an emission control device specifically allowed under provisions of any rule in this article to meet the emission

limitations specified in the rule.

(9) This subdivision is applicable only to dip coating or flow coating operations at miscellaneous metal coating operations subject to 326 IAC 8-2-9 as follows:

(A) For dip coating or flow coating operations only. The equivalent emission limit in kilograms VOC/liter (lb/gallon) of coating solids is as follows:

Miscellaneous metal coating category	Limit in kilograms VOC/liter (lb/gallon) of coating less water	Equivalent emission limit in kilograms VOC/liter (lb/gallon) of coating solids
Clear coatings	0.52 (4.3)	1.22 (10.2)
Air dried or forced warm air dried at temperatures up to ninety (90) degrees Celsius (one hundred ninety-four (194) degrees Fahrenheit)	0.42 (3.5)	0.80 (6.7)
Extreme performance coatings	0.42 (3.5)	0.80 (6.7)
All other coatings and coating application systems	0.36 (3.0)	0.61 (5.1)

(B) Compliance with the equivalent emission limit shall be determined by doing the following:

(i) Calculate the VOC content of a dip coating or flow coating, expressed in units of weight of VOC per volume of coating solids, on a thirty (30) day rolling average basis using the following equation:

$$VOC_A = (\sum(W_{oi} \times D_{ci} \times Q_i) + \sum (W_{oJ} \times D_{dJ} \times Q_J))/(\sum(V_{ni} \times Q_i))$$

Where:

VOC_A = The as-applied, VOC content in pound VOC per gallon (lb VOC/gal) of coating solids for a dip coating or flow coating, calculated on a thirty (30) day rolling average basis.

W_{oi} = Percent VOC by weight of each as supplied coating (i) added to the dip coating or flow coating process, expressed as a decimal fraction (that is 55% = 0.55).

D_{ci} = Density of each as supplied coating (i) added to the dip coating or flow coating process, in pounds per gallon.

Q_i = Quantity of each as supplied coating (i) added to the dip coating or flow coating process, in gallons.

V_{ni} = Percent solids by volume of each as supplied coating (i) added to the dip coating or flow coating process, expressed as a decimal fraction.

W_{oJ} = Percent VOC by weight of each thinner (J) added to the dip coating or flow coating process, expressed as a decimal fraction.

D_{dJ} = Density of each thinner (J) added to the dip coating or flow coating process, in pounds per gallon.

Q_J = Quantity of each thinner (J) added to the dip coating or flow coating process, in gallons.

(ii) Maintain the following records on a daily basis for each VOC-containing coating, solvent, or other material added to the tank:

(AA) The following parameters for each coating, thinner, or other material as supplied:

(aa) The coating, thinner, or other material identification number.

(bb) The volume used.

(cc) The mix ratio.

(dd) The density or specific gravity.

(ee) The weight percent of total volatiles, water, solids, and exempt solvents.

(ff) The volume percent of solids.

(BB) The VOC content of each coating and thinner as supplied.

(CC) The VOC content of each as-applied coating.

(iii) Maintain all records necessary to confirm compliance as follows:

(AA) On site for the most recent three (3) year period.

(BB) Make reasonably accessible for an additional two (2) years.

(b) VOC emissions shall be limited to not greater than the equivalent emissions, expressed as pounds of VOC per gallon of coating solids, allowed under the applicable emission limitation contained in this article for any surface coating operation using the compliance methods contained in subsection (a) or section 5 of this rule as follows:

(1) Equivalency shall be determined by the following equation:

$$E = \frac{L}{1 - \frac{L}{D}}$$

Where: E = Equivalent emission limit in pounds of VOC per gallon of coating solids, as applied.
L = Applicable emission limit from this article in pounds of VOC per gallon of coating.
D = Baseline solvent density of VOC in the coating and shall be equal to seven and thirty-six hundredths (7.36) pounds of VOC per gallon of solvent.

(2) Compliance with an equivalent emission limit established in subdivision (1) shall be determined according to the following equation:

$$E_a = \frac{L_a}{1 - \frac{L_a}{D_a}}$$

Where: E_a = Actual emissions in pounds of VOC per gallon of coating solids, as applied.
L_a = Actual VOC content in pounds of VOC per gallon of coating, as applied.
D_a = Actual density of the VOC in the coating, as applied, in pounds per gallon of VOC.

(c) The overall efficiency of any capture system and control device determined by the test methods and procedures specified in section 4 of this rule shall be not less than the equivalent overall efficiency, which shall be calculated by the following equation:

$$O = \frac{V - E}{V} \times 100$$

Where: V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in section 4 of this rule in units of pounds of VOC per gallon of coating solids as applied.
E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.
O = Equivalent overall efficiency of the capture system and control device as a percentage.

(d) Any other equivalent method must be submitted and approved as a SIP revision by U.S. EPA before it can be used to determine or achieve compliance with any provision of this article.

*This document is incorporated by reference and may be obtained from the Library Services Office (MD-35), United States Environmental Protection Agency, Office of Air Quality, Planning and Standards, Research Triangle Park, NC 27711 or is available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-1-2; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2527; errata, 11 IR 2632; filed Sep 23, 1988, 11:59 a.m.: 12 IR 256; filed Jan 16, 1990, 4:00 p.m.: 13 IR 1016; filed Apr 18, 1990, 4:55 p.m.: 13 IR 1676; filed May 9, 1990, 5:00 p.m.: 13 IR 1845; filed May 6, 1991, 4:45 p.m.: 14 IR 1713; filed Aug 21, 1996, 2:00 p.m.: 20 IR 6; filed Nov 15, 2002, 11:27 a.m.: 26 IR 1073; filed Nov 3, 2009, 3:29 p.m.: 20091202-IR-326090220FRA; errata filed Nov 18, 2009, 3:43 p.m.: 20091216-IR-326090220ACA)*

326 IAC 8-1-3 Compliance schedules

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 3. (a) All sources located in Clark, Floyd, Lake, Marion, and Porter counties that were in operation prior to December 28, 1979, and not meeting the requirements of 326 IAC 8-2-2 through 326 IAC 8-2-8 (surface coating of autos, cans, coils, paper, metal furniture, large appliances, and magnet wire), 326 IAC 8-2-11 (fabric and vinyl coating), 326 IAC 8-3 (degreasing), 326 IAC 8-4-2 (petroleum refineries), 326 IAC 8-4-3(b) (fixed roof tanks), 326 IAC 8-4-4 (bulk gasoline terminals), 326 IAC 8-4-5 (bulk gasoline plants), 326 IAC 8-4-7 (gasoline transport), and 326 IAC 8-5-2 (asphalt paving) shall achieve compliance as expeditiously

as practicable, but not later than indicated in the following compliance schedule:

(1) Submittal of plans and specifications to the board by December 31, 1980.

(2) Contracts for emission control systems or process modification awarded or purchase orders issued by March 31, 1981.

(3) Initiation of on-site construction or installations by June 30, 1981.

(4) Completion of on-site construction or installations by September 30, 1982.

(5) Demonstration of final compliance by December 31, 1982.

(b) All sources located in Clark, Floyd, Lake, Marion, and Porter counties that were in operation prior to November 1, 1980, and not meeting the requirements of 326 IAC 8-2-9 (miscellaneous metal coating), 326 IAC 8-2-10 (flat wood coating), 326 IAC 8-4-3(c) (floating roof tanks), 326 IAC 8-4-8 (refinery leaks), 326 IAC 8-4-9 (truck leaks), 326 IAC 8-5-3 (synthesized pharmaceutical manufacturing), 326 IAC 8-5-4 (rubber tire manufacturing), and 326 IAC 8-5-5 (graphic arts) shall achieve compliance as expeditiously as practicable, but not later than indicated in the following compliance schedule:

(1) Submittal of plans and specifications to the board by June 30, 1981.

(2) Contracts for emission control system or process modification awarded or purchase orders issued by August 31, 1981.

(3) Initiation of on-site construction or installations by October 31, 1981.

(4) Completion of on-site construction or installations by October 31, 1982.

(5) Demonstration of final compliance by December 31, 1982.

(c) All sources located in Elkhart and St. Joseph counties that either were in operation prior to December 28, 1979, and are not meeting the requirements of 326 IAC 8-2-2 through 326 IAC 8-2-8 (surface coating of autos, cans, coils, paper, metal furniture, large appliances, and magnet wire), 326 IAC 8-2-11 (fabric and vinyl coating), 326 IAC 8-3 (degreasing), 326 IAC 8-4-2 (petroleum refineries), 326 IAC 8-4-3(b) (fixed roof tanks), 326 IAC 8-4-4 (bulk gasoline terminals), 326 IAC 8-4-5 (bulk gasoline plants), 326 IAC 8-4-7 (gasoline transport), and 326 IAC 8-5-2 (asphalt paving) or were in operation prior to November 1, 1980, and are not meeting the requirements of 326 IAC 8-2-9 (miscellaneous metal coating), 326 IAC 8-2-10 (flat wood coating), 326 IAC 8-4-3(c) (floating roof tanks), 326 IAC 8-4-8 (refinery leaks), 326 IAC 8-4-9 (truck leaks), 326 IAC 8-5-3 (synthesized pharmaceutical manufacturing), 326 IAC 8-5-4 (rubber tire manufacturing), and 326 IAC 8-5-5 (graphic arts) shall achieve compliance as expeditiously as practicable, but not later than indicated in the following compliance schedule:

(1) Submittal of plans and specifications to the board by June 30, 1985.

(2) Contracts for emission control systems or process modification awarded or purchase orders issued by August 31, 1985.

(3) Initiation of on-site construction or installation by October 31, 1985.

(4) Completion of on-site construction or installation by September 30, 1986.

(5) Demonstration of final compliance by December 31, 1986.

(d) All sources located in Clark, Floyd, Lake, Marion, Hendricks, and Porter counties with a monthly throughput of twenty thousand (20,000) gallons per month or greater and not meeting the requirements of 326 IAC 8-4-6 (gasoline dispensing facilities) shall achieve compliance as expeditiously as practical, but not later than in the compliance schedule listing in subsection (a) for those sources in operation prior to January 1, 1980.

(e) All sources located in Elkhart and St. Joseph counties with a monthly throughput of twenty thousand (20,000) gallons per month or greater and not meeting the requirements of 326 IAC 8-4-6 (gasoline dispensing facilities) shall achieve compliance as expeditiously as practicable but not later than in the compliance schedule listed in subsection (c).

(f) All sources located in Clark, Elkhart, Floyd, Hendricks, Lake, Marion, Porter, and St. Joseph counties that were in operation prior to January 1, 1980, and have a monthly throughput between ten thousand (10,000) and twenty thousand (20,000) gallons per month and not meeting the requirements of 326 IAC 8-4-6 (gasoline dispensing facilities) shall achieve compliance as expeditiously as practicable but not later than indicated in the following compliance schedule:

(1) Submittal of plans and specifications to the board by June 30, 1986.

(2) Contracts for emission control system or process modification awarded or purchase orders issued by August 31, 1986.

(3) Initiation of on-site construction or installation by October 31, 1986.

(4) Completion of on-site construction or installation by September 30, 1987.

(5) Demonstration of final compliance by December 31, 1987.

(g) All sources subject to the requirements of 326 IAC 8-4 located in Boone, Dearborn, Hamilton, Hancock, Harrison, Johnson, Morgan, and Shelby counties that were in existence prior to July 1, 1989, shall achieve compliance not later than July 1, 1990.

(h) All sources statewide with a monthly gasoline throughput of ten thousand (10,000) gallons per month or greater that have not met the compliance schedules in subsection (d), (e), (f), or (g) shall comply with 326 IAC 8-4-6 not later than January 10, 2011.

(Air Pollution Control Division; 326 IAC 8-1-3; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2528; errata, 11 IR 2632; filed Aug 11, 1989, 1:40 p.m.: 13 IR 6; filed Apr 15, 2010, 4:05 p.m.: 20100512-IR-326070353FRA)

326 IAC 8-1-4 Testing procedures

Authority: IC 13-14-8; IC 13-14-9-7
Affected: IC 13-15; IC 13-17

Sec. 4. (a) The following test methods and procedures shall be used to determine compliance of as-applied coatings with the limitations contained in this article:

(1) Sampling procedures shall follow the guidelines presented in the following:

(A) ASTM D3925, "Standard practice for sampling liquid paints and related pigment coatings"*.

(B) ASTM E300, "Standard practice for sampling industrial chemicals"*.

(2) Samples collected for analysis shall be one (1) liter taken into a one (1) liter container at a location and time such that the sample will be representative of the coating as applied. The container must be tightly sealed immediately after the sample is taken. Any solvent or other volatile organic material added after the sample is taken must be measured and accounted for in the calculations in subdivision (4). For multiple package coatings, separate samples of each component shall be obtained.

(3) The following applicable analytical methods shall be used to determine the composition of coatings as applied:

(A) Method 24 of 40 CFR 60, Appendix A**, shall be used to determine the volatile organic compound content in coatings. If it is demonstrated to the satisfaction of the commissioner that plant coating formulation data are equivalent to Method 24 results, formulation data may be used. Any determination approving the use of formulation data shall be submitted to U.S. EPA as a SIP revision. In the event of any inconsistency between a Method 24 test and a facility's formulation data, the Method 24 test will govern.

(B) Method 24A of 40 CFR 60, Appendix A**, shall be used to determine the volatile organic compound content and density of rotogravure printing inks and related coatings. If it is demonstrated to the satisfaction of the commissioner that plant coating formulation data are equivalent to Method 24A results, formulation data may be used. Any determination approving the use of formulation data shall be submitted to U.S. EPA as a SIP revision. In the event of any inconsistency between a Method 24A test and a facility's formulation data, the Method 24A test will govern.

(C) The following ASTM methods are the analytical procedures for determining certain factors related to coatings:

(i) ASTM D1475-60, "Standard test method for density of paint, varnish, lacquer, and related products"*.

(ii) ASTM D2369-87, "Standard test method for volatile content of a coating"*.

(iii) ASTM D3792-86, "Standard test method for water content of water-reducible paints by direct injection into a gas chromatograph"*.

(iv) ASTM D4017-81, "Standard test method for water content in paints and paint materials by the Karl Fischer method"*.

(v) ASTM D4457-85, "Standard test method for determination of dichloromethane and 1, 1, 1, trichloroethane in paints and coatings by direct injection into a gas chromatograph"*. This method may be used to develop protocols for any compound specifically exempted from the definition of volatile organic compound.

(vi) ASTM D2697-86, "Standard test method for volume nonvolatile matter in clear or pigmented coatings"*.

(vii) ASTM D3980, "Standard practice for interlaboratory testing of paint and related materials"*.

(viii) ASTM E180-85, "Practice for determining the precision data of ASTM methods for analysis of and testing of industrial chemicals"*.

(ix) ASTM D2372-85, "Standard method of separation of vehicle from solvent-reducible paints"*.

(D) 40 CFR 63, Subpart PPPP, Appendix A**, shall be used to determine the VOC content of reactive adhesives.

(E) The commissioner may determine that the analytical methods specified in clauses (A) through (C) are not appropriate to determine compliance and may either specify or allow an alternate test method. Such alternate test method shall be submitted to U.S. EPA as a SIP revision.

(4) Calculations for determining the volatile organic compound content, water content, and the content of any compounds that are specifically exempted from the definition of volatile organic compound of coatings, inks, and fountain solutions as applied shall follow the guidance provided in the following documents:

(A) EPA 340/1-86-016, "A Guide for Surface Coating Calculation"*.

(B) EPA 450/3-84-019, "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings", revised June 1986*.

(C) EPA 340/1-88-004, "A Guideline for Graphic Arts Calculations", June 1988*.

(b) The protocol for determining the transfer efficiency of coating applicators at topcoat coating operations at an automobile assembly facility shall follow the procedure in EPA 453/R-08-002, "Protocol for Determining the Daily VOC Emission Rate of Automobile and Light Duty Truck Primer-Surfacer and Topcoat Operations", September 2008*.

(c) The following test methods, as appropriate, shall be used by emission sources required to determine capture efficiency:

(1) Test methods in 40 CFR 51, Appendix M**, as follows:

(A) Method 204, Criteria for and Verification of a Permanent or Temporary Total Enclosure**.

(B) Method 204A, Volatile Organic Compounds Content in Liquid Input Stream**.

(C) Method 204B, Volatile Organic Compounds Emissions in Captured Stream**.

(D) Method 204C, Volatile Organic Compounds Emissions in Captured Stream (Dilution Technique)**.

(E) Method 204D, Volatile Organic Compounds Emissions in Uncaptured Stream from Temporary Total Enclosure**.

(F) Method 204E, Volatile Organic Compounds Emissions in Uncaptured Stream from Building Enclosure**.

(G) Method 204F, Volatile Organic Compounds Content in Liquid Input Stream (Distillation Approach)**.

(2) Alternative capture efficiency protocols and test methods may be used that satisfy criteria of either the data quality objective approach or the lower confidence limit approach as listed in 40 CFR 63, Subpart KK, Appendix A**.

(d) Control device efficiency shall be determined by simultaneously measuring the inlet and outlet gas phase volatile organic material concentrations and gas volumetric flow rates in accordance with the gas phase test methods specified in subsection (f).

(e) The overall efficiency of the emission control system shall be determined as the product of each individual capture system efficiency and each control device efficiency or by the liquid/liquid test protocol for each solvent recovery system. In those cases in which the overall efficiency is being determined for an entire line, the capture efficiency represents the total capture efficiency over the entire line.

(f) Determination of control efficiency shall be made using the following methods:

(1) 40 CFR 60, Appendix A, Method 18**, 25**, or 25A**, as appropriate to the conditions at the site, shall be used to determine volatile organic compound concentration. Method selection shall be based on consideration of the diversity of organic species present, their total concentration, and on consideration of the potential presence of interfering gases. Except as indicated in the following, the test shall consist of three (3) separate runs, each lasting a minimum of sixty (60) minutes, unless the commissioner determines that process variables dictate shorter sampling times:

(A) When the method is to be used to determine the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual adsorber vessels, the test shall consist of three (3) separate runs, each coinciding with one (1) or more complete sequences through the adsorption cycles of all the individual adsorber vessels.

(B) When the method is to be used to determine the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each adsorber vessel, each adsorber vessel shall be tested individually. The test for each adsorber vessel shall consist of three (3) separate runs. Each run shall coincide with one (1) or more complete adsorption cycles.

(2) 40 CFR 60, Appendix A, Method 1** or 1A** shall be used for sample and velocity traverses.

(3) 40 CFR 60, Appendix A, Method 2**, 2A**, 2C**, or 2D** shall be used for velocity and volumetric flow rates.

(4) 40 CFR 60, Appendix A, Method 3** shall be used for gas analysis.

(5) 40 CFR 60, Appendix A, Method 4** shall be used for stack gas moisture.

(6) 40 CFR 60, Appendix A, Methods 2**, 2A**, 2C**, 2D**, 3*, and 4** shall be performed, as applicable, at least twice during each test run.

(g) The method for determining the emissions of gasoline from a vapor recovery system are delineated in 40 CFR Part 60, Subpart XX, Section 60.503**. Guidance on conducting the test will be found in the following:

(1) EPA 340/1-80-012, "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations"*.

(2) EPA 450/2-77-026, "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals"*.

(h) The method for determining volatile organic compound emissions from organic solvent degreasing operations are delineated in EPA 905/2-78-001, "Regulatory Guidance for Control of Volatile Organic Compound Emissions from 15 Categories of Stationary Sources", Section XX.9404, pages 48 and 49*.

(i) The VOC emissions from sources engaged in synthesized pharmaceutical manufacturing (326 IAC 8-5-3), pneumatic rubber tire manufacturing (326 IAC 8-5-4), and graphic arts system (326 IAC 8-5-5) shall be determined using the Method 25 contained

in 40 CFR Part 60, Appendix A**.

(j) Compliance with the gap requirement for external floating roof tanks shall be determined using the test procedure specified in U.S. EPA guideline document EPA 450/2-78-047, "Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks"*.

(k) The volume percent solids of a coating shall be calculated using either EPA 450/3-84-019*, "Procedures for Certifying Quantity of VOCs Emitted by Paint, Ink, and Other Coatings", December 1984* and no later amendments or using some other equivalent method. Such equivalent method shall be submitted to U.S. EPA as a SIP revision.

(l) An owner or operator of a source must be able to document that the coating manufacturer used either ASTM D2369-87* or other equivalent method to determine the volatile content of the coatings supplied and must also be able to document that the coating manufacturer used EPA 450/3-84-019* or other equivalent method to calculate the volume percent solids content of the coatings. Such equivalent method shall be submitted to U.S. EPA as a SIP revision.

(m) The commissioner or U.S. EPA may verify any test results submitted by a source. In the event of any inconsistency between test results, the commissioner's or U.S. EPA's test results will take precedence over results submitted by the source.

*These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

**These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-1-4; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2529; filed Sep 23, 1988, 11:59 a.m.: 12 IR 257; filed May 19, 1990, 5:00 p.m.: 13 IR 1847; filed May 6, 1991, 4:45 p.m.: 14 IR 1714; filed Jun 15, 2001, 12:10 p.m.: 24 IR 3619; errata filed Dec 12, 2002, 3:30 p.m.: 26 IR 1565; filed Aug 26, 2004, 11:30 a.m.: 28 IR 44; filed Nov 3, 2009, 3:29 p.m.: 20091202-IR-326090220FRA; errata filed Nov 18, 2009, 3:43 p.m.: 20091216-IR-326090220ACA)*

326 IAC 8-1-5 Petition for site-specific reasonably available control technology (RACT) plan

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. (a) An owner or operator of a source may submit a petition to the commissioner requesting a site-specific Reasonably Available Control Technology (RACT) plan as an alternative to the requirements specified in 326 IAC 8. This petition for site-specific RACT must contain:

(1) the name and address of the company and the name and telephone number of a responsible company representative over whose signature the petition is submitted;

(2) a description of all operations conducted at the location to which the petition applies and the purpose the volatile organic compound emitting equipment serves within the operations;

(3) reference to the specific emission limits, operational or equipment controls for which alternative emission limits, operational or equipment controls are proposed;

(4) a detailed description of the proposed alternative emission limits, operational or equipment controls, the magnitude of volatile organic compound emission reduction which will be achieved, and the quantity and composition of volatile organic compounds which will be emitted if the alternative emission limits, operational or equipment controls are instituted;

(5) a schedule for the installation or institution of the alternative operational or equipment controls in conformance with the appropriate compliance schedule section;

(6) a demonstration that the alternative control program constitutes reasonably available control technology for the petitioned facility. The factors to be presented in this demonstration include but are not limited to:

(A) the capital expenditure necessary to achieve the petitioned level of control;

(B) the impact of these costs on the firm;

(C) the energy requirements of the petitioned level of control;

(D) the impact on the environment in terms of any increase in air, water, and solid waste effluent discharge of the petitioned level of control;

(E) any adverse worker or product safety implications of the petitioned level of control; and

(F) an analysis for each of the factors in clauses (A) through (E) above for the control levels otherwise required by 326 IAC 8.

(b) The commissioner shall approve a petition for a site-specific RACT plan if:

(1) the petition is submitted in accordance with subsection (a) of this section;

(2) the petition demonstrates that the alternative control measures represent reasonably available control technology;

(3) the petition contains a compliance schedule for achieving and maintaining a reduction of volatile organic compound emissions as expeditiously as practicable.

(c) Site-specific RACT plans shall be submitted to the U.S. EPA as a SIP revision. *(Air Pollution Control Division; 326 IAC 8-1-5; filed Mar 10, 1988, 1:20 pm: 11 IR 2530)*

326 IAC 8-1-6 New facilities; general reduction requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 6. New facilities (as of January 1, 1980) that:

(1) have potential emissions of twenty-two and seven-tenths (22.7) megagrams (twenty-five (25) tons) or more per year;

(2) are located anywhere in the state; and

(3) are not otherwise regulated by:

(A) other provisions of this article;

(B) 326 IAC 20-48; or

(C) 326 IAC 20-56;

shall reduce VOC emissions using best available control technology (BACT). *(Air Pollution Control Division; 326 IAC 8-1-6; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2530; filed May 25, 2006, 2:30 p.m.: 29 IR 3350)*

326 IAC 8-1-7 Military specifications

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 7. If emission limitations set forth in this article (326 IAC 8) conflict with military specifications, the owner or operator of a source may petition the commissioner to have military specifications be the controlling limitation. If the commissioner approves the petition, the modified limitation shall be submitted to the U.S. EPA as a SIP revision. *(Air Pollution Control Division; 326 IAC 8-1-7; filed Mar 10, 1988, 1:20 pm: 11 IR 2530)*

326 IAC 8-1-8 Transfer efficiency determination *(Repealed)*

Sec. 8. *(Repealed by Air Pollution Control Division; filed Apr 18, 1990, 4:55 p.m.: 13 IR 1686)*

326 IAC 8-1-9 General record keeping and reporting requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 9. (a) For the purpose of records required under section 10(c), 11(c), or 12(c) of this rule, the applicable test methods and procedures specified in section 4 of this rule shall be used to determine the following:

(1) The volatile organic compound (VOC) content of each coating, as applied.

(2) The efficiency of each capture system and control device.

(b) Records required by this rule or records used to demonstrate that a source is exempt from the requirements of this article shall be submitted to the department or the U.S. EPA within thirty (30) days of the receipt of a written request.

(c) Coating sources subject to 326 IAC 8-5-5 shall comply with all applicable record keeping and reporting requirements. All records required by this rule or records necessary to determine compliance with 326 IAC 8-5-5 shall be accessible on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period. *(Air Pollution Control Division;*

326 IAC 8-1-9; filed Apr 22, 1997, 2:00 p.m.: 20 IR 2317)

326 IAC 8-1-10 Compliance certification, record keeping, and reporting requirements for certain coating facilities using compliant coatings

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 10. (a) This section applies to any coating source that:

(1) uses compliant coatings to comply with volatile organic compounds (VOC) emission limits; and

(2) meets any of the applicability criteria that follow:

(A) 326 IAC 8-5-5(a)(1);

(B) 326 IAC 8-5-5(a)(2); or

(C) 326 IAC 8-5-5(a)(3)(A).

(b) Upon startup of a new coating facility, or upon changing the method of compliance for an existing coating facility from daily-weighted averaging or control devices to the use of compliant coatings, the owner or operator of the coating source identified in subsection (a) shall certify to the department that the coating facility is in compliance with the requirements of this section. The certification shall include the following:

(1) The name and location of the source.

(2) The name, address, and telephone number of the person responsible for the source.

(3) Identification of each VOC emitting coating facility and identification of the applicable emission limitation.

(4) The name and identification number of each coating, as applied, used at each coating facility.

(5) The mass of VOC (excluding water and exempt compounds) per volume of coating and the volume of each coating, as applied.

(c) By May 1, 1997, or upon startup of a new coating facility, or upon changing the method of compliance for an existing coating facility from daily-weighted averaging or control devices to the use of compliant coatings, the owner or operator of a coating facility identified in subsection (a) shall for each coating facility and for each coating used collect and record each day and maintain all of the following information:

(1) The name and identification number of each coating, as applied.

(2) The mass of VOC (excluding water and exempt compounds) per volume of coating for each coating, as applied, or the VOC content of each coating, as applied, expressed in units necessary to determine compliance.

(3) As new compliant coatings are added to a coating facility, the records required by this subsection shall be updated to include the new coating.

(4) If use of a coating is discontinued, the records required by this section shall be maintained consistent with section 9(c) of this rule.

(d) By May 1, 1997, the owner or operator of a coating facility identified in subsection (a) shall notify the department in either of the following instances:

(1) Any record showing use of any noncompliant coatings shall be reported by submitting a copy of the record to the department within thirty (30) days following use; such record shall also be submitted with the quarterly compliance report. The following information shall accompany each submittal:

(A) Name and location of the coating facility.

(B) Time, date, and duration of the noncompliance.

(C) Corrective action taken.

(2) At least thirty (30) calendar days before changing the method of compliance from the use of compliant coatings to daily-weighted averaging or control devices, the owner or operator shall comply with all requirements of section 11(b) or 12(b) of this rule, respectively. Upon changing the method of compliance for a coating facility from the use of compliant coatings to daily-weighted averaging or control devices, the owner or operator shall comply with all requirements of section 11 or 12 of this rule, respectively.

(Air Pollution Control Division; 326 IAC 8-1-10; filed Apr 22, 1997, 2:00 p.m.: 20 IR 2318)

326 IAC 8-1-11 Compliance certification, record keeping, and reporting requirements for certain coating facilities using daily-weighted averaging

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 11. (a) This section applies to any owner or operator of a coating source that:

(1) uses daily-weighted averaging on the coating facility to comply with volatile organic compound (VOC) emission limits; and

(2) meets any of the applicability criteria that follow:

(A) 326 IAC 8-5-5(a)(1);

(B) 326 IAC 8-5-5(a)(2); or

(C) 326 IAC 8-5-5(a)(3)(A).

(b) Upon startup of a new coating facility, or upon changing the method of compliance for an existing coating facility from the use of compliant coatings or control devices to daily-weighted averaging, the owner or operator of a coating facility identified in subsection (a) shall certify to the department that the coating facility is in compliance with the requirements of this section. The certification shall include:

(1) The name and location of the source.

(2) The address and telephone number of the person responsible for the source.

(3) Identification of each coating facility and identification of the applicable emission limitation.

(4) The name and identification number of each coating facility that will comply by means of daily-weighted averaging.

(5) The VOC content of each coating, as applied, each day for each coating facility, expressed in units necessary to determine compliance.

(6) The instrument or method by which the owner or operator will accurately measure or calculate the VOC content of each coating and the volume of each coating, as applied, used each day at each coating facility.

(7) The method by which the owner or operator will create and maintain records each day as required in subsection (c).

(8) Calculation of the daily-weighted average for a day representative of current or projected maximum production levels.

(9) The time at which the coating facility's day begins if a time other than midnight local time is used to define a day.

(c) On and after May 1, 1997, or upon initial startup of a new coating facility, or upon changing the method of compliance for an existing coating facility from the use of compliant coatings or control devices to daily-weighted averaging, the owner or operator of a coating facility identified in subsection (a) shall for each coating facility and for each coating used collect and record each day, and maintain all of the following information:

(1) The name and identification number of each coating, as applied.

(2) The mass of VOC per volume (excluding water and exempt compounds) and the volume of each coating (excluding water and exempt compounds), as applied, or the VOC content and the volume of each coating, as applied, expressed in units necessary to determine compliance.

(3) The daily-weighted average VOC content of all coatings, in each coating facility.

(d) On and after May 1, 1997, the owner or operator of a coating facility identified in subsection (a) shall notify the department in either of the following instances:

(1) Any record showing noncompliance with the applicable daily-weighted average requirements shall be reported by submitting a copy of the record to the department within thirty (30) days following noncompliance; such record shall also be submitted with the quarterly compliance report. The following information shall accompany each submittal:

(A) Name and location of the coating facility.

(B) Date and duration of the noncompliance.

(C) Corrective action taken.

(2) At least thirty (30) calendar days before changing the method of compliance from daily-weighted averaging to compliant coatings or control devices, the owner or operator shall comply with all requirements of section 10(b) or 12(b) of this rule, respectively. Upon changing the method of compliance from daily-weighted averaging to the use of compliant coatings or control devices, the owner or operator shall comply with all requirements of section 10 or 12 of this rule, respectively.

(Air Pollution Control Division; 326 IAC 8-1-11; filed Apr 22, 1997, 2:00 p.m.: 20 IR 2319)

326 IAC 8-1-12 Compliance certification, record keeping, and reporting requirements for certain coating facilities using control devices

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 12. (a) This section applies to any owner or operator of a coating source that:
(1) uses control devices to comply with volatile organic compounds (VOC) emission limits; and
(2) meets the applicability criteria that follow:
(A) 326 IAC 8-5-5(a)(1);
(B) 326 IAC 8-5-5(a)(2); or
(C) 326 IAC 8-5-5(a)(3)(A).

(b) By May 1, 1997, or upon startup of a new coating facility, or upon changing the method of compliance for an existing coating facility, the owner or operator of the coating facility shall comply with the following requirements:
(1) Control system operation, maintenance, and testing requirements shall be as follows:
(A) The control system shall be operated and maintained according to the manufacturer's recommendations but may be modified based on the results of the initial or subsequent compliance test or upon the written request of the department.
(B) A copy of the operating and maintenance procedures shall be maintained in a convenient location at the source property and as close to the control system as possible for reference by plant personnel and department inspectors.
(C) The control system shall be tested according to the following schedule and in the following situations:
(i) An initial compliance test shall be conducted. Compliance tests shall be conducted no later than every thirty (30) months after the date of the initial test.
(ii) A compliance test shall be conducted whenever the owner or operator chooses to operate a control system under conditions different from those that were in place at the time of the previous test.
(iii) A compliance test shall be performed within ninety (90) days of:
(AA) startup of a new coating facility;
(BB) changing the method of compliance for an existing coating facility from compliant coatings or daily-weighted averaging to control devices; or
(CC) receipt of a written request from the department or the U.S. EPA.
(D) All compliance tests shall be conducted according to a protocol approved by the department at least thirty (30) days before the test. The protocol shall contain, at a minimum, the following information:
(i) Test procedures.
(ii) Operating and control system parameters.
(iii) Type of VOC containing process material being used.
(iv) The process and control system parameters that will be monitored during the test.
(2) Monitoring equipment requirements shall be as follows:
(A) If a thermal incinerator is used for VOC reduction, a temperature monitoring device capable of continuously recording the temperature of the gas stream in the combustion zone of the incinerator shall be used. The temperature monitoring device shall have an accuracy of one percent (1%) of the temperature being measured in degrees Centigrade, or plus or minus five-tenths degree Centigrade (± 0.5°C), whichever is more accurate.
(B) If a catalytic incinerator is used for VOC reduction, a temperature device capable of continuously recording the temperature in the gas stream immediately before and after the catalyst bed of the incinerator shall be used. The temperature monitoring device shall have an accuracy of one percent (1%) of the temperature being measured in degrees Centigrade, or plus or minus five-tenths degree Centigrade (± 0.5°C), whichever is more accurate.
(C) If a carbon adsorber is used to remove and recover VOC from the gas stream, a VOC monitoring device capable of continuously recording the concentration level of VOC at the outlet of the carbon bed shall be used. The monitoring device shall be based on a detection principle such as infrared, photoionization, or thermal conductivity.
(D) Where a VOC recovery device other than a carbon adsorber is used, the source shall provide to the department information describing the operation of the device and the process parameters that would indicate proper operation and maintenance of the control device. The department may request further information and will specify appropriate monitoring procedures, record keeping, and reporting requirements.

(c) On and after May 1, 1997, or on and after startup of a new coating facility, or upon changing the method of compliance for an existing coating facility from the use of compliant coatings or daily-weighted averaging to control devices, the owner or operator of a coating facility identified in subsection (a) shall collect and record each day and maintain all of the following information each day for each coating facility:

(1) The name and identification number of each coating used at each coating facility.

(2) The mass of VOC per unit volume of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating expressed in units necessary to determine compliance, used each day at each coating facility.

(3) The maximum VOC content (mass of VOC per unit volume of coating solids, as applied) or the daily-weighted average VOC content (mass of VOC per unit volume of coating solids, as applied) of the coatings used each day on each coating facility.

(4) The required overall emission reduction efficiency for each day for each coating facility.

(5) The actual overall emission reduction efficiency achieved for each day for each coating facility as determined during the compliance test required by subsection (b)(1)(C).

(6) Control device monitoring data as follows:

(A) For thermal incinerators, the following:

(i) Continuous records of the temperature in the gas stream in the combustion zone of the incinerator.

(ii) Records of all three (3) hour periods of operation in which the average combustion temperature of the gas stream in the combustion zone was more than fifty degrees Fahrenheit (50°F) (twenty-eight degrees Centigrade (28°C)) below the average combustion temperature that existed during the most recent test that demonstrated that the coating facility was in compliance.

(B) For catalytic incinerators, the following:

(i) Continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator.

(ii) Records of all three (3) hour periods of operation in which the average temperature measured at the process vent stream immediately before the catalyst bed is more than fifty degrees Fahrenheit (50°F) (twenty-eight degrees Centigrade (28°C)) below the average temperature of the process vent stream that existed during the most recent test that demonstrated that the coating facility was in compliance.

(iii) Records of all three (3) hour periods of operation in which the average temperature difference across the catalyst bed is less than eighty percent (80%) of the temperature difference measured during the most recent test that demonstrated that the coating facility was in compliance.

(C) For carbon adsorbers, the following:

(i) Continuous records of the VOC concentration level or reading in the exhaust stream of the carbon adsorber.

(ii) Records of all three (3) hour periods of operation during which either the average VOC concentration or the reading of organic compounds in the exhaust gases is more than twenty percent (20%) greater than the average exhaust gas concentration or reading measured by the organic compound monitoring device during the most recent determination of the recovery efficiency of the carbon adsorber that demonstrated that the coating facility was in compliance.

(D) Facilities using VOC recovery devices other than carbon adsorbers shall maintain the monitoring records and meet the reporting requirements specified by the department of subsection (b)(2)(D).

(7) A log of operating time for the capture system, control device, monitoring equipment, and the associated coating facility.

(8) A maintenance log for the capture system, control device, and monitoring equipment detailing all routine and nonroutine maintenance performed including dates and duration of any outages.

(d) On and after May 1, 1997, the owner or operator of a coating facility identified in subsection (a) shall notify the department in either of the following instances:

(1) Any record showing noncompliance with the applicable requirements for control devices shall be reported by submitting a copy of the record to the department within thirty (30) days following noncompliance; such record shall also be submitted with the quarterly compliance report. The following information shall accompany each submittal:

(A) Name and location of the coating facility.

(B) Identification of the control system where the noncompliance occurred and the coating facility it served.

(C) Time, date, and duration of the noncompliance.

(D) Corrective action taken.

(2) At least thirty (30) calendar days before changing the method of compliance from control devices to the use of compliant coatings or daily-weighted averaging, the owner or operator shall comply with all applicable requirements of section 10(b) or 11(b) of this rule, respectively. Upon changing the method of compliance from control devices to the use of compliant coatings or daily-weighted averaging, the owner or operator shall comply with all requirements of section 10 or 11 of this rule, respectively, applicable to the coating facility subject to 326 IAC 8-5-5.

(Air Pollution Control Division; 326 IAC 8-1-12; filed Apr 22, 1997, 2:00 p.m.: 20 IR 2319)

Rule 2. Surface Coating Emission Limitations

326 IAC 8-2-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-12-3-1; IC 13-14-8-3; IC 13-14-8-7; IC 13-17-1-1

Sec. 1. (a) This rule applies to the following:

(1) Facilities existing as of January 1, 1980, of the types described in sections 2 through 8 of this rule and section 11 of this rule, and facilities existing as of November 1, 1980, of the types described in sections 9 through 10 of this rule located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph counties; facilities of the types described in section 12 of this rule, located in Clark, Floyd, Lake, or Porter counties; and that are located at sources that have potential emissions of ninety and seven-tenths (90.7) megagrams (one hundred (100) tons) or greater per year of VOC.

(2) Facilities, construction of which commences after January 1, 1980, of the types described in sections 2 through 8 of this rule and section 11 of this rule, and facilities, construction of which commences after November 1, 1980, of the types described in sections 9 through 10 of this rule located in any county and that have potential emissions of twenty-two and seven-tenths (22.7) megagrams (twenty-five (25) tons) or greater per year of VOC.

(3) Facilities existing as of July 1, 1990, of the types described in sections 2 through 8, 9(a)(1), and 10 through 12 of this rule located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph counties and that have actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls.

(4) Facilities, construction of which commences after July 1, 1990, of the types described in sections 2 through 8, 9(a)(1), and 10 through 12 of this rule located in any county and that have actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls.

(5) Surface coating operations, including related cleaning activities, of the types described in sections 2, 5, 6, 7, 9, and 10 of this rule located in Lake County or Porter County with actual VOC emissions of equal to or greater than fifteen (15) pounds per day before add-on controls as specified in sections 2(c), 5(c), 6(c), 7(c), 9(d), and 10(e) of this rule.

(b) Facilities described in subsection (a)(3) shall attain compliance with this rule no later than July 1, 1991. *(Air Pollution Control Division; 326 IAC 8-2-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2533; errata filed Dec 29, 1988, 2:00 p.m.: 12 IR 1209; filed Apr 18, 1990, 4:55 p.m.: 13 IR 1677; errata filed Jun 18, 1990, 3:42 p.m.: 13 IR 2003; filed Dec 5, 1990, 3:30 p.m.: 14 IR 619; filed May 6, 1991, 4:45 p.m.: 14 IR 1716; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Nov 3, 2009, 3:29 p.m.: 20091202-IR-326090220FRA; filed Oct 20, 2010, 9:00 a.m.: 20101117-IR-326100413FRA; errata filed Oct 31, 2011, 9:33 a.m.: 20111116-IR-326110678ACA)*

326 IAC 8-2-2 Automobile and light duty truck coating operations

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-12-3-1; IC 13-14-8-3; IC 13-14-8-7; IC 13-17-1-1

Sec. 2. (a) This section establishes emission limitations for automobile and light duty truck surface coating operations, which include all passenger car or passenger car derivatives capable of seating twelve (12) or fewer passengers and any motor vehicle rated at three thousand eight hundred sixty-four (3,864) kilograms (eight thousand five hundred (8,500) pounds) gross weight or less that are designed primarily for the purpose of transportation or are derivatives of such vehicles.

(b) No owner or operator of an automotive or light duty truck assembly plant subject to this section may cause, allow, or permit the discharge into the atmosphere of any VOC from the application, flash-off, and curing of prime and topcoat coatings on automobile

and light duty truck bodies, hoods, fenders, cargo boxes, doors, and grill opening panels to exceed the following:

(1) Twenty-three hundredths (0.23) kilogram per liter of coating (one and nine-tenths (1.9) pounds per gallon), excluding water, delivered to the applicator from prime application, flash-off area, and oven operations.

(2) Thirty-four hundredths (0.34) kilogram per liter of coating (two and eight-tenths (2.8) pounds per gallon) excluding water, delivered to the applicator from topcoat application, flash-off area, and oven operations.

(3) Fifty-eight hundredths (0.58) kilogram per liter of coating (four and eight-tenths (4.8) pounds per gallon) excluding water, delivered to the applicator from final repair application, flash-off area, and oven operations.

(c) On and after April 1, 2011, the owner or operator of an automotive or light duty truck assembly plant in which the total actual VOC emissions from all automobile and light duty truck assembly coating operations, including related cleaning activities, are equal to or exceed fifteen (15) pounds per day, before add-on controls, located in Lake County or Porter County, shall comply with the following:

(1) VOC limitations for metal automotive or light duty truck assembly coating operations are as follows:

Assembly Coating Process	VOC Emission Limit
Electrodeposition primer (EDP) operations (including application area, spray/rinse stations, and curing oven)	VOC limit specified in 40 CFR 60.392(a)*
Primer-surfacer operations (including application area, flash-off area, and oven)	1.44 kilograms per liter of deposited solids (12.0 pounds per gallon) on a daily weighted average basis
Topcoat operations (including application area, flash-off area, and oven)	1.44 kilograms per liter of deposited solids (12.0 pounds per gallon) on a daily weighted average basis
Final repair operations	0.58 kilograms per liter of coating (4.8 pounds per gallon) excluding water and exempt solvents on a daily weighted average basis or as an occurrence weighted average
Combined primer-surfacer and topcoat operations	1.44 kilograms per liter of deposited solids (12.0 pounds per gallon) on a daily weighted average basis

(2) VOC limitations for metal automotive or light duty truck assembly coating materials are as follows:

Material**	VOC Emission Limit (kilograms of VOC per liter excluding water and exempt compounds, as applied)
Automobile and light duty truck glass bonding primer	0.90 kg VOC/liter
Automobile and light duty truck adhesive	0.25 kg VOC/liter
Automobile and light duty truck cavity wax	0.65 kg VOC/liter
Automobile and light duty truck sealer	0.65 kg VOC/liter
Automobile and light duty truck deadener	0.65 kg VOC/liter
Automobile and light duty truck gasket/gasket sealing material	0.20 kg VOC/liter
Automobile and light duty truck underbody coating	0.65 kg VOC/liter
Automobile and light duty truck interior coating	0.65 kg VOC/liter
Automobile and light duty truck bed liner	0.20 kg VOC/liter
Automobile and light duty truck weatherstrip adhesive	0.75 kg VOC/liter
Automobile and light duty truck lubricating wax/compound	0.70 kg VOC/liter
** VOC limits do not apply to materials supplied in containers with a net volume of 16 ounces or less, or a net weight of one pound or less.	

(3) Work practices shall be used for storage, mixing, and handling operations for VOC coatings, thinners, and coating-related waste materials. Work practices shall include, but not be limited to, the following:

(A) Store all VOC coatings, thinners, and coating-related materials in closed containers.

(B) Ensure that mixing and storage containers used for VOC coatings, thinners, and coating-related materials are kept closed at all times except when depositing or removing these materials.

(C) Minimize spills of VOC coatings, thinners, and coating-related materials.

(D) Convey VOC coatings, thinners, and coating-related materials from one (1) location to another in closed containers

or pipes.

(E) Minimize VOC emissions from cleaning of storage, mixing, and conveying equipment.

(4) Each facility shall develop and implement a work practice plan to minimize VOC emissions from cleaning and from purging of equipment associated with all coating operations for which emission limits are specified in this subsection. The plan shall specify practices and procedures to ensure that VOC emissions from the following operations are minimized:

(A) Vehicle body wiping.

(B) Coating line purging.

(C) Flushing of coating systems.

(D) Cleaning of spray booth grates.

(E) Cleaning of spray booth walls.

(F) Cleaning of spray booth equipment.

(G) Cleaning external spray booth areas.

(H) Other housekeeping measures.

If a facility has a work practice plan in place as specified in 40 CFR 63, Subpart III*, a facility must add procedures for minimizing nonhazardous air pollutant VOC emissions.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-2-2; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2533; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Nov 3, 2009, 3:29 p.m.: 20091202-IR-326090220FRA; errata filed Nov 18, 2009, 3:43 p.m.: 20091216-IR-326090220ACA)*

326 IAC 8-2-3 Can coating operations

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

Sec. 3. (a) This section establishes emission limitations for the coating applicator(s) and oven(s) of sheet, can or end coating lines involved in sheet basecoat (exterior and interior) and overvarnish; two-piece can exterior (basecoat and overvarnish); two- and three-piece can interior body spray; two-piece can exterior end (spray or roll coat); three-piece can side-seam spray and end sealing compound operations.

(b) No owner or operator of a can coating line subject to this section may cause, allow or permit the discharge into the atmosphere of any volatile organic compounds in excess of:

(1) 0.49 kilograms per liter of coating (4.0 pounds per gallon) excluding water, delivered to the coating applicator from sheet basecoat (exterior and interior) and overvarnish. After December 31, 1985, this limitation shall be 0.34 kilograms per liter of coating (2.8 pounds per gallon) excluding water;

(2) 0.51 kilograms per liter of coating (4.2 pounds per gallon) excluding water, delivered to the coating applicator from two- and three-piece can interior body spray and two-piece can exterior end (spray or roll coat) operations;

(3) 0.66 kilograms per liter of coating (5.5 pounds per gallon) excluding water, delivered to the coating applicator from three-piece can side-seam spray operations;

(4) 0.66 kilograms per liter of coating (5.5 pounds per gallon) excluding water, delivered to the coating applicator from end sealing compound operations. After December 31, 1985, this limitation shall be 0.44 kilograms per liter of coating (3.7 pounds per gallon) excluding water; or

(5) 0.34 kilograms per liter of coating (2.8 pounds per gallon) excluding water, delivered to the coating applicator from two-piece can exterior (basecoat and overvarnish) operations.

(Air Pollution Control Division; 326 IAC 8-2-3; filed Mar 10, 1988, 1:20 pm: 11 IR 2533; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

326 IAC 8-2-4 Coil coating operations

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

Sec. 4. (a) This section establishes emission limitations for the coating of any flat metal sheet or strips that comes in rolls or coils.

(b) No owner or operator of a coil coating line subject to this section may cause, allow or permit the discharge into the atmosphere of any volatile organic compounds in excess of 0.42 kilograms per liter of coating (3.5 pounds per gallon) excluding water, delivered to the coating applicator from prime and topcoat or single coat operations. After December 31, 1985, this limitation shall be 0.31 kilograms per liter of coating (2.6 pounds per gallon) excluding water. *(Air Pollution Control Division; 326 IAC 8-2-4; filed Mar 10, 1988, 1:20 pm: 11 IR 2534; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 8-2-5 Paper coating operations

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-12-3-1; IC 13-14-8-3; IC 13-14-8-7; IC 13-17-1-1

Sec. 5. (a) This section establishes emission limitations for web coating or saturation processes of paper, plastic, metal foil, and pressure sensitive tapes and labels regardless of substrate. Excluded from this category are single pieces of equipment that meet the emission limitations contained in 326 IAC 8-5-5 that conduct packaging rotogravure printing, publication rotogravure printing, or flexographic printing operations in line with surface coating lines.

(b) No owner or operator of a coating line subject to this section may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of thirty-five hundredths (0.35) kilogram per liter of coating (two and nine-tenths (2.9) pounds per gallon) excluding water, delivered to the coating applicator from a paper, plastic, metal foil, or pressure sensitive tape/labels coating line.

(c) On and after April 1, 2011, the owner or operator of a coating line in which the total actual VOC emissions from all paper coating operations, including related cleaning activities, are equal to or exceed fifteen (15) pounds per day located in Lake County or Porter County, before add-on controls, shall comply with the following:

(1) For coating lines with potential VOC emissions of twenty-five (25) tons per year or greater the following VOC emission limitations apply:

(A) Two-tenths (0.2) kilogram VOC/kg solids (two-tenths (0.2) lb VOC/lb solids) applied for pressure sensitive tape and label coating.

(B) Four-tenths (0.4) kilogram VOC/kg solids (four-tenths (0.4) lb VOC/lb solids) applied for paper, film, and foil coating.

(2) As an alternative to subdivision (1), an owner or operator may achieve compliance using a capture and control device that achieves a minimum overall VOC control efficiency of ninety percent (90%).

(3) An owner or operator may also achieve compliance by using a combination of subdivisions (1) and (2). The required overall add-on control efficiency, when combining add-on control with low VOC coatings, must be determined using 326 IAC 8-1-2(c), except that the units for actual VOC content and equivalent emissions limit is in pound of VOC per pound of coating solids instead of pound of VOC per gallon of coating solids.

(4) Work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for cleaning material, and cleaning-related waste materials. Work practices shall include, but not be limited to, the following:

(A) Store all VOC containing materials in closed containers.

(B) Ensure that mixing and storage containers used for VOC containing materials are kept closed at all times except when depositing or removing these materials.

(C) Minimize spills of VOC containing cleaning materials.

(D) Convey VOC containing cleaning materials from one (1) location to another in closed containers or pipes.

(E) Minimize VOC emissions from the cleaning of storage, mixing, and conveying equipment.

(Air Pollution Control Division; 326 IAC 8-2-5; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2534; filed Sep 23, 1988, 11:59 a.m.: 12 IR 258; filed Jan 16, 1990, 4:00 p.m.: 13 IR 1017; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Nov 3, 2009, 3:29 p.m.: 20091202-IR-326090220FRA)

326 IAC 8-2-6 Metal furniture coating operations

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-12-3-1; IC 13-14-8-3; IC 13-14-8-7; IC 13-17-1-1

Sec. 6. (a) This section is applicable to surface coating of any furniture made of metal or any metal part that will be assembled with other metal, wood, fabric, plastic, or glass parts to form a furniture piece.

(b) No owner or operator of a metal furniture coating line subject to this section may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of thirty-six hundredths (0.36) kilogram per liter of coating (three and zero-tenths (3.0) pounds per gallon) excluding water, delivered to the coating applicator from prime and topcoat or single coat operations.

(c) On and after April 1, 2011, the owner or operator of a metal furniture coating line in which the total actual VOC emissions from all metal furniture coating operations, including related cleaning activities, are equal to or exceed fifteen (15) pounds per day, before add-on controls, located in Lake County or Porter County, shall comply with the following:

(1) VOC limitations for metal furniture coating according to either of the following:

(A) Emission limits in terms of mass of VOC per volume of coating:

Coating Type	Maximum VOC Content	
	Baked	Air Dried
	Kilograms/liter (pounds/gallon) of coating, excluding water, as applied	Kilograms/liter (pounds/gallon) of coating, excluding water, as applied
General, one component	0.275 (2.3)	0.275 (2.3)
General, multicomponent	0.275 (2.3)	0.340 (2.8)
Extreme high gloss	0.360 (3.0)	0.340 (2.8)
Extreme performance	0.360 (3.0)	0.420 (3.5)
Heat resistant	0.360 (3.0)	0.420 (3.5)
Metallic	0.420 (3.5)	0.420 (3.5)
Pretreatment coatings	0.420 (3.5)	0.420 (3.5)
Solar absorbent	0.360 (3.0)	0.420 (3.5)

(B) Emission limits in terms of mass of VOC per volume of coating solids, as applied:

Coating Type	Maximum VOC Content	
	Baked	Air Dried
	Kilograms/liter (pounds/gallon) of coating solids, as applied	Kilograms/liter (pounds/gallon) of coating solids, as applied
General, one component	0.40 (3.3)	0.40 (3.3)
General, multicomponent	0.40 (3.3)	0.55 (4.5)
Extreme high gloss	0.61 (5.1)	0.55 (4.5)
Extreme performance	0.61 (5.1)	0.80 (6.7)
Heat resistant	0.61 (5.1)	0.80 (6.7)
Metallic	0.80 (6.7)	0.80 (6.7)
Pretreatment coatings	0.80 (6.7)	0.80 (6.7)
Solar absorbent	0.61 (5.1)	0.80 (6.7)

(2) As an alternative to subdivision (1), an owner or operator may achieve compliance with this subsection by using a capture and control device that achieves a minimum overall VOC control efficiency of ninety percent (90%).

(3) An owner or operator may also achieve compliance by using a combination of subdivisions (1)(B) and (2). The required overall add-on control efficiency, when combining add-on control with low VOC coatings, must be determined using 326 IAC 8-1-2(c).

(4) One (1) or a combination of the following equipment shall be used for coating application:

(A) Electrostatic equipment.

(B) High volume low-pressure (HVLP) spray equipment.

(C) Flow coating.

(D) Roller coating.

(E) Dip coating, including electrodeposition.

(F) Other coating application method capable of achieving a transfer efficiency equivalent to or better than achieved by HVLP spraying.

(5) Work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for cleaning material, coating related materials, and cleaning-related waste materials. Work practices shall include, but not be limited to, the following:

(A) Store all VOC containing materials in closed containers.

(B) Ensure that mixing and storage containers used for VOC containing materials are kept closed at all times except when depositing or removing these materials.

(C) Minimize spills of VOC containing materials.

(D) Convey VOC containing materials from one (1) location to another in closed containers or pipes.

(E) Minimize VOC emissions from the cleaning of storage, mixing, and conveying equipment.

(d) The following coating types are exempt from the emission limitations in this section:

(1) Stencil coatings.

(2) Safety-indicating coatings.

(3) Solid film lubricants.

(4) Electric-insulating and thermal-conducting coatings.

(5) Touch-up and repair coatings.

(6) Hand-held aerosol can coatings.

(Air Pollution Control Division; 326 IAC 8-2-6; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2534; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Nov 3, 2009, 3:29 p.m.: 20091202-IR-326090220FRA)

326 IAC 8-2-7 Large appliance coating operations

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

Affected: IC 13-12-3-1; IC 13-14-8-3; IC 13-14-8-7; IC 13-17-1-1

Sec. 7. (a) This section is applicable to the surface coating of doors, cases, lids, panels, and interior support parts of the following residential and commercial products:

(1) Washers.

(2) Dryers.

(3) Ranges.

(4) Refrigerators.

(5) Freezers.

(6) Water heaters.

(7) Dishwashers.

(8) Trash compactors.

(9) Air conditioners.

(10) Other similar products.

(b) No owner or operator of a large appliance coating line subject to this section may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of thirty-four hundredths (0.34) kilogram per liter of coating (two and eight-tenths (2.8) pounds per gallon) excluding water, delivered to the coating applicator from prime, single, or topcoat coating operations.

(c) On and after April 1, 2011, the owner or operator of a large appliance coating line in which the total actual VOC emissions from all large appliance coating operations, including related cleaning activities, are equal to or exceed fifteen (15) pounds per day, before add-on controls, located in Lake County or Porter County, shall comply with the following:

(1) VOC limitations for large appliance coating according to either of the following:

(A) Emission limits in terms of mass of VOC per volume of coating:

Coating Type	Maximum VOC Content	
	Baked	Air Dried
	Kilograms/liter (pounds/gallon) of coating, excluding water, as applied	Kilograms/liter (pounds/gallon) of coating, excluding water, as applied
General, one component	0.275 (2.3)	0.275 (2.3)
General, multicomponent	0.275 (2.3)	0.340 (2.8)
Extreme high gloss	0.360 (3.0)	0.340 (2.8)

Extreme performance	0.360 (3.0)	0.420 (3.5)
Heat resistant	0.360 (3.0)	0.420 (3.5)
Metallic	0.420 (3.5)	0.420 (3.5)
Pretreatment coatings	0.420 (3.5)	0.420 (3.5)
Solar absorbent	0.360 (3.0)	0.420 (3.5)

(B) Emission limits in terms of mass of VOC per volume of coating solids, as applied:

Coating Type	Maximum VOC Content	
	Baked	Air Dried
	Kilograms/liter (pounds/gallon) of coating solids, as applied	Kilograms/liter (pounds/gallon) of coating solids, as applied
General, one component	0.40 (3.3)	0.40 (3.3)
General, multicomponent	0.40 (3.3)	0.55 (4.5)
Extreme high gloss	0.61 (5.1)	0.55 (4.5)
Extreme performance	0.61 (5.1)	0.80 (6.7)
Heat resistant	0.61 (5.1)	0.80 (6.7)
Metallic	0.80 (6.7)	0.80 (6.7)
Pretreatment coatings	0.80 (6.7)	0.80 (6.7)
Solar absorbent	0.61 (5.1)	0.80 (6.7)

(2) As an alternative to subdivision (1), an owner or operator may achieve compliance with this subsection by using a capture and control device that achieves a minimum overall VOC control efficiency of ninety percent (90%).

(3) An owner or operator may also achieve compliance by using a combination of subdivisions (1) and (2). The required overall add-on control efficiency, when combining add-on control with low VOC coatings, must be determined using 326 IAC 8-1-2(c).

(4) One (1) or a combination of the following equipment shall be used for coating application:

(A) Electrostatic equipment.

(B) High volume low-pressure (HVLP) spray equipment.

(C) Flow coating.

(D) Roller coating.

(E) Dip coating, including electrodeposition.

(F) Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.

(5) Work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for cleaning material, coating materials, thinners, and cleaning-related waste materials. Work practices shall include, but not be limited to, the following:

(A) Store all VOC containing materials in closed containers.

(B) Ensure that mixing and storage containers used for VOC containing materials are kept closed at all times except when depositing or removing these materials.

(C) Minimize spills of VOC containing cleaning materials.

(D) Convey VOC containing cleaning materials from one (1) location to another in closed containers or pipes.

(E) Minimize the usage of solvents during the cleaning of storage, mixing, and conveying equipment.

(d) The following exemptions apply in this section:

(1) The use of quick-drying lacquers for repair of scratches and nicks that occur during assembly are exempt from the requirements in subsection (b) (limited to one (1) gallon in an eight (8) hour period).

(2) The following coating types are exempt from the emission limitations in this section:

(A) Stencil coatings.

(B) Safety-indicating coatings.

(C) Solid film lubricants.

(D) Electric-insulating and thermal-conducting coatings.

(E) Touch-up and repair coatings.
(F) Hand-held aerosol can coatings.
(Air Pollution Control Division; 326 IAC 8-2-7; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2534; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Nov 3, 2009, 3:29 p.m.: 20091202-IR-326090220FRA)

326 IAC 8-2-8 Magnet wire coating operations
Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-17

Sec. 8. (a) This section establishes the emission limitations for the process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

(b) No owner or operator of a magnet wire coating oven subject to this section may cause, allow or permit the discharge into the atmosphere of any volatile organic compounds in excess of 0.20 kilograms per liter of coating (1.7 pounds per gallon) excluding water, delivered to the coating applicator from magnet wire coating operations. *(Air Pollution Control Division; 326 IAC 8-2-8; filed Mar 10, 1988, 1:20 pm: 11 IR 2534; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 8-2-9 Miscellaneous metal and plastic parts coating operations
Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 9. (a) This section is applicable to surface coating as follows:
(1) Sources located in any county except Lake County or Porter County shall comply with subsections (b), (c), (e), and (f) for the metal surface coating of the following:
(A) Large and small farm machinery.
(B) Small household appliances.
(C) Office equipment.
(D) Commercial and industrial machinery and equipment.
(E) Any other industrial category that coats metal parts or products under the Standard Industrial Classification Code of major groups #33, #34, #35, #36, #37, #38, and #39.
(2) Sources located in Lake County or Porter County shall comply with subsections (d) and (f) for the metal and plastic surface coating of the following:
(A) Large and small farm machinery.
(B) Small household appliances.
(C) Office equipment.
(D) Commercial and industrial machinery and equipment.
(E) Any other industrial category that coats metal parts or products under the Standard Industrial Classification Code of major groups #33, #34, #35, #36, #37, #38, and #39.
(F) Fabricated metal products.
(G) Molded plastic parts.
(H) Automotive or transportation equipment.
(I) Interior or exterior automotive parts.
(J) Construction equipment.
(K) Motor vehicle accessories.
(L) Bicycles and sporting goods.
(M) Toys.
(N) Recreational vehicles.
(O) Pleasure craft (recreational boats).
(P) Extruded aluminum structural components.
(Q) Railroad cars.
(R) Heavier vehicles.

(S) Lawn and garden equipment.
(T) Business machines.
(U) Laboratory and medical equipment.
(V) Electronic equipment.
(W) Steel drums.
(X) Metal pipes.

(b) This section is not applicable to the surface coating of the following metal parts and products or to the following types of coating:

(1) Any metal parts or products limited by other sections of this rule.
(2) Exterior of airplanes.
(3) Automobile refinishing.
(4) Customized top coating of automobiles and trucks, if production is less than thirty-five (35) vehicles per day.
(5) Exterior of marine vessels.
(6) The application of coatings to burial caskets (Standard Industrial Classification Code 3995) if the source is not located in or adjacent to:
(A) a county designated as nonattainment for ozone; or
(B) Clark County or Floyd County.

(c) No owner or operator of a facility engaged in the surface coating of miscellaneous metal parts and products may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of the following:

(1) Fifty-two hundredths (0.52) kilogram per liter (four and three-tenths (4.3) pounds per gallon) of coating, excluding water, delivered to a coating applicator that applies clear coatings. A clear coating is a coating that:
(A) lacks color or opacity; and
(B) is transparent and uses the undercoat as a reflectant base or undertone color.
(2) Forty-two hundredths (0.42) kilogram per liter (three and five-tenths (3.5) pounds per gallon) of coating excluding water, delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to ninety (90) degrees Celsius (one hundred ninety-four (194) degrees Fahrenheit).
(3) Forty-two hundredths (0.42) kilogram per liter (three and five-tenths (3.5) pounds per gallon) of coating, excluding water, delivered to a coating applicator that applies extreme performance coatings. Extreme performance coatings are coatings designed for exposure to:
(A) temperatures consistently above ninety-five (95) degrees Celsius;
(B) detergents;
(C) abrasive or scouring agents;
(D) solvents;
(E) corrosive atmospheres;
(F) outdoor weather at all times; or
(G) similar environmental conditions.
(4) Thirty-six hundredths (0.36) kilogram per liter (three (3) pounds per gallon) of coating, excluding water, delivered to a coating applicator for all other coatings and coating application systems.

(d) On and after April 1, 2011, the owner or operator engaged in the surface coating of miscellaneous metal or plastic parts and products in which the total actual VOC emissions from all miscellaneous metal or plastic parts or products coating operations, including related cleaning activities, are equal to or exceed fifteen (15) pounds per day, before add-on controls, located in Lake County or Porter County, shall comply with the following:

(1) VOC limitations for surface coating of miscellaneous metal and plastic parts and products according to one (1) of the following:
(A) VOC limits based on low VOC coatings as follows:

Metal Parts and Products		
Coating Category	Maximum VOC Content	
	Air Dried	Baked

	Kilograms/liter (pounds/gallon) of coating, excluding water, as applied	Kilograms/liter (pounds/gallon) of coating, excluding water, as applied
General, one component	0.34 (2.8)	0.28 (2.3)
General, multicomponent		
Military specification		
Drum coating, new, exterior		
Camouflage	0.42 (3.5)	0.42 (3.5)
Electric-insulating varnish		
Etching filler		
High temperature		
Metallic		
Mold-seal		
Pan backing		
Pretreatment coatings		
Silicone release		
Vacuum-metalizing		
Drum coating, new, interior		
Drum coating, reconditioned, exterior		
Extreme high-gloss	0.42 (3.5)	0.36 (3.0)
Extreme performance		
Heat-resistant		
Repair and touch-up		
Solar-absorbent		
High performance architectural	0.74 (6.2)	0.74 (6.2)
Prefabricated architectural one or multicomponent	0.42 (3.5)	0.28 (2.3)
Drum coating, reconditioned, interior	0.50 (4.2)	0.50 (4.2)

Plastic Parts and Products	
Coating Category	Kilograms/liter (pounds/gallon) of coating, excluding water, as applied
General, one component	0.28 (2.3)
General, multicomponent	0.42 (3.5)
Electric dissipating coatings and shock free coatings	0.80 (6.7)
Extreme performance	0.42 (3.5) (two-pack coatings)
Metallic	0.42 (3.5)
Military specification	0.34 (2.8) (one pack)
	0.42 (3.5) (two pack)
Mold seal	0.76 (6.3)
Multicolored coatings	0.68 (5.7)
Optical coatings	0.80 (6.7)
Vacuum-metalizing	0.80 (6.7)

Automotive and Transportation Plastic Parts Coatings*		
Coating Category		Kilograms/liter (pounds/gallon) of coating, excluding water, as applied
High bake coatings – interior and exterior parts		
	Flexible primer	0.54 (4.5)
	Nonflexible primer	0.42 (3.5)
	Base coat	0.52 (4.3)

	Clear coat	0.48 (4.0)
	Nonbasecoat/clear coat	0.52 (4.3)
Low bake/air dried coatings – exterior parts		
	Primers	0.58 (4.8)
	Base coat	0.60 (5.0)
	Clear coat	0.54 (4.5)
	Nonbasecoat/clear coat	0.60 (5.0)
Low bake/air dried coatings – interior parts		0.60 (5.0)
Touch-up and repair coatings		0.62 (5.2)
*For red, yellow, and black automotive coatings, except touch-up and repair coatings, the limit is determined by multiplying the appropriate limit in this table by 1.15		

Business Machine Plastic Parts Coatings	
Coating Category	Kilograms/liter (pounds/gallon) of coating, excluding water, as applied
Primers	0.35 (2.9)
Topcoat	0.35 (2.9)
Texture coat	0.35 (2.9)
Fog coat	0.26 (2.2)
Touch-up and repair	0.35 (2.9)

Pleasure Craft Surface Coating	
Coating Category	Kilograms/liter (pounds/gallon) of coating, excluding water, as applied
Extreme high gloss topcoat	0.49 (4.1)
High gloss topcoat	0.42 (3.5)
Pretreatment wash primers	0.78 (6.5)
Finish primer surfacer	0.42 (3.5)
High build primer surfacer	0.34 (2.8)
Aluminum substrate antifoulant coating	0.56 (4.7)
Other substrate antifoulant coating	0.33 (2.8)
All other pleasure craft surface coatings for metal or plastic	0.42 (3.5)

Motor Vehicle Materials	
Coating Category	Kilograms/liter (pounds/gallon) of coating, excluding water, as applied
Motor vehicle cavity wax	0.65 (5.4)
Motor vehicle sealer	0.65 (5.4)
Motor vehicle deadener	0.65 (5.4)
Motor vehicle gasket/gasket sealing material	0.20 (1.7)
Motor vehicle underbody coating	0.65 (5.4)
Motor vehicle trunk interior coating	0.65 (5.4)
Motor vehicle bed liner	0.20 (1.7)
Motor vehicle lubricating wax/compound	0.70 (5.8)

(B) VOC limits based on low VOC coatings and add-on controls (VOC per volume solids), except for motor vehicle materials, as follows:

Metal Part and Products		
Coating Category	Maximum VOC Content	
	Air Dried	Baked

	Kilograms/liter (pounds/gallon) of solids, excluding water, as applied	Kilograms/liter (pounds/gallon) of solids, excluding water, as applied
General, one component	0.54 (4.52)	0.40 (3.35)
General, multicomponent		
Military specification		
Drum coating, new, exterior		
Camouflage	0.80 (6.67)	0.80 (6.67)
Electric-insulating varnish		
Etching filler		
High temperature		
Metallic		
Mold seal		
Pan backing		
Pretreatment coatings		
Silicone release		
Vacuum-metalizing		
Drum coating, new, interior		
Drum coating, reconditioned, exterior		
Extreme high-gloss	0.80 (6.67)	0.61 (5.06)
Extreme performance		
Heat-resistant		
Solar-absorbent		
High performance architectural	4.56 (38.0)	4.56 (38.0)
Prefabricated architectural one or multicomponent	0.80 (6.67)	0.40 (3.35)
Drum coating, reconditioned, interior	1.17 (9.78)	1.17 (9.78)

Plastic Parts and Products	
Coating Category	Kilograms/liter (pounds/gallon) of solids, excluding water, as applied
General, one component	0.40 (3.35)
General, multicomponent	0.80 (6.67)
Electric dissipating coatings and shock free coatings	8.96 (74.7)
Extreme performance	0.80 (6.67) (two-pack coatings)
Metallic	0.80 (6.67)
Military specification	0.54 (4.52) (one pack)
	0.80 (6.67) (two pack)
Mold seal	5.24 (43.7)
Multicolored coatings	3.04 (25.3)
Optical coatings	8.96 (74.7)
Vacuum-metalizing	8.96 (74.7)

Automotive and Transportation Plastic Parts Coatings*		
Coating Category		Kilograms/liter (pounds/gallon) of solids, excluding water, as applied
High bake coatings – interior and exterior parts		
	Flexible primer	1.39 (11.58)
	Nonflexible primer	0.80 (6.67)
	Base coat	1.24 (10.34)
	Clear coat	1.05 (8.76)

	Nonbasecoat/clear coat	1.24 (10.34)
Low bake/air dried coatings – exterior parts		
	Primers	1.66 (13.80)
	Base coat	1.87 (15.59)
	Clear coat	1.39 (11.58)
	Nonbasecoat/clear coat	1.87 (15.59)
Low bake/air dried coatings – interior parts		1.87 (15.59)
Touch-up and repair coatings		2.13 (17.72)
*For red, yellow, and black automotive coatings, except touch-up and repair coatings, the limit is determined by multiplying the appropriate limit in this table by 1.15		
Business Machine Plastic Parts Coatings		
Coating Category		Kilograms/liter (pounds/gallon) of solids, excluding water, as applied
Primers		0.57 (4.80)
Topcoat		0.57 (4.80)
Texture coat		0.57 (4.80)
Fog coat		0.38 (3.14)
Touch-up and repair		0.57 (4.80)
Pleasure Craft Surface Coating		
Coating Category		Kilograms/liter (pounds/gallon) of solids, excluding water, as applied
Extreme high gloss topcoat		1.10 (9.2)
High gloss topcoat		0.80 (6.7)
Pretreatment wash primers		6.67 (55.6)
Finish primer surfacer		0.80 (6.7)
High build primer surfacer		0.55 (4.6)
Aluminum substrate antifoulant coating		1.53 (12.8)
Other substrate antifoulant coating		0.53 (4.4)
All other pleasure craft surface coatings for metal or plastic		0.80 (6.7)

(2) One (1) or a combination of the following equipment shall be used for coating application, unless achieving compliance using an add-on control device under subdivision (3) or exempt under subdivision (7):

(A) Electrostatic equipment.
(B) High volume low-pressure (HVLP) spray equipment.
(C) Flow coating.
(D) Roller coating.
(E) Dip coating, including electrodeposition.
(F) Airless spray.
(G) Air-assisted airless spray.
(H) Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.

(3) An owner or operator may achieve compliance with this subsection by using a capture and control device that achieves a minimum overall VOC control efficiency of ninety percent (90%) instead of using low VOC coatings and application methods under subdivision (2). The required overall add-on control efficiency, when combining add-on control with low VOC coatings, must be determined using 326 IAC 8-1-2(c).

(4) The following coating types are exempt from the metal parts coating VOC limits in this subsection:

(A) Stencil coatings.
(B) Safety-indicating coatings.
(C) Solid film lubricants.
(D) Electric-insulating and thermal-conducting coatings.

(E) Magnetic data storage disk coatings.
(F) Plastic extruded onto metal parts to form a coating.

(5) The following types of coatings and coating operations are exempt from the plastic parts VOC limits in this subsection:
(A) Touch-up and repair coatings.
(B) Stencil coatings applied on clear or transparent substrates.
(C) Clear or translucent coatings.
(D) Coatings applied at a paint manufacturing facility while conducting performance tests on the coatings.
(E) Any individual coating category used in volumes less than fifty (50) gallons in any one (1) year, if substitute compliant coatings are not available, provided that the total usage of all such coatings does not exceed two hundred (200) gallons per year, per facility.
(F) Reflective coating applied to highway cones.
(G) Mask coatings that are less than five-tenths (0.5) millimeter thick (dried) and the area coated is less than twenty-five (25) square inches.
(H) Electromagnetic interference or radio frequency interference (EMI or RFI) shielding coatings.
(I) Heparin-benzalkonium chloride (HBAC) containing coatings applied to medical devices, provided that the total usage of all such coatings does not exceed one hundred (100) gallons per year, per plastic parts coating operation.

(6) The following types of coatings and operations are exempt from the automotive or transportation and business machine plastic part coating VOC limits:
(A) Texture coatings.
(B) Vacuum metalizing coatings.
(C) Gloss reducers.
(D) Texture topcoats.
(E) Adhesion primers.
(F) Electrostatic preparation coatings.
(G) Resist coatings.
(H) Stencil coatings.

(7) The application method requirements in subdivision (2) do not apply to the following:
(A) Metal parts touch-up coatings, repair coatings, and textured finishes.
(B) Plastic parts airbrush operations using five (5) gallons or less per year of coating.
(C) Extreme high gloss coatings are exempt from the pleasure craft VOC limits.

(e) If more than one (1) emission limitation in subsection (c) applies to a specific coating, then the least stringent emission limitation shall be applied.

(f) Work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
(1) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
(2) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
(3) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
(4) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
(5) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(Air Pollution Control Division; 326 IAC 8-2-9; filed Feb 9, 1988, 2:07 p.m.: 11 IR 1736; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2534; filed Apr 18, 1990, 4:55 p.m.: 13 IR 1678; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Nov 15, 2002, 11:17 a.m.: 26 IR 1078; filed Nov 3, 2009, 3:29 p.m.: 20091202-IR-326090220FRA; filed Oct 20, 2010, 9:00 a.m.: 20101117-IR-326100413FRA)

326 IAC 8-2-10 Flat wood panels; manufacturing operations

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

Sec. 10. (a) This section establishes the emission limitations for flat wood manufacturing and surface finishing of the following:

(1) Printed interior panels made of hardwood plywood and thin particle board. "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed. "Hardwood particleboard" means a manufactured board one-fourth (1/4) inch or less in thickness made of individual wood particles that have been coated with a binder and formed into flat sheets by pressure.

(2) Natural finish hardwood plywood panels. "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

(3) Hardboard paneling with Class II finishes. "Hardboard" means a panel manufactured primarily from inter-felted ligno-cellulosic fibers that are consolidated under heat and pressure in a hot press. "Class II finish" means finishes that meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.

(4) Exterior siding. Exterior siding may be made of solid wood, hardboard, or waferboard.

(5) Tileboard. "Tileboard" means a premium interior wall paneling product made of hardboard that is used in high moisture areas of the home, such as kitchens and bathrooms.

(b) This section does not apply to coating lines used solely in the manufacture of exterior siding, tileboard, or particleboard used as a furniture component.

(c) If a coating line is used both for coating paneling subject to this section as described in subsection (a) and for paneling exempt from this section as described in subsection (b) then any control equipment installed on the line shall be operated at all times when the line is in use.

(d) No owner or operator of a flatwood manufacturing facility subject to this section shall emit VOC from a coating line in excess of the following:

(1) Two and nine-tenths (2.9) kg per one hundred (100) square meters of coated finished product (6.0 lb/1,000 sq ft) from printed interior panels, regardless of the number of coats applied.

(2) Five and eight-tenths (5.8) kg per one hundred (100) square meters of coated finished product (12.0 lb/1,000 sq ft) from natural finish hardwood plywood panels, regardless of the number of coats applied.

(3) Four and eight-tenths (4.8) kg per one hundred (100) square meters of coated finished product (10.0 lb/1,000 sq ft) from Class II finishes on hardboard panels, regardless of the number of coats applied.

(e) On and after April 1, 2011, the owner or operator of a flatwood manufacturing facility in which the total actual VOC emissions from all flatwood paneling coating lines, including related cleaning activities, are equal to or exceed fifteen (15) pounds per day, before add-on controls, located in Lake County or Porter County, shall comply with the following:

(1) VOC emission limitations as follows:

Paneling Category	lb of VOC per gallon (grams VOC per liter) of surface coating, ink, or adhesive (excluding water and exempt compounds)	lb VOC per gallon solids (grams VOC per liter solids)
Printing interior panels made of hardwood, plywood, or thin particleboard	2.1 (250)	2.9 (350)
Natural finish hardwood plywood panels	2.1 (250)	2.9 (350)
Class II finishes on hardboard panels	2.1 (250)	2.9 (350)
Tileboard	2.1 (250)	2.9 (350)
Exterior siding	2.1 (250)	2.9 (350)

(2) An owner or operator may achieve compliance with this subsection by using a capture and control device that achieves a minimum overall VOC control efficiency of ninety percent (90%).

(3) As an alternative to subdivision (1), an owner or operator may also achieve compliance by using a combination of subdivisions (1) and (2). The required overall add-on control efficiency, when combining add-on control with low VOC coatings, must be determined using 326 IAC 8-1-2(c).

(4) Work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include the following,

at a minimum:

(A) Store all VOC containing materials in closed containers.

(B) Ensure that mixing and storage containers used for VOC containing materials are kept closed at all times except when depositing or removing these materials.

(C) Minimize spills of VOC containing cleaning materials.

(D) Convey VOC containing cleaning materials from one (1) location to another in closed containers or pipes.

(E) Minimize VOC emissions from the cleaning of storage, mixing, and conveying equipment.

(Air Pollution Control Division; 326 IAC 8-2-10; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2535; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Nov 3, 2009, 3:29 p.m.: 20091202-IR-326090220FRA)

326 IAC 8-2-11 Fabric and vinyl coating

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

Sec. 11. (a) This section establishes emission limitations for fabric coating and vinyl coating. "Fabric coating" means the coating or saturation of a textile substrate with a knife, roll, or rotogravure coater to impart properties that are not initially present, such as strength, stability, water repellancy, or appearance. "Vinyl coating" means applying a functional, decorative, or protective topcoat or printing on vinyl coated fabric or vinyl sheets. Organisol and plastisol cannot be used to bubble emissions from vinyl printing and topcoating.

(b) The owner or operator of a coating line subject to this section must implement one (1) of the following means of reducing volatile organic compounds emissions:

(1) Limit the VOC content of coating to:

(A) 0.35 kilograms of VOC per liter of coating (2.9 pounds per gallon) excluding water, delivered to the coating applicator from a fabric coating line; or

(B) 0.58 kilograms of VOC per liter of coating (4.8 pounds per gallon) excluding water, delivered to the coating applicator from a vinyl coating line.

(2) Install add on capture and control devices with an overall control efficiency of not less than 67.5 percent which shall meet:

(A) capture efficiency of at least seventy-five percent (75%); and

(B) control efficiency from the control device(s) of at least ninety percent (90%). In the case of incineration, the system shall have a destruction efficiency of ninety percent (90%) which will reduce VOC to carbon dioxide and water.

(Air Pollution Control Division; 326 IAC 8-2-11; filed Sep 23, 1988, 11:59 a.m.: 12 IR 258; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

326 IAC 8-2-12 Wood furniture and cabinet coating

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

Sec. 12. (a) This section applies to surface coated wood furnishings which include cabinets (kitchen, bath and vanity), tables, beds, chairs, sofas (non-upholstered), art objects, and any other coated furnishings made of solid wood, wood composition or simulated wood material.

(b) An owner or operator of a wood furniture or cabinet coating operation subject to this section shall apply all coating material, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one (1) or more of the following application systems: airless spray application system, air-assisted airless spray application system, electrostatic spray application system, electrostatic bell or disc application system, heated airless spray application system, roller coat, brush or wipe application system or dip-and-drain application system.

(c) Compliance with the provisions of this section shall be achieved on or before December 31, 1987. An owner or operator may submit a petition to the commissioner prior to December 31, 1987 to establish an extended schedule for compliance with this section. The petition shall include both a demonstration that compliance cannot be achieved by December 31, 1987 and milestone dates for purchases or construction necessary to achieve compliance. The petition, if approved by the commissioner, shall be submitted to the U.S. EPA as a SIP revision. Final compliance shall in no case extend beyond December 31, 1988. *(Air Pollution*

Control Division; 326 IAC 8-2-12; filed Mar 10, 1988, 1:20 pm: 11 IR 2536; errata filed Jan 11, 1989, 10:00 p.m.: 12 IR 1394; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

326 IAC 8-2-13 Marine vessel surface coating *(Repealed)*

Sec. 13. *(Repealed by Air Pollution Control Division; filed Apr 1, 1996, 10:00 a.m.: 19 IR 1757)*

Rule 3. Organic Solvent Degreasing Operations

326 IAC 8-3-1 Applicability and exemptions

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

Sec. 1. (a) This rule applies to the following:

(1) Persons owning or operating a degreaser using solvents that contain one (1) or more volatile organic compounds (VOC), with the potential to emit VOC emissions of greater than or equal to fifteen (15) pounds per day.

(2) Any person who sells, offers for sale, uses, or manufactures solvent that contains one (1) or more VOC for use in cold cleaner degreasers.

(b) For purposes of this section, "electronic components" means all components of an electronic assembly, including the following:

(1) Circuit board assemblies.
(2) Printed wire assemblies.
(3) Printed circuit boards.
(4) Soldered joints.
(5) Ground wires.
(6) Bus bars.
(7) Any other associated electronic component manufacturing equipment.

(c) Unless exempted in subsection (d), this rule applies to persons owning or operating degreasers as follows:

(1) Sections 2(a), 3(a), and 4(a) of this rule apply to the following degreasers:
  (A) Degreasers constructed on or before January 1, 1980, that are located:
    (i) in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph County; and
    (ii) at sources that have potential emissions of ninety and seven-tenths (90.7) megagrams (one hundred (100) tons) or greater per year of VOC.
  (B) Degreasers constructed after January 1, 1980, located anywhere in the state.

(2) Sections 2 through 4 of this rule apply to the following degreasers:
  (A) Cold cleaner degreasers without remote solvent reservoirs that:
    (i) are located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph County; or
    (ii) were constructed after July 1, 1990, and located anywhere in the state.
  (B) Open top vapor degreasers with an air-to-solvent interface of one (1) square meter (ten and eight-tenths (10.8) square feet) or greater that:
    (i) are located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph County; or
    (ii) were constructed after July 1, 1990, and located anywhere in the state.
  (C) Conveyorized degreasers with an air-to-solvent interface of two (2) square meters (twenty-one and six-tenths (21.6) square feet) or greater that:
    (i) are located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph County; or
    (ii) were constructed after July 1, 1990, and located anywhere in the state.

(3) Section 8 of this rule applies to any person who sells, offers for sale, uses, or manufactures solvent for use in cold cleaner degreasers as follows:
  (A) Before January 1, 2015, in the following counties:
    (i) Clark.

(ii) Floyd.
(iii) Lake.
(iv) Porter.
(B) On and after January 1, 2015, anywhere in the state.
(d) The following degreasers and solvent material uses are exempt from this rule:
(1) Sections 2 through 4 of this rule do not apply to the following solvent degreasing operations:
(A) Degreasers that are required to comply with and are operated in compliance with 326 IAC 20-6-1 that incorporates by reference 40 CFR 63, Subpart T*, National Emissions Standards for Hazardous Air Pollutants for Halogenated Solvent Cleaning.
(B) Degreasers that use solvents that contain less than one percent (1%) of VOC by weight.
(2) Section 8 of this rule does not apply to the following:
(A) Solvents intended to be used in degreasers to clean electronic components.
(B) Solvents used in degreasers that are:
(i) required to comply with and are operated in compliance with the requirements of 326 IAC 20-15-1, which incorporates by reference 40 CFR 63, Subpart GG*, National Emission Standards for Aerospace Manufacturing and Rework Facilities; and
(ii) not located in Clark, Floyd, Lake, or Porter County.
(C) Solvents containing less than one percent (1%) VOC by weight used in degreasers that are not located in Clark, Floyd, Lake, or Porter County.
(3) Sections 2 and 8 of this rule do not apply to spray gun cleaners, provided that the following conditions are met:
(A) The spray gun cleaner is not used to clean parts.
(B) The spray gun cleaner is a flushing and cleaning system that:
(i) has solvent pumped through or on the spray gun and spray gun components to flush out and clean off remaining coating;
(ii) has solvent recirculated within the cleaner and any associated solvent storage tank; or
(iii) uses nonatomized spray for flushing and cleaning lines and spray guns that are:
(AA) connected to a container of solvent; and
(BB) sprayed, are drained, or flow into a container that is covered or closed when not in use.
(C) The spray gun and spray gun components are not immersed in solvent.
(e) When a limit is expressed in metric units and the English units are provided, the owner or operator has the option of using either metric or English units to demonstrate compliance with the rule.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-3-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2537; filed Apr 18, 1990, 4:55 p.m.: 13 IR 1679; filed Apr 27, 1999, 9:06 a.m.: 22 IR 2854; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Jan 30, 2013, 12:33 p.m.: 20130227-IR-326070352FRA; filed May 11, 2021, 11:22 a.m.: 20210609-IR-326180542FRA)*

326 IAC 8-3-2 Cold cleaner degreaser control equipment and operating requirements

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

Sec. 2. (a) The owner or operator of a cold cleaner degreaser shall comply with the following control equipment and operating requirements:
(1) Equip the degreaser with a cover.
(2) Equip the degreaser with a device for draining cleaned parts.
(3) Close the degreaser cover whenever parts are not being handled in the degreaser.
(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
(5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).
(6) Store waste solvent only in closed containers.

(7) Prohibit the disposal or transfer of waste solvent in a manner that would allow greater than twenty percent (20%) of the waste solvent by weight to evaporate into the atmosphere.

(b) The owner or operator of a cold cleaner degreaser subject to this subsection shall comply with the following additional control equipment and operating requirements:

(1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent used is insoluble in, and heavier than, water.

(C) A refrigerated chiller.

(D) Carbon adsorption.

(E) VOC emission control equipment operated in accordance with section 8(b)(3) of this rule.

(2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.

(3) If used, solvent spray must be:

(A) performed in an enclosed chamber, with or without venting; or

(B) a solid, fluid stream applied at a pressure that does not cause excessive splashing.

(Air Pollution Control Division; 326 IAC 8-3-2; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2537; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Jan 30, 2013, 12:33 p.m.: 20130227-IR-326070352FRA; filed May 11, 2021, 11:22 a.m.: 20210609-IR-326180542FRA)

326 IAC 8-3-3 Open top vapor degreaser operation

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

Affected: IC 13-17-3

Sec. 3. (a) The owner or operator of an open top vapor degreaser shall comply with the following control equipment and operating requirements:

(1) Equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone.

(2) Keep the cover closed at all times except when processing workloads through the degreaser.

(3) Minimize solvent carryout by:

(A) racking parts to allow complete drainage;

(B) moving parts in and out of the degreaser at less than three and three-tenths (3.3) meters per minute (eleven (11) feet per minute);

(C) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;

(D) tipping out any pools of solvent on the cleaned parts before removal; and

(E) allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry.

(4) Prohibit the entrance into the degreaser of porous or absorbent materials, such as cloth, leather, wood, or rope.

(5) Prohibit occupation of more than one-half (1/2) of the degreaser's open top area with the workload.

(6) Prohibit the loading of the degreaser in a manner that causes the vapor level to drop more than fifty percent (50%) of the vapor depth when the workload is removed.

(7) Prohibit solvent spraying above the vapor level.

(8) Repair solvent leaks immediately, or shut down the degreaser if leaks cannot be repaired immediately.

(9) Store waste solvent only in closed containers.

(10) Prohibit the disposal or transfer of waste solvent in a manner that would allow greater than twenty percent (20%) of the waste solvent by weight to evaporate into the atmosphere.

(11) Prohibit the use of workplace fans near the degreaser opening.

(12) Prohibit visually detectable water in the solvent exiting the water separator.

(13) Provide the degreaser with a permanent, conspicuous label that lists the operating requirements in subdivisions (2) through (12).

(b) The owner or operator of an open top vapor degreaser subject to this subsection shall comply with the following additional control equipment and operating requirements:

(1) Equip the degreaser with the following switches:

(A) A condenser flow switch and thermostat that shuts off sump heat if condenser coolant stops circulating or becomes too warm.

(B) A spray safety switch that shuts off spray pump if the vapor level drops more than ten (10) centimeters (four (4) inches).

(2) Equip the degreaser with one (1) of the following control devices:

(A) A freeboard ratio of seventy-five hundredths (0.75) or greater and a powered cover if the degreaser opening is greater than one (1) square meter (ten and eight-tenths (10.8) square feet).

(B) A refrigerated chiller.

(C) An enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser.

(D) A carbon adsorption system with ventilation that, with the cover open, achieves:

(i) a ventilation rate of greater than or equal to fifteen (15) cubic meters per minute per square meter (fifty (50) cubic feet per minute per square foot) of air-to-vapor interface area; and

(ii) an average of less than twenty-five (25) parts per million of solvent exhausted over one (1) complete adsorption cycle.

(E) VOC emission control equipment that complies with the following:

(i) A capture efficiency of at least ninety percent (90%) by weight for the VOC emissions.

(ii) Either:

(AA) a destruction efficiency of at least ninety percent (90%), by weight; or

(BB) an outlet concentration of less than fifty (50) parts per million, by volume, dry basis, for the VOC emissions.

(iii) Compliance with the test methods and procedures in 326 IAC 8-1-4(d) through 326 IAC 8-1-4(f).

(3) Prohibit the loading of the degreaser to the point where the vapor level would drop more than ten (10) centimeters (four (4) inches) when the workload is removed.

(4) Prohibit the exhaust ventilation rate from exceeding twenty (20) cubic meters per minute per square meter (sixty-five (65) cubic feet per minute per square foot) of degreaser open area unless a greater ventilation rate is necessary to meet Occupational Safety and Health Administration requirements.

(5) Ensure that the label required under subsection (a)(13) includes the additional operating requirements listed in subdivisions (3) and (4).

(Air Pollution Control Division; 326 IAC 8-3-3; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2537; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Jan 30, 2013, 12:33 p.m.: 20130227-IR-326070352FRA; filed May 11, 2021, 11:22 a.m.: 20210609-IR-326180542FRA)

326 IAC 8-3-4 Conveyorized degreaser control equipment and operating requirements

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

Sec. 4. (a) The owner or operator of a conveyorized degreaser shall comply with the following control equipment and operating requirements:

(1) Minimize carryout emissions by:

(A) racking parts for optimal drainage; and

(B) maintaining the vertical conveyor speed at less than three and three-tenths (3.3) meters per minute (eleven (11) feet per minute).

(2) Store waste solvent only in closed containers.

(3) Prohibit the disposal or transfer of waste solvent in a manner that would allow greater than twenty percent (20%) of the waste solvent by weight to evaporate into the atmosphere.

(4) Repair solvent leaks immediately, or shut down the degreaser if leaks cannot be repaired immediately.

(5) Prohibit the use of workplace fans near the degreaser opening.

(6) Prohibit visually detectable water in the solvent from exiting the water separator.

(7) Equip the degreaser with a permanent, conspicuous label that lists the operating requirements in subdivisions (1) through (6).

(b) The owner or operator of a conveyorized degreaser subject to this subsection shall comply with the following control equipment and operating requirements:

(1) Equip the degreaser's entrances and exits with downtime covers that are closed when the degreaser is not operating.

(2) Equip the degreaser with the following switches:

(A) A condenser flow switch and thermostat that shuts off sump heat if condenser coolant stops circulating or becomes too warm.

(B) A spray safety switch that shuts off spray pump if the vapor level drops more than ten (10) centimeters (four (4) inches).

(C) A vapor level control thermostat that shuts off sump heat when vapor level rises more than ten (10) centimeters (four (4) inches).

(3) Equip the degreaser with entrances and exits that silhouette workloads in a manner that the average clearance between the articles and the degreaser opening is either less than:

(A) ten (10) centimeters (four (4) inches); or

(B) ten percent (10%) of the width of the opening.

(4) Equip the degreaser with a drying tunnel, rotating or tumbling basket, or other equipment that prevents cleaned articles from carrying out solvent liquid or vapor.

(5) Equip the degreaser with one (1) of the following control devices:

(A) A refrigerated chiller.

(B) A carbon adsorption system with ventilation that, with the downtime covers open, achieves:

(i) a ventilation rate of greater than or equal to fifteen (15) cubic meters per minute per square meter (fifty (50) cubic feet per minute per square foot) of air-to-solvent interface area; and

(ii) an average of less than twenty-five (25) parts per million of solvent exhausted over one (1) complete adsorption cycle.

(C) VOC emission control equipment that complies with the following:

(i) A capture efficiency of at least ninety percent (90%) by weight for the VOC emissions.

(ii) Either:

(AA) a destruction efficiency of at least ninety percent (90%), by weight; or

(BB) an outlet concentration of less than fifty (50) parts per million, by volume, dry basis, for the VOC emissions.

(iii) Compliance with the test methods and procedures in 326 IAC 8-1-4(d) through 326 IAC 8-1-4(f).

(6) Prohibit the exhaust ventilation rate from exceeding twenty (20) cubic meters per minute per square meter (sixty-five (65) cubic feet per minute per square foot) of degreaser opening unless a greater ventilation rate is necessary to meet Occupational Safety and Health Administration requirements.

(7) Cover entrances and exits at all times except when processing workloads through the degreaser.

(8) Ensure that the label required under subsection (a)(7) includes the additional operating requirements listed in subdivisions (6) and (7).

(Air Pollution Control Division; 326 IAC 8-3-4; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2537; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Jan 30, 2013, 12:33 p.m.: 20130227-IR-326070352FRA; filed May 11, 2021, 11:22 a.m.: 20210609-IR-326180542FRA)

326 IAC 8-3-5 Cold cleaner degreaser operation and control *(Repealed)*

Sec. 5. *(Repealed by Air Pollution Control Division; filed Jan 30, 2013, 12:33 p.m.: 20130227-IR-326070352FRA)*

326 IAC 8-3-6 Open top vapor degreaser operation and control requirements *(Repealed)*

Sec. 6. *(Repealed by Air Pollution Control Division; filed Jan 30, 2013, 12:33 p.m.: 20130227-IR-326070352FRA)*

326 IAC 8-3-7 Conveyorized degreaser operation and control *(Repealed)*

Sec. 7. *(Repealed by Air Pollution Control Division; filed Jan 30, 2013, 12:33 p.m.: 20130227-IR-326070352FRA)*

326 IAC 8-3-8 Material requirements for cold cleaner degreasers

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

Sec. 8. (a) Material requirements specified in this section for use in cold cleaner degreasers apply as follows:
(1) Before January 1, 2015, in Clark, Floyd, Lake, and Porter counties.
(2) On and after January 1, 2015, anywhere in the state.
(b) Material requirements are as follows:
(1) A person shall not cause or allow the sale of solvents for use in cold cleaner degreasing operations with a VOC composite partial vapor pressure, when diluted at the manufacturer's recommended blend and dilution, that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit) in an amount greater than five (5) gallons during any seven (7) consecutive days to an individual or business, except if that individual or business is in compliance with subdivision (3).
(2) A person shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit), except in compliance with subdivision (3).
(3) As an alternative to compliance with subdivisions (1) and (2), the owner or operator of a degreaser may install and operate VOC emission control equipment for a cold cleaner degreaser that meets the following:
(A) A capture efficiency of at least ninety percent (90%) by weight for the VOC emissions.
(B) Either:
(i) a destruction efficiency of at least ninety percent (90%), by weight; or
(ii) an outlet concentration of less than fifty (50) parts per million, by volume, dry basis, for the VOC emissions.
(C) Test methods and procedures in 326 IAC 8-1-4(d) through 326 IAC 8-1-4(f).
(c) Record keeping requirements are as follows:
(1) A person subject to the requirements of subsection (b)(1) shall maintain all of the following records for each sale:
(A) The name and address of the solvent purchaser.
(B) The date of sale, invoice, or billing of the contract servicer indicating the service date.
(C) The type of solvent sold.
(D) The volume of each unit of solvent sold.
(E) The total volume of the solvent sold.
(F) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
(2) A person subject to the requirements of subsection (b)(2) shall maintain each of the following records for each purchase:
(A) The name and address of the solvent supplier.
(B) The date of purchase, invoice, or billing of the contract servicer indicating the service date.
(C) The type of solvent purchased.
(D) The total volume of the solvent purchased.
(E) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
(3) A person subject to the requirements of subsection (b)(3) shall:
(A) comply with the monitoring equipment requirements in 326 IAC 8-1-12(b)(2); and
(B) collect and record the control device monitoring data in 326 IAC 8-1-12(c)(6) through 326 IAC 8-1-12(c)(8) each day of operation of the solvent cleaning operation and control device.
(d) All records required by subsection (c) must be:
(1) retained on-site or accessible electronically from the site for the most recent three (3) year period; and
(2) reasonably accessible for an additional two (2) year period.

(Air Pollution Control Division; 326 IAC 8-3-8; filed Apr 27, 1999, 9:06 a.m.: 22 IR 2854; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Jan 30, 2013, 12:33 p.m.: 20130227-IR-326070352FRA; filed May 11, 2021, 11:22 a.m.: 20210609-IR-

326180542FRA)

Rule 4. Petroleum Sources

326 IAC 8-4-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) All sections of this rule apply to sources as described in the applicable section of this rule and located in the following counties:

(1) Clark.
(2) Elkhart.
(3) Floyd.
(4) Hendricks.
(5) Lake.
(6) Marion.
(7) Porter.
(8) St. Joseph.

(b) Sections 4 through 7 and 9 of this rule apply to sources as described in the applicable section of this rule and located in the following counties:

(1) Boone.
(2) Dearborn.
(3) Hamilton.
(4) Hancock.
(5) Harrison.
(6) Johnson.
(7) Morgan.
(8) Shelby.

(c) Sections 2 through 5 and 7 through 9 of this rule apply to all new sources of the types described in this rule as of January 1, 1980.

(d) Section 6(a) and 6(b) of this rule apply to any gasoline storage tank at a gasoline dispensing facility with a monthly gasoline throughput of ten thousand (10,000) gallons per month or greater.

(e) Unless a stage II vapor recovery system is decommissioned in accordance with section 6(d) of this rule, a gasoline dispensing facility with a stage II vapor recovery system in the following counties shall comply with section 6(c) of this rule:

(1) Clark.
(2) Floyd.
(3) Lake.
(4) Porter.

(f) Section 6(d) of this rule applies to a gasoline dispensing facility with a stage II vapor recovery system that plans to decommission the stage II vapor recovery system. *(Air Pollution Control Division; 326 IAC 8-4-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2538; filed Aug 11, 1989, 1:40 p.m.: 13 IR 7; filed Apr 23, 1999, 2:12 p.m.: 22 IR 2855; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Apr 15, 2010, 4:05 p.m.: 20100512-IR-326070353FRA; filed Feb 5, 2015, 1:29 p.m.: 20150304-IR-326120636FRA)*

326 IAC 8-4-2 Petroleum refineries

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. This section will apply to vacuum producing systems, wastewater separators, and process unit turnarounds at petroleum refining sources.

(1) Vacuum Systems: No owner or operator of any vacuum producing systems at a petroleum refinery may cause, allow or permit the emission of any noncondensable volatile organic compounds from the condensers, hot wells or accumulators of the system. Lube oil units are exempt from this requirement.

(2) Wastewater Separators: The owner or operator of any wastewater (oil/water) separators at a petroleum refinery shall equip all separators, forebay, and openings in covers with lids or seals such that the lids or seals are in the closed position at all times except when in actual use.

(3) Process Turnaround: The owner or operator of a petroleum refinery shall notify the commissioner thirty (30) days prior to a process unit turnaround. In addition, the owner or operator shall minimize volatile organic compound emissions during turnaround, by providing for:

(A) depressurization venting of the process unit or vessel to a vapor recovery system, flare or firebox; and

(B) no emission of volatile organic compounds from a process unit or vessel until its internal pressure is 136 kPa (19.7 psi) or less.

(Air Pollution Control Division; 326 IAC 8-4-2; filed Mar 10, 1988, 1:20 pm: 11 IR 2538; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

326 IAC 8-4-3 Petroleum liquid storage facilities

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

Sec. 3. (a) This section will apply to all petroleum liquid storage vessels with capacities greater than one hundred fifty thousand (150,000) liters (thirty-nine thousand (39,000) gallons) containing volatile organic compounds whose true vapor pressure is greater than 10.5 kPa (1.52 psi).

(b) External Fixed Roof Tanks.

(1) No owner or operator of an affected fixed roof tanks shall permit the use of such facility unless:

(A) The facility has been retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall unless the source has been retrofitted with equally effective alternative control which has been approved.

(B) The facility is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.

(C) All openings, except stub drains, are equipped with covers, lids, or seals such that:

(i) the cover, lid, or seal is in the closed position at all times except when in actual use;

(ii) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(iii) rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

(c) External Floating Roof Tanks.

(1) This subsection applies to applicable open top tanks with a cover consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank wall.

This subsection does not apply to vessels which:

(A) are used to store a crude oil with a pour point of 50° F. or higher as determined by the ASTM Standard D97-66 (reapproved 1978) "Pour Point of Petroleum Oils" ASTM Part 15, 1981 ASTM, 1916 Race Street, Philadelphia, PA 19103 Library of Congress Cat. Card #40-10712;

(B) have capacities less than one million six hundred thousand (1,600,000) liters (four hundred twenty thousand (420,000) gal) and are used to store produced crude oil and condensate prior to lease custody transfer. "Condensate" means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions. "Lease custody transfer" means the transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation;

(C) contain a petroleum liquid with a true vapor pressure less than 27.6 kPa (4.0 psi); and

(i) are of welded construction; and

(ii) presently possess a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled-type seal, or other closure device of demonstrated equivalence approved by the commissioner; or

(D) are of welded construction, equipped with a metallic-type shoe primary seal and has a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal).

(2) No owner of a facility subject to this subsection shall store a petroleum liquid in that facility unless:

(A) The facility has been fitted with:

(i) a continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or

(ii) a closure or other device approved by the commissioner which is equally effective.

(B) All seal closure devices meet the following requirements:

(i) there are no visible holes, tears, or other openings in the seal(s) or seal fabric;

(ii) the seal(s) are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.

(iii) for vapor mounted primary seals, the accumulated gap area around the circumference of the secondary seal where a gap exceeding one-eighth (⅛) inch exists between the secondary seal and the tank wall shall not exceed 1.0 square inch per foot of tank diameter. There shall be no gaps exceeding one-half (½) inch between the secondary seal and the tank wall of welded tanks and no gaps exceeding one (1) inch between the secondary seal and the tank wall of riveted tanks.

(C) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:

(i) equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and

(ii) equipped with projections into the tank which remain below the liquid surface at all times.

(D) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(E) rim vents are set to open when the roof is being floated off the leg supports or at the manufacturer's recommended setting; and

(F) emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least ninety percent (90%) of the area of the opening.

(d) Record Keeping and Reporting. Owners or operators of petroleum liquid storage vessels shall maintain records of the types of volatile petroleum liquid stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed on the storage vessels. Such records shall be maintained for a period of two (2) years and shall be made available to the commissioner upon written request. *(Air Pollution Control Division; 326 IAC 8-4-3; filed Mar 10, 1988, 1:20 pm: 11 IR 2538; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 8-4-4 Bulk gasoline terminals

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

Sec. 4. (a) No owner or operator of a bulk gasoline terminal shall permit the loading of gasoline into any transport, excluding railroad tank cars, or barges, unless:

(1) The bulk gasoline terminal is equipped with a vapor control system, in good working order, in operation and consisting of one of the following:

(A) An adsorber or condensation system which processes and recovers vapors and gases from the equipment being controlled, releasing no more than 80 mg/l of VOC to the atmosphere.

(B) A vapor collection system which directs all vapors to a fuel gas system or incinerator.

(C) An approved control system, demonstrated to have control efficiency equivalent to or greater than clause (A) above.

(2) Displaced vapors and gases are vented only to the vapor control system.

(3) A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

(4) All loading and vapor lines are equipped with fittings which make vapor-tight connections and which will be closed upon disconnection.

(b) If employees of the owner of the bulk gasoline terminal are not present during loading, it shall be the responsibility of the owner of the transport to make certain the vapor control system is attached to the transport. The owner of the terminal shall take all reasonable steps to insure that owners of transports loading at the terminal during unsupervised times comply with this section. *(Air Pollution Control Division; 326 IAC 8-4-4; filed Mar 10, 1988, 1:20 pm: 11 IR 2539; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 8-4-5 Bulk gasoline plants

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

Sec. 5. (a) No owner or operator of a bulk gasoline plant shall allow the transfer of gasoline between any transport and any bulk plant storage tank unless such tank is equipped with:

(1) a vapor balance system connected between the gasoline transport and the gasoline storage tank, operating according to manufacturer's specifications; and

(2) a submerged fill pipe which has its discharge opening entirely submerged when the liquid level is either:

(A) six (6) inches above the bottom of the tank; or

(B) eighteen (18) inches or twice the diameter of the fill pipe, whichever is greater, above the bottom of a tank loaded from the side.

(b) If neither the owner nor the employees of the owner of a bulk gasoline plant are present during loading, it shall be the responsibility of the owner or operator of the transport to make certain that the vapor balance system is connected between the transport and the storage tank, and is operating according to manufacturer's specifications. *(Air Pollution Control Division; 326 IAC 8-4-5; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2540; filed Aug 11, 1989, 1:40 p.m.: 13 IR 8; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 8-4-6 Gasoline dispensing facilities

Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-12-3-1

Sec. 6. (a) The following definitions apply throughout this section:

(1) "Average monthly volume" means the amount of motor fuel dispensed per month from a gasoline dispensing facility based upon a monthly average for a two (2) year period from November 1990 through October 1992, or, if not available, the monthly average for the most recent twelve (12) calendar months. Monthly averages shall include only those months when the facility was operating.

(2) "CARB" means the California Air Resources Board.

(3) "Certified" means any vapor collection and control system that has been tested and approved by CARB as having a vapor recovery and removal efficiency of at least ninety-five percent (95%) by weight.

(4) "Constructed" means fabricated, erected, or installed and refers to any facility, emission source, or air pollution control equipment.

(5) "Dynamic pressure drop test" means a test procedure used to determine the pressure drop (flow resistance) through vapor collection and control systems, including:

(A) nozzles;

(B) vapor hoses;

(C) swivels;

(D) dispenser piping; and

(E) underground piping;

at prescribed flow rates. Test procedures for this test can be found in EPA 450/3-91-022b, "Technical Guidance–Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities"*.

(6) "Employee" means any person who performs work for an employer for compensation.

(7) "Facility" means any:

(A) building;

(B) structure;
(C) installation;
(D) operation; or
(E) combination located on contiguous properties and under common ownership;
that provides for the dispensing of motor vehicle fuel.
(8) "Gasoline dispensing facility" means any facility where gasoline is dispensed into motor vehicle fuel tanks or portable containers from a storage tank with a capacity of nine hundred forty-six (946) liters (two hundred fifty (250) gallons) or more. Diesel fuel and kerosene are not considered to be motor vehicle fuels.
(9) "Independent small business marketer of gasoline" means a person engaged in the marketing of gasoline who:
(A) is not a refiner;
(B) does not control, is not controlled by, or is not under common control with a refiner;
(C) is not otherwise directly or indirectly affiliated with a refiner or a person who controls, is controlled by, or is under a common control with a refiner (unless the sole affiliation referred to in this subdivision is by means of a supply contract or an agreement or contract to use a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner or any such person); and
(D) receives less than fifty percent (50%) annual income from the marketing of gasoline.
(10) "Liquid blockage test" means a test procedure used to detect low points in any vapor collection and control system where condensate may accumulate. Test procedures can be found in EPA 450/3-91-022b, "Technical Guidance–Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities"*.
(11) "Modification" means any change, removal, or addition, other than a certified replacement of any component contained within the vapor collection system and control system.
(12) "Motor vehicle" means any self-propelled vehicle powered by an internal combustion engine, including, but not limited to, the following:
(A) Automobiles.
(B) Trucks.
(C) Motorcycles.
(13) "Motor vehicle fuel" means any petroleum distillate having a Reid vapor pressure of more than four (4) pounds per square inch and that is used to power motor vehicles. Diesel fuel and kerosene are not considered to be motor vehicle fuels.
(14) "Owner or operator" means any person who:
(A) owns;
(B) leases;
(C) operates;
(D) manages;
(E) supervises; or
(F) controls;
directly or indirectly, a gasoline dispensing facility.
(15) "Pressure decay or leak test" means a test procedure used to quantify the vapor tightness of a vapor collection and control system installed at gasoline dispensing facilities. Test procedures can be found in EPA 450/3-91-022b, "Technical Guidance–Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities"*.
(16) "Vapor collection and control systems" means any system certified by CARB that limits the discharge to the atmosphere of motor vehicle fuel vapor displaced during the dispensing of motor vehicle fuel into motor vehicle fuel tanks.
(b) Stage I vapor recovery system requirements at gasoline dispensing facilities are as follows:
(1) No owner or operator of a gasoline dispensing facility shall allow the transfer of gasoline between any transport and any storage tank unless the tank is equipped with the following:
(A) A submerged fill pipe that extends to not more than:
(i) twelve (12) inches from the bottom of the storage tank if the fill pipe was installed on or before November 9, 2006; or
(ii) six (6) inches from the bottom of the storage tank if the fill pipe was installed after November 9, 2006.
(B) Either a pressure relief valve set to release at not less than seven-tenths (0.7) pounds per square inch or an orifice of five-tenths (0.5) inch in diameter.

(C) A vapor balance system connected between the tank and the transport operating according to manufacturer's specifications.

(2) If the owner or employees of the owner of a gasoline dispensing facility are not present during loading, it shall be the responsibility of the owner or the operator of the transport to make certain the vapor balance system is:

(A) connected between the transport and the storage tank; and

(B) operating according to manufacturer's specifications.

(c) Stage II vapor recovery system requirements at gasoline dispensing facilities are as follows:

(1) Unless a stage II vapor recovery system is decommissioned in accordance with subsection (d), the provisions of subdivision (2) shall apply to any gasoline dispensing facility that has a stage II vapor recovery system and is located in any of the following counties:

(A) Clark.

(B) Floyd.

(C) Lake.

(D) Porter.

(2) An owner or operator of a gasoline dispensing facility with a stage II vapor recovery system shall utilize a certified vapor collection and control system that is properly installed and operated as follows:

(A) No vapor collection and control system shall be used or maintained unless the system has been certified by CARB.

(B) Any vapor collection and control system utilized shall be maintained in accordance to its certified configuration and with the manufacturer's specification and maintenance schedule.

(C) No elements or components of a vapor collection and control system shall be:

(i) modified;

(ii) removed;

(iii) replaced; or

(iv) otherwise rendered inoperative;

in a manner that prevents the system from performing in accordance with its certification and design specifications.

(D) A vapor collection and control system shall not be operated with defective, malfunctioning, missing, or noncertified components. The following requirements apply to a vapor collection and control system:

(i) All parts of the system that can be visually inspected must be checked daily by the operator of the facility for the following malfunctions:

(AA) Absence or disconnection of any component required to be used to certify the system.

(BB) A vapor hose that is crimped or flattened such that the vapor passage is blocked or severely restricted.

(CC) A nozzle boot that is torn in either of the following manners:

(aa) A triangular shaped or similar tear one-half (1/2) inch or more to a side or a hole one-half (1/2) inch or more in diameter or length.

(bb) Slit one (1) inch or more in length.

(DD) A faceplate or flexible cone that is damaged in the following manner:

(aa) For balance nozzles and nozzles for aspirator and educator assist type systems, damage shall be such that the capability to achieve a seal with a fill pipe interface is affected for one-fourth (1/4) of the circumference of the faceplate (accumulated).

(bb) For nozzles for vacuum assist type systems that use a flexible cone, having more than one-fourth (1/4) of the flexible cone missing.

(EE) A nozzle shutoff mechanism that malfunctions in any manner.

(FF) A vacuum producing device that is inoperative.

(ii) Any defect in the system that is discovered in item (i) will require the immediate shutdown of the affected pumps until proper repairs are made.

(iii) A signed daily log of the daily inspection in item (i) shall be maintained at the facility.

(iv) One (1) operator or employee of the gasoline dispensing facility shall be trained and instructed annually in the proper operation and maintenance of a vapor collection and control system.

(v) Instructions shall:

(AA) be posted in a conspicuous and visible place within the motor vehicle fuel dispensing area for the

system in use at that station;

(BB) clearly describe how to fuel vehicles correctly with the vapor recovery nozzles utilized at that station; and

(CC) include a warning that repeated attempts to continue dispensing motor vehicle fuel after the system has indicated that the vehicle fuel tank is full may result in a spillage of fuel.

(3) Any gasoline dispensing facility subject to subdivision (2) shall retain copies of all records and reports adequate to clearly demonstrate the following:

(A) That a certified vapor collection and control system has been installed and tested to verify its performance according to its specifications.

(B) That proper maintenance has been conducted in accordance with the manufacturer's specifications and requirements.

(C) The time period and duration of all malfunctions of the vapor collection and control system.

(D) The motor vehicle fuel throughput of the facility for each calendar month of the previous year.

(E) That operators and employees are trained and instructed in the proper operation and maintenance of the vapor collection and control system.

(4) All records and reports required in subdivision (3) shall be made available to the department upon request. All records shall be retained for a period of two (2) years.

(5) All vapor collection and control systems shall be retested for vapor leakage and blockage, and successfully pass the test, at least every five (5) years or upon major system replacement or modification. A major system modification is considered to be replacing, repairing, or upgrading seventy-five percent (75%) or more of a vapor collection and control system of a facility.

(d) A stage II vapor recovery system at a gasoline dispensing facility in Clark, Floyd, Lake, or Porter counties must be maintained in accordance with subsection (c), unless the owner or operator decommissions the stage II vapor recovery system as follows:

(1) The owner or operator shall notify the department of the intent to decommission the stage II vapor recovery system.

(2) The owner or operator shall decommission the stage II vapor recovery system in accordance with section 14 of the 2009 "Recommended Practices for Installation and Testing of Vapor Recovery Systems at Vehicle Refueling Sites"* of the Petroleum Equipment Institute.

(3) The owner or operator shall complete decommissioning within one hundred (100) calendar days from notification to the department.

(e) After the effective date of this rule, a stage II vapor recovery system is not required in Clark, Floyd, Lake, or Porter counties for:

(1) a new gasoline dispensing facility; or

(2) an existing gasoline dispensing facility that has been decommissioned in accordance with subsection (d).

(f) Upon request by the department, the owner or operator of a gasoline dispensing facility that claims to be exempt from the requirements of this section shall submit records to the agency within thirty (30) calendar days from the date of the request that demonstrate that the gasoline dispensing facility is in fact exempt.

*These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-4-6; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2540; filed Aug 11, 1989, 1:40 p.m.: 13 IR 8; filed Nov 30, 1990, 4:20 p.m.: 14 IR 605; filed Oct 28, 1993, 5:00 p.m.: 17 IR 332; filed Sep 18, 1995, 3:00 p.m.: 19 IR 203; errata filed Dec 11, 1995, 3:00 p.m.: 19 IR 674; filed Jul 30, 1996, 2:00 p.m.: 19 IR 3349; errata filed Feb 18, 1997, 4:00 p.m.: 20 IR 1738; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Aug 26, 2004, 11:30 a.m.: 28 IR 47; filed Apr 15, 2010, 4:05 p.m.: 20100512-IR-326070353FRA; filed Feb 5, 2015, 1:29 p.m.: 20150304-IR-326120636FRA)*

326 IAC 8-4-7 Gasoline transports

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 7. (a) No owner or operator of a gasoline transport shall cause, allow, or permit the transfer of gasoline between transports and storage tanks that are equipped with a vapor balance system or vapor recovery system unless:

(1) the vapor balance system or vapor recovery system is connected and operating according to manufacturers' specifications;

(2) gasoline transport compartment hatches are closed at all times during loading operations;

(3) except as provided in section 9(i) of this rule (stack testing) and for sources subject to 40 CFR 60.503(b)* (Standards of Performance for New Stationary Sources) or 40 CFR 63.425(a)* (National Emission Standards for Hazardous Air Pollutants) requirements, there are no visible leaks, or otherwise detectable leaks (measured at twenty-one thousand (21,000) parts per million as propane as specified in 40 CFR 63.425(f)(1)*), in the gasoline transport's pressure/vacuum relief valves, hatch cover, trailer compartments, storage tanks, or associated vapor and liquid lines during loading or unloading; and

(4) the pressure relief valves on gasoline transports are set to release at no less than four and eight-tenths (4.8) kilo Pascals (seven-tenths (0.7) pounds per square inch).

(b) Tank wagons are exempt from vapor balance requirements.

(c) When employees of the owner of a bulk gasoline terminal are present to supervise or perform loading, the owner of the terminal shall be responsible for compliance with subsection (a)(1) through (a)(3). The owner of the terminal shall also ensure that owners of gasoline transports loading at the terminal during unsupervised times comply with this section.

(d) Gasoline transports must be designed, maintained, and operated so as to be vapor-tight.

(e) Transfer of gasoline between a gasoline transport and a storage tank that is not equipped with a vapor balance system or vapor recovery system is not subject to this section. *(Air Pollution Control Division; 326 IAC 8-4-7; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2540; filed Aug 11, 1989, 1:40 p.m.: 13 IR 9; errata filed Sep 29, 1989, 4:30 p.m.: 13 IR 297; filed Oct 5, 1999, 3:46 p.m.: 23 IR 298; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Nov 30, 2001, 12:15 p.m.: 25 IR 1183)*

326 IAC 8-4-8 Leaks from petroleum refineries; monitoring; reports

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

Sec. 8. (a) The owner or operator of each petroleum refinery subject to this rule shall develop and conduct a monitoring program consistent with the provisions of subsection (c). A description of such program shall be submitted to the board by June 30, 1981. The first report required by this section shall be submitted by January 31, 1982.

(b) The monitoring program required by this section shall contain each element listed as a requirement in subsections (c) through (m). The provisions listed as guidelines in subsections (c) through (m) are not absolute requirements, but guidelines to be used in preparation of the program. Programs following all guidelines contained in subsections (c) through (m) will be approved by the commissioner. Programs that delete or amend certain guidelines will only be approved if the owner or operator submits information justifying such amendment or deletion based on the fact that:

(1) such guideline is not economically or technologically feasible as it applies to a particular source; or

(2) the program proposed by such owner or operator will result in equivalent control of VOC emissions.

(c) Each monitoring program shall specify the components that will be tested and the frequency at which such tests will be made.

(d) An approvable program will consist of the following:

(1) Monitor yearly by the methods referenced in subsection (n), all pump seals, pipeline valves in liquid service, and process drains.

(2) Monitor quarterly by the methods referenced in subsection (n), all compressor seals, pipeline valves in gaseous service, and pressure relief valves in gaseous service.

(3) Monitor weekly by visual methods all pump seals.

(4) Monitor immediately any pump seal from which liquids are observed dripping.

(5) Monitor any relief valve within twenty-four (24) hours after it has vented to the atmosphere.

(6) Monitor immediately after repair any component that was found leaking.

(7) Commencing July 1, 1991, components which are located where monitoring would be hazardous shall be monitored when conditions allow these components to be monitored safely.

(e) Pressure relief devices which are connected to an operating flare header, vapor recovery device, storage tank valves, and valves that are not externally regulated are exempt from the monitoring requirements listed in subsection (c). Components which are located where monitoring would be hazardous, and components in lines carrying gases composed of ninety percent (90%) methane or ethane, are exempt from the monitoring requirements listed in subsection (c) until July 1, 1991.

(f) The monitoring program may be suspended during the months of December, January, and February.

(g) Each monitoring program shall specify the make and model of the monitoring equipment to be used.

(h) Each monitoring program shall specify the following:

(1) The VOC concentration which will establish the existence of a leaking component.

(2) The way in which such components will be recorded and identified.

(3) The time within which each type of leaking component will be repaired.

(i) An approvable program will consist of the following:

(1) Record all leaking components which have a VOC concentration exceeding ten thousand (10,000) parts per million when tested according to the provisions in subsection (n).

(2) The owner or operator of a petroleum refinery, upon the detection of a leaking component, as defined in subdivision (1), shall affix a weatherproof and readily visible tag, bearing an identification number and the date the leak is located, to the component. This tag shall remain in place until the leaking component is repaired.

(3) Repair and retest the leaking components, as defined in subdivision (1), as soon as possible but no later than fifteen (15) normal working days after the leak is found.

(4) Identify all leaking components, as defined in subdivision (1), which cannot be repaired until the unit is shut down for turnaround.

(j) Each monitoring program shall specify the records that will be maintained. A copy of the log book format will be submitted with the program description. Copies of all monitoring records shall be retained for a minimum of two (2) years after the date on which the record was made. Copies of monitoring records shall be immediately made available to the commissioner, upon verbal or written request, at any reasonable time.

(k) An approvable record keeping program will include the following data:

(1) The name of the process unit where the component is located.

(2) The type of component, for example, valve, seal.

(3) The tag number of the component.

(4) The date on which a leaking component is discovered.

(5) The date on which a leaking component is repaired.

(6) The date and instrument reading of the recheck procedure after a leaking component is repaired.

(7) A record of the calibration of the monitoring instrument.

(8) Those leaks that cannot be repaired until turnaround.

(9) The total number of components checked and the total number of components found leaking.

(l) Each monitoring program shall specify the frequency at which reports will be submitted to the commissioner and the data that will be included in such reports.

(m) An approvable reporting program shall include the following:

(1) Submission of a report to the commissioner during June, September, and December that lists all leaking components that were located during the previous calendar months, but not repaired within fifteen (15) days, all leaking components awaiting unit turnaround, the total number of components inspected, and the total number of components found leaking.

(2) Submission of a signed statement with the report attesting to the fact that, with the exception of those leaking components listed in the report, all monitoring and repairs were performed as stipulated in the monitoring program.

(n) Each monitoring program shall specify the testing and calibration procedures to be used to determine compliance.

(o) An approvable monitoring program shall use testing and calibration procedures consistent with Method 21 of 40 CFR 60, Appendix A.

(p) Following submittal of the program description as required by subsection (a), the commissioner shall approve or disapprove such program within two (2) months following the submittal. If no action is taken within the two (2) month period, the program as submitted shall be deemed approved. If no program is submitted by a refinery by the time specified in subsection (a), the refinery shall be required to implement a program in accordance with the guidelines of subsections (b) through (o). If a program is disapproved, the disapproval shall indicate the specific portions of the program that are unacceptable. All acceptable portions of the program shall be implemented immediately. The owner or operator of the refinery shall have three (3) months after disapproval to amend the program or substantiate the program in a manner acceptable to the commissioner. At the end of such time, if the program is still unacceptable, the commissioner may require the refinery to comply with a program specified by the commissioner. Monitoring, record keeping, and reporting programs varying from the guidelines specified in subsections (b) through (o) shall be submitted to the U.S. EPA as a SIP revision.

(q) Each refinery subject to this section shall comply with the following provisions:

(1) The commissioner may require the operator to reschedule turnaround based on the number and severity of tagged leaks awaiting turnaround.

(2) Except for safety pressure relief valves, no owner or operator of a petroleum refinery shall install or operate a valve at the end of a pipe or line containing volatile organic compounds unless the pipe or line is sealed with a second valve, a blind flange, a plug, or a cap. The sealing device may be removed only when a sample is being taken or during maintenance operations.

(3) Pipeline valves and pressure relief valves in gaseous volatile organic compound service shall be marked in some manner that will be readily obvious to both refinery personnel performing monitoring and the staff.

(r) The commissioner, upon written notice, may modify the monitoring, record keeping, and reporting requirements. *(Air Pollution Control Division; 326 IAC 8-4-8; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2540; filed Apr 18, 1990, 4:55 p.m.: 13 IR 1681; errata filed Sep 5, 1990, 2:20 p.m.: 14 IR 155; filed May 6, 1991, 4:45 p.m.: 14 IR 1719; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 8-4-9 Leaks from transports and vapor collection systems; records

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 9. (a) This section is applicable to the following:

(1) All vapor balance systems and vapor control systems at sources subject to sections 4 through 6 of this rule.

(2) All gasoline transports subject to section 7 of this rule.

(b) No person shall allow a gasoline transport that is subject to this rule and that has a capacity of two thousand (2,000) gallons or more to be filled or emptied unless the gasoline transport completes the following:

(1) Annual leak detection testing before the end of the twelfth calendar month following the previous year's test, according to test procedures contained in 40 CFR 63.425(e)*, as follows:

(A) Conduct the pressure and vacuum tests for the transport's cargo tank using a time period of five (5) minutes. The initial pressure for the pressure test shall be four hundred sixty (460) millimeters H_2O (eighteen (18) inches H_2O) gauge. The initial vacuum for the vacuum test shall be one hundred fifty (150) millimeters H_2O (six (6) inches H_2O) gauge. The maximum allowable pressure or vacuum change is twenty-five (25) millimeters H_2O (one (1) inch H_2O) in five (5) minutes.

(B) Conduct the pressure test of the cargo tank's internal vapor valve as follows:

(i) After completing the test under clause (A), use the procedures in 40 CFR 60, Appendix A, Method 27* to repressurize the tank to four hundred sixty (460) millimeters H_2O (eighteen (18) inches H_2O) gauge. Close the transport's internal vapor valve or valves, thereby isolating the vapor return line and manifold from the tank.

(ii) Relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After five (5) minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable five (5) minute pressure increase is one hundred thirty (130) millimeters H_2O (five (5) inches H_2O).

(2) Repairs by the gasoline transport owner or operator, if the transport does not meet the criteria of subdivision (1), and retesting to prove compliance with the criteria of subdivision (1).

(c) The annual test data remain valid until the end of the twelfth calendar month following the test. The owner of the gasoline transport shall be responsible for compliance with subsection (b) and shall provide the owner of the loading facility with the most recent valid modified 40 CFR 60, Appendix A, Method 27* test results upon request. The owner of the loading facility shall take all reasonable steps, including reviewing the test date and tester's signature, to ensure that gasoline transports loading at its facility comply with subsection (b).

(d) The owner or operator of a vapor balance system or vapor control system subject to this rule shall:

(1) design and operate the applicable system and the gasoline loading equipment in a manner that prevents:

(A) gauge pressure from exceeding four thousand five hundred (4,500) pascals (eighteen (18) inches of H_2O) and a vacuum from exceeding one thousand five hundred (1,500) pascals (six (6) inches of H_2O) in the gasoline transport;

(B) except for sources subject to 40 CFR 60.503(b)* (Standards of Performance for New Stationary Sources) or 40 CFR 63. 425(a)* (National Emission Standards for Hazardous Air Pollutants) requirements, a reading equal to or greater than twenty-one thousand (21,000) parts per million as propane, from all points on the perimeter of a potential

leak source when measured by the method referenced in 40 CFR 60, Appendix A, Method 21*, or an equivalent procedure approved by the commissioner during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals; and

(C) avoidable visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals; and

(2) within fifteen (15) days, repair and retest a vapor balance, collection, or control system that exceeds the limits in subdivision (1).

(e) The department may, at any time, monitor a gasoline transport, vapor balance, or vapor control system to confirm continuing compliance with subsection (b) or (c).

(f) The owner or operator of a vapor balance or vapor control system subject to this section shall maintain records of all certification testing. The records shall identify the following:

(1) The vapor balance, vapor collection, or vapor control system.

(2) The date of the test and, if applicable, retest.

(3) The results of the test and, if applicable, retest.

The records shall be maintained in a legible, readily available condition for at least two (2) years after the date the testing and, if applicable, retesting were completed.

(g) The owner or operator of a gasoline transport subject to this section shall keep a legible copy of the transport's most recent valid annual modified 40 CFR 60, Appendix A, Method 27* test either in the cab of the transport or affixed to the transport trailer. The test record shall identify the following:

(1) The gasoline transport.

(2) The type and date of the test and, if applicable, date of retest.

(3) The test methods, test data, and results certified as true, accurate, and in compliance with this rule by the person who performs the test.

This copy shall be made available immediately upon request to the department and to the owner of the loading facility for inspection and review. The department shall be allowed to make copies of the test results.

(h) If the commissioner allows alternative test procedures in subsection (b)(1) or (d)(1)(B), such method shall be submitted to the U.S. EPA as a SIP revision.

(i) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in subsection (d)(1)(B). Testers shall use 40 CFR 60, Appendix A, Method 21* to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the bulk gas terminal. The threshold for leaks shall be as follows:

(1) Five hundred (500) parts per million methane for all bulk gas terminals subject to NESHAP/MACT (40 CFR 63, Subpart R*).

(2) Ten thousand (10,000) parts per million methane for all bulk gas terminals subject to New Source Performance Standards (40 CFR 60, Subpart XX*) and for all other bulk gas terminals.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-4-9; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2542; filed Nov 30, 1990, 4:20 p.m.: 14 IR 606; filed Jul 30, 1996, 2:00 p.m.: 19 IR 3351; filed Oct 5, 1999, 3:46 p.m.: 23 IR 299; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Jan 14, 2002, 2:57 p.m.: 25 IR 1906; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Aug 26, 2004, 11:30 a.m.: 28 IR 49)*

Rule 5. Miscellaneous Operations

326 IAC 8-5-1 Applicability of rule

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-14-8-7; IC 13-17-1; IC 13-17-3

Sec. 1. This rule applies to the following:

(1) Facilities or sources existing as of January 1, 1980, of the types described in section 2 of this rule and facilities or sources existing as of November 1, 1980, of the types described in sections 3 through 5 of this rule located in the following counties:
(A) Clark.
(B) Elkhart.
(C) Floyd.
(D) Lake.
(E) Marion.
(F) Porter.
(G) St. Joseph.
(2) Sources or facilities, construction of which commences after January 1, 1980, of the types described in section 2 of this rule and sources or facilities, construction of which commences after November 1, 1980, of the types described in sections 3 through 5 of this rule located anywhere in the state.
(3) Any asphalt paving application made after January 1, 1980.
(4) Facilities or sources, construction of which commences after April 1, 2007, of the types described in section 6 of this rule located anywhere in the state.
(Air Pollution Control Division; 326 IAC 8-5-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2543; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Feb 20, 2007, 3:14 p.m.: 20070321-IR-326050197FRA)

326 IAC 8-5-2 Asphalt paving rules
Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-17

Sec. 2. (a) This section applies to any paving application anywhere in the state. For the purposes of this section, the term "asphalt emulsion" shall mean any dispersion of asphalt in water, optional additives, optional distillates, and emulsifying agents.
(b) No person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than seven percent (7%) oil distillate by volume of emulsion as determined by ASTM D244-80a "Emulsific Asphalts" ASTM part 15, 1981 ASTM 1916 Race St., Philadelphia, PA 19103, Library of Congress Card Catalog #40-10712, for any paving application except as used for the following purposes:
(1) penetrating prime coating;
(2) stockpile storage;
(3) application during the months of November, December, January, February, and March.
(Air Pollution Control Division; 326 IAC 8-5-2; filed Mar 10, 1988, 1:20 pm: 11 IR 2543; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

326 IAC 8-5-3 Synthesized pharmaceutical manufacturing operations
Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-17

Sec. 3. (a) This section applies to the manufacture of pharmaceutical products by chemical synthesis. This section applies to all facilities emitting volatile organic compounds, including reactors, distillation units, dryers, storage of volatile organic compounds, transfer of volatile organic compounds, extraction equipment, filters, crystallizers, and centrifuges that have the potential to emit six and eight-tenths (6.8) kilograms per day (fifteen (15) pounds per day) or more.
(b) Control requirements are as follows:
(1) Volatile organic compound emissions from all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers shall be controlled by surface condensers or equivalent controls.
(A) If surface condensers are used, the condenser outlet gas temperature must not exceed:
(i) minus twenty-five degrees Celsius (-25°C) when condensing VOC of vapor pressure greater than forty (40) kilo Pascals (five and eight-tenths (5.8) pounds per square inch);
(ii) minus fifteen degrees Celsius (-15°C) when condensing VOC of vapor pressure greater than twenty (20) kilo Pascals (two and nine-tenths (2.9) pounds per square inch);

(iii) zero degrees Celsius (0°C) when condensing VOC of vapor pressure greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch);
(iv) ten degrees Celsius (10°C) when condensing VOC of vapor pressure greater than seven (7) kiloPascals (one (1) pound per square inch); or
(v) twenty-five degrees Celsius (25°C) when condensing VOC of vapor pressure greater than three and five-tenths (3.5) kilo Pascals (five-tenths (0.5) pound per square inch).

(B) The vapor pressures listed above shall be measured at twenty degrees Celsius (20°C).

(C) If equivalent controls are used, the VOC emissions must be reduced by at least as much as they would be by using a surface condenser which meets the requirements of clause (A).

(2) VOC emissions from all air dryers and production equipment exhaust systems at sources existing as of July 1, 1990, in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph Counties and at new sources located in any county construction of which commences after July 1, 1990, shall be reduced:

(A) by at least eighty-five percent (85%) until July 1, 1991, and by at least ninety percent (90%) commencing July 1, 1991, if emissions are one hundred fifty (150) kilograms per day (three hundred thirty (330) pounds per day) or more of VOC; or

(B) to fifteen (15) kilograms per day (thirty-three (33) pounds per day) or less if emissions are less than one hundred fifty (150) kilograms per day (three hundred thirty (330) pounds per day) of VOC.

This requirement may be waived by the commissioner if the owner or operator can show to the satisfaction of the commissioner that such control is not practical at a reasonable cost because of dilution of the exhaust gas with large quantities of air. Any such waiver shall be submitted to the U.S. EPA as a SIP revision.

(3) The owner or operator of a synthesized pharmaceutical manufacturing facility subject to this section shall:

(A) provide a vapor balance system or equivalent control that is at least ninety percent (90%) effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than seven thousand five hundred (7,500) liters (two thousand (2,000) gallons) that store VOC with vapor pressures greater than twenty-eight (28) kiloPascals (four and one-tenth (4.1) pounds per square inch) at twenty degrees Celsius (20°C); and

(B) install pressure/vacuum conservation vents set at plus or minus two-tenths (± 0.2) kilo Pascals on all storage tanks that store VOC with vapor pressures greater than ten (10) kilo Pascals (one and five-tenths (1.5) pounds per square inch at twenty degrees Celsius (20°C)), unless a more effective control system is used.

(4) The owner or operator of a synthesized pharmaceutical facility subject to this section shall enclose all centrifuges, rotary vacuum filters, and other filters having an exposed liquid surface, where the liquid contains VOC and exerts a total VOC vapor pressure of three and five-tenths (3.5) kiloPascals (five-tenths (0.5) pounds per square inch) or more at twenty degrees Celsius (20°C).

(5) The owner or operator of a synthesized pharmaceutical facility subject to this rule shall install covers on all inprocess tanks containing a volatile organic compound at any time. These covers must remain closed, unless production, sampling, maintenance, or inspection procedures require operator access.

(6) The owner or operator of a synthesized pharmaceutical manufacturing facility subject to this section shall repair all leaks from which a liquid, containing VOC, can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair.

(Air Pollution Control Division; 326 IAC 8-5-3; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2544; filed Apr 18, 1990, 4:55 p.m.: 13 IR 1683; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

326 IAC 8-5-4 Pneumatic rubber tire manufacturing

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

Sec. 4. (a) This section applies to sources manufacturing pneumatic rubber, passenger type tires on a mass production basis. "Passenger type tire" means agricultural, airplane, industrial, mobile home, light and medium duty truck, and passenger vehicle tires with a bead diameter up to twenty (20) inches and cross section dimensions up to twelve and eight-tenths (12.8) inches.

(b) This section does not apply to the production of specialty tires for antique or other vehicles when produced on an irregular basis or with short production runs. If normal production line equipment is used for such limited runs, then any control equipment

installed for such equipment shall be used during the limited runs.

(c) This section applies to the following individual types of facilities:

(1) Undertread cementing, which is the application of a solvent based cement to the underside of a tire tread. This shall not include application of cement to precured tread to be used for recapping of used tires.

(2) Bead dipping, which is the dipping of an assembled tire bead into a solvent based cement.

(3) Tread end cementing, which is the application of a solvent based cement to the tire tread ends.

(4) Green tire spraying, which is the spraying of green tires, both inside and outside, with release compounds which help remove air from the tire during molding and prevent the tire from sticking to the mold after curing.

(d) The following facilities subject to this section shall comply with subsections (e) through (f) no later than December 31, 1991:

(1) Facilities located in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph Counties.

(2) Facilities, which commenced construction between January 1, 1980, and January 20, 1983, located in any county.

(e) The owner or operator of an undertread cementing, tread end cementing, or bead dipping operation shall install and operate a capture system in conjunction with a control device which shall achieve an overall control efficiency of:

(1) eighty percent (80%) for carbon adsorption systems;

(2) seventy-five percent (75%) for incineration systems; or

(3) eighty percent (80%) for alternative volatile organic compound emission reduction systems approved by the commissioner.

(f) The owner or operator of a green tire spraying operation shall meet one (1) of the following requirements:

(1) Substitute water-based sprays for the normal solvent-based mold release compound. A water-based spray may contain up to ten percent (10%) organic solvents.

(2) Install and operate a capture system in conjunction with a control device which shall achieve an overall control efficiency of:

(A) eighty-five percent (85%) for carbon adsorption systems;

(B) eighty percent (80%) for incineration systems; or

(C) eighty-five percent (85%) for alternative volatile organic compound emission reduction systems approved by the commissioner.

(g) Any alternative organic compound emission reduction system approved by the commissioner, as provided in this section, shall be submitted to the U.S. EPA as a SIP revision. *(Air Pollution Control Division; 326 IAC 8-5-4; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2544; filed May 6, 1991, 4:45 p.m.: 14 IR 1721; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 8-5-5 Graphic arts operations

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-12-3-1; IC 13-14-8-1; IC 13-14-8-2; IC 13-17-1

Sec. 5. (a) This section applies to packaging rotogravure, publication rotogravure, and flexographic printing sources as follows:

(1) Sources existing as of November 1, 1980, whose potential emissions of VOC are greater than ninety (90) megagrams per year (one hundred (100) tons per year).

(2) All new (after November 1, 1980) sources, located anywhere in the state, with potential emissions of twenty-two and seven-tenths (22.7) megagrams (twenty-five (25) tons) per year or more VOC.

(3) As of October 1, 1993, all sources located in Lake County or Porter County as follows:

(A) Sources whose potential emissions of VOC are greater than or equal to twenty-two and seven-tenths (22.7) megagrams (twenty-five (25) tons) per year are subject to the requirements of this section and the requirements of 326 IAC 8-1-9 through 326 IAC 8-1-12, as applicable.

(B) Sources whose potential emissions of VOC are less than twenty-five (25) tons per year but greater than or equal to ten (10) tons per year are exempt from the emission limit requirements of subsection (c), the capture system requirements of subsection (d), and the capture system requirements of subsection (e) but shall comply with the requirements of 326 IAC 8-7-2(c) and 326 IAC 8-1-9(b).

(C) Sources whose potential emissions of VOC are less than ten (10) tons per year shall comply with the requirements of 326 IAC 8-1-9(b).

(4) As of April 1, 2011, all sources located in Lake County or Porter County in which the total actual VOC emissions from

all flexible packaging printing lines, including related cleaning activities, are equal to or exceed fifteen (15) pounds per day, before add-on controls, shall comply with subsection (f).

(b) The following definitions apply throughout this section:

(1) "Flexible packaging printing" means the performance of packaging flexographic printing or packaging rotogravure printing. Flexible packaging refers to any package or part of a package the shape of which can be readily changed.

(2) "Flexographic printing" means the application of words, designs, and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

(3) "Packaging rotogravure printing" means rotogravure printing upon:

(A) paper;

(B) paper board;

(C) metal foil;

(D) plastic film; and

(E) other substrates;

that are, in subsequent operations, formed into packaging products and labels for articles to be sold.

(4) "Publication rotogravure printing" means rotogravure printing upon paper that is subsequently formed into the following:

(A) Books.

(B) Magazines.

(C) Catalogues.

(D) Brochures.

(E) Directories.

(F) Newspaper supplements.

(G) Other types of printed materials.

(c) No owner or operator of a facility subject to this section and employing solvent-containing ink may cause, allow, or permit the operation of the facility unless:

(1) the volatile fraction of the ink, as it is applied to the substrate, contains twenty-five percent (25%) by volume or less of VOC and seventy-five percent (75%) by volume or more of water;

(2) the ink as it is applied to the substrate, less water, contains sixty percent (60%) by volume or more nonvolatile material;

(3) the owner or operator installs and operates:

(A) a carbon adsorption system that reduces the VOC from the capture system by at least ninety percent (90%) by weight;

(B) an incineration system that oxidizes at least ninety percent (90%) of the nonmethane VOC (VOC measured as total combustible carbon) to carbon dioxide and water; or

(C) an alternative VOC emission reduction system demonstrated to have at least a ninety percent (90%) reduction efficiency, measured across the control system, and has been approved by the commissioner; or

(4) for packaging rotogravure and flexographic printing processes, the ink, as applied to the substrate, meets an emission limit of five-tenths (0.5) pound of VOC per pound (five-tenths (0.5) kilogram (kg) of VOC per kg) of solids in the ink.

(d) The following facilities subject to this section shall comply with the capture system requirements in subsection (e):

(1) Facilities existing as of July 1, 1990, with potential VOC emissions of ninety (90) megagrams (one hundred (100) tons) or greater per year located in Clark, Elkhart, Floyd, Marion, or St. Joseph counties. These facilities shall attain compliance with subsection (e)(1) no later than July 1, 1991.

(2) New facilities, construction of which commences after July 1, 1990, with potential emissions of twenty-two and seven-tenths (22.7) megagrams (twenty-five (25) tons) or greater per year located in any county.

(3) Facilities located in Lake County or Porter County with potential emissions of twenty-two and seven-tenths (22.7) megagrams (twenty-five (25) tons) or greater per year, prior to controls, from inks, coatings, and adhesives combined. These facilities shall attain compliance with subsection (e)(1) no later than October 1, 1993, and the flexible packaging requirements in subsection (e)(2) no later than April 1, 2011.

(e) A capture system must be used in conjunction with the emission control systems specified in subsection (c)(3) as follows:

(1) The capture system shall attain an efficiency sufficient to achieve an overall control efficiency, in conjunction with the emission control system, of the following:

(A) Seventy-five percent (75%) for publication rotogravure processes.
(B) Sixty-five percent (65%) for packaging rotogravure processes.
(C) Sixty percent (60%) for flexographic printing processes.

(2) For flexible packaging printing presses, on and after April 1, 2011, the capture system shall attain an efficiency sufficient to achieve an overall control efficiency, in conjunction with the emission control system, of the following:

(A) Sixty-five percent (65%) for a flexible packaging printing press that was first installed prior to March 14, 1995, and that is controlled by an add-on air pollution control device whose first installation date was prior to January 1, 2010.
(B) Seventy percent (70%) for a flexible packaging printing press that was first installed prior to March 14, 1995, and that is controlled by an add-on air pollution control device whose first installation date was on or after January 1, 2010.
(C) Seventy-five percent (75%) for a flexible packaging printing press that was first installed after March 14, 1995, and that is controlled by an add-on air pollution control device whose first installation date was prior to January 1, 2010.
(D) Eighty percent (80%) for a flexible packaging printing press that was first installed on or after March 14, 1995, and that is controlled by an add-on air pollution control device whose first installation date was on or after January 1, 2010.

(f) Work practices shall be used to minimize VOC emissions from cleaning operations. Work practices shall include, but not be limited to, the following:

(1) When not in use, all cleaning materials shall be kept in closed containers.
(2) Cleaning materials shall be conveyed from one (1) location to another in closed containers or pipes.

(Air Pollution Control Division; 326 IAC 8-5-5; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2545; filed Apr 18, 1990, 4:55 p.m.: 13 IR 1685; filed May 6, 1991, 4:45 p.m.: 14 IR 1723; filed Aug 9, 1993, 5:00 p.m.: 16 IR 2828; filed Apr 22, 1997, 2:00 p.m.: 20 IR 2321; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Nov 3, 2009, 3:29 p.m.: 20091202-IR-326090220FRA)

326 IAC 8-5-6 Fuel grade ethanol production at dry mills

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

Sec. 6. (a) This section applies to fuel grade ethanol production plants constructed or modified after April 1, 2007, that meet the following conditions:

(1) Are dry mills and have no wet milling operations.
(2) Use fermentation, distillation, and dehydration to produce ethanol and dried distillers grain and solubles (DDGS).
(3) Have combined potential VOC emissions of twenty-two and seven-tenths (22.7) megagrams (twenty-five (25) tons) or more per year from the following processes:

(A) Fermentation, distillation, and dehydration.
(B) DDGS dryer or dryers.
(C) Ethanol load-out operations.

(b) The following definitions apply throughout this section:

(1) "Dry mill" means an ethanol production operation that uses the whole corn kernel to produce a meal that is then used to produce alcohol. The byproduct of a dry mill is the DDGS.
(2) "Fuel grade ethanol production plant" means an operation that produces ethanol that is then denatured with a denaturant to make it unfit for human consumption.
(3) "Wet milling" means a process by which corn is soaked or steeped to soften the corn kernel so that it can be separated into its various components, such as the following:

(A) Gluten.
(B) Germ.
(C) Protein.
(D) Fiber.
(E) Starch.

(c) The owner or operator of a fuel grade ethanol production plant that is a dry mill shall install and operate at least one (1) of the following control devices for VOC emissions from the plant:

(1) A thermal oxidizer with an overall control efficiency of not less than ninety-eight percent (98%) or resulting in a volatile organic compound concentration of not more than ten (10) parts per million (ppm).

(2) A wet scrubber with an overall control efficiency of not less than ninety-eight percent (98%) or resulting in a volatile organic compound concentration of not more than twenty (20) parts per million (ppm).

(3) An enclosed flare with an overall control efficiency of not less than ninety-eight percent (98%).

(d) The source shall determine initial compliance with the control efficiency requirement within sixty (60) days after achieving maximum production levels but no later than one hundred and eighty (180) days after startup.

(e) The owner or operator of a fuel grade ethanol production plant that is a dry mill shall ensure and verify initial and continuing compliance with the control efficiency requirement by doing the following:

(1) If using a thermal oxidizer, the owner or operator shall meet the following requirements:

(A) The three (3) hour average operating temperature of the oxidizer, as measured by a continuous temperature monitor, must be greater than or equal to the minimum operating temperature established during the most recent compliance demonstration.

(B) Maintain continuous temperature records for the thermal oxidizer and the three (3) hour average operating temperature used to demonstrate compliance during the most recent compliant stack test.

(C) The three (3) hour average duct pressure or fan amperage, as measured by a continuous parameter monitoring system, must be within the normal range established during the most recent compliance demonstration.

(D) Maintain daily records of the duct pressure or fan amperage for the thermal oxidizer.

(2) If using a wet scrubber, the owner or operator shall meet the following requirements:

(A) The pressure drop across the scrubber must be within the normal range established during the latest stack test. The pressure drop of the scrubber must be monitored at least once per day when the associated emission unit is in operation to ensure that the pressure drop across the scrubber is within the normal range established during the latest stack test.

(B) The scrubber flow rate must be greater than the minimum flow rate for the scrubber during normal operation. The scrubber flow rate must be monitored at least once per day when the associated emission unit is in operation to ensure that the flow rate of the scrubber is greater than the minimum flow rate established during the latest stack test.

(C) Maintain daily records of pressure drop and flow rate for the scrubber during normal operation.

(3) If using an enclosed flare, the owner or operator shall meet the following requirements:

(A) Maintain a flare pilot flame when the associated emission unit is in operation and continuously monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame when the associated emission unit is in operation.

(B) Maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when the loading rack is in operation.

(Air Pollution Control Division; 326 IAC 8-5-6; filed Feb 20, 2007, 3:14 p.m.: 20070321-IR-326050197FRA)

Rule 6. Organic Solvent Emission Limitations

326 IAC 8-6-1 Applicability of rule

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

Sec. 1. This rule (326 IAC 8-6) shall apply to:

(1) existing sources (as of January 1, 1980), located in Lake and Marion Counties, with potential emissions of 90.7 megagrams (100 tons) or greater per year of VOC, not limited by other rules in this article (326 IAC 8); and

(2) sources commencing operation after October 7, 1974, and prior to January 1, 1980, located anywhere in the state, with potential emissions of 90.7 megagrams (100 tons) or greater per year of VOC, not limited by other rules in this article (326 IAC 8).

(Air Pollution Control Division; 326 IAC 8-6-1; filed Mar 10, 1988, 1:20 pm: 11 IR 2546; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

326 IAC 8-6-2 Emission limits; exemptions

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

Sec. 2. (a) No person shall emit or cause the emission of more than 90.7 megagrams (100 tons) per year of VOC from any source unless all VOC emitted from such source are reduced by at least eighty-five percent (85%) from emissions which would occur before the application of any control equipment or process. This section applies only to emissions of organic solvents which are VOC and which are liquids at standard conditions, and include diluents which are used as dissolvers, viscosity reducers, carrying agents, and cleaning agents.

(1) The aggregate emissions of VOC into the atmosphere from any series of facilities designed for processing a continuously moving sheet, web, strip, or wire by a combination of operations shall comply with the requirements of this section.

(2) Emissions of VOC into the atmosphere which result from the cleaning of any facility with organic solvents shall be included with the other emissions of VOC from such facility in determining compliance with this section.

(3) Emissions of VOC into the atmosphere which result from the spontaneous drying of products after their removal from any facility shall be included with other emissions of VOC from such facility in determining compliance with this section.

(b) The provisions of this section shall not apply to:

(1) the manufacture of organic solvents;

(2) the spraying or other employment of insecticides, pesticides, or herbicides;

(3) industrial surface coating operations when the coating's solvent make-up does not contain highly reactive organic materials by volume greater than set forth in subdivision (b)(4) of this section.

(4) The use of the following solvents:

(A) hydrocarbons, alcohols, aldehydes, esters, ethers or ketones provided that the total of such solvents with olefinic or cyclo-olefinic unsaturation does not exceed five percent (5%) by volume either singly or in combinations;

(B) aromatic organic solvents provided that the total of such solvents with eight (8) or more carbon atoms to the molecule, excluding ethyl benzene, does not exceed eight percent (8%) by volume either singly or in combinations;

(C) ethyl benzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene not exceeding twenty percent (20%) by volume either singly or in combinations;

(D) any organic solvent or mixture of solvents which, because of its structure or composition, may be subject to the limitations of more than one (1) of the categories in clause (A), (B), or (C), above shall be considered a member of the class with the lowest percentage limitation. In no case shall a combination of compounds subject to the limitations of clause (A), (B), or (C) above, exceed twenty percent (20%) by volume of the combination;

(E) saturated halogenated hydrocarbons, perchloroethylene, acetone, C(1)-C(5) n-paraffins, cyclohexanone, ethyl acetate, diethylamine, isobutyl acetate, isopropyl alcohol, methyl benzoate, 2-nitropropane, phenyl acetate, triethylamine, and non-photochemically reactive hydrocarbons.

(Air Pollution Control Division; 326 IAC 8-6-2; filed Mar 10, 1988, 1:20 pm: 11 IR 2546; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

Rule 7. Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties

326 IAC 8-7-1 Definitions

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

Sec. 1. In addition to the definitions contained in 326 IAC 1-2 and 326 IAC 8-1-0.5, the following definitions apply throughout this rule:

(1) "Aggregate emissions of a source" means the sum of the baseline potential emissions from all the facilities at the source of the types listed in section 2(a) of this rule.

(2) "Baseline actual emissions" means the actual emissions for the baseline year.

(3) "Baseline potential emissions" means the facility's potential to emit assuming one hundred percent (100%) use of the highest VOC emitting material used in the baseline year.

(4) "Baseline year" means the year 1990 or later for which the most accurate or complete data are available and are representative of the source's normal operating conditions.

(5) "Fuel combustion facility" means a fossil fuel fired steam generating unit, process heater, or process furnace used exclusively for the purpose of producing steam by heat transfer or for heating an industrial process by heat transfer.

(6) "Industrial wastewater treatment" means the treatment of spent or used water containing dissolved or suspended matter from the following types of industries:

(A) Organic chemical, plastic, and synthetic fiber manufacturing.
(B) Pesticide manufacturing.
(C) Pharmaceutical manufacturing.
(D) Hazardous waste treatment, storage, and disposal facilities.

(Air Pollution Control Division; 326 IAC 8-7-1; filed Dec 22, 1994, 11:45 a.m.: 18 IR 1224)

326 IAC 8-7-2 Applicability

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

Sec. 2. (a) This rule shall apply to stationary sources located in Lake, Porter, Clark, or Floyd County that emit or have the potential to emit volatile organic compounds (VOCs) at levels equal to or greater than twenty-five (25) tons per year (tpy) in Lake and Porter Counties and one hundred (100) tpy in Clark and Floyd Counties. This rule shall also apply to sources that have coating facilities which emit or have the potential to emit a total equal to or greater than ten (10) tpy of VOCs in Floyd, Clark, Lake, or Porter County. In determining whether the thresholds in this section are exceeded, the owner or operator of a source shall include the total potential VOC emissions from the following facilities:

(1) Facilities of the type identified by the following rules, but with actual emissions below the applicability levels of those rules:

(A) 326 IAC 8-2, concerning surface coating operations.
(B) 326 IAC 8-3, concerning organic solvent degreasing operations.
(C) 326 IAC 8-4, concerning petroleum operations.
(D) 326 IAC 8-5, concerning miscellaneous operations.

(2) Facilities of the following types:

(A) Fuel combustion facilities, including process heaters and furnaces.
(B) Wastewater treatment plants, excluding industrial wastewater treatment operations as defined in section 1(6) of this rule.
(C) Coke ovens, including byproduct ovens.
(D) Barge loading facilities.
(E) Jet engine test cells.
(F) Iron and steel production facilities.
(G) Vegetable oil processing facilities.

(3) All other facilities with potential VOC emissions, hereafter referred to as affected facilities except those covered by the rules cited in clauses (A) through (D) and those belonging to source categories listed in clauses (E) through (Q) as follows:

(A) 326 IAC 8-2.
(B) 326 IAC 8-3.
(C) 326 IAC 8-4.
(D) 326 IAC 8-5.
(E) Synthetic organic chemical manufacturing industry (SOCMI) distillation.
(F) SOCMI reactors.
(G) Offset lithography.
(H) Batch processors.
(I) Industrial wastewater treatment operations.
(J) Plastic parts coating for business machines.
(K) Plastic parts coating for automobiles.
(L) Wood furniture coating.
(M) Aerospace coating.
(N) Auto body refinishing.
(O) Ship building and ship repair.

(P) Cleanup solvents.
(Q) Volatile organic liquids storage.

(b) Facilities of the types listed in subsection (a)(1) through (a)(2) are exempt from the emission limit requirements of section 3 of this rule.

(c) Coating facilities that have aggregate potential emissions greater than ten (10) tpy and less than twenty-five (25) tpy in Lake and Porter Counties and coating facilities with aggregate potential emissions greater than forty (40) tpy and less than one hundred (100) tpy in Clark and Floyd Counties shall comply with the certification, record keeping, and reporting requirements of section 6 of this rule.

(d) Affected facilities are subject to the requirements of section 3 of this rule unless the source's actual emissions have been limited on or before May 31, 1995, to below twenty-five (25) tpy in Lake and Porter Counties and one hundred (100) tpy in Clark and Floyd Counties through federally enforceable production or capacity limitations in an operating permit. Until such time as 326 IAC 2-8 has been approved by the U.S. EPA, the operating permit will be submitted to the U.S. EPA by the department as a SIP revision. *(Air Pollution Control Division; 326 IAC 8-7-2; filed Dec 22, 1994, 11:45 a.m.: 18 IR 1224)*

326 IAC 8-7-3 Emission limits

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

Sec. 3. Affected facilities must implement one (1) of the following emissions reduction measures on or before May 31, 1995:

(1) Achieve an overall VOC reduction from baseline actual emissions of at least ninety-eight percent (98%) by the documented reduction in use of VOC containing materials or install an add-on control system that achieves an overall control efficiency of ninety-eight percent (98%).

(2) Where it can be demonstrated by the source that control technology does not exist that is reasonably available and both technologically and economically feasible to achieve a ninety-eight percent (98%) reduction in VOC emissions, a source shall achieve an overall VOC reduction of at least eighty-one percent (81%) from baseline actual emissions with the documented reduction in use of VOC containing materials or install an add-on control system that achieves an overall control efficiency of eighty-one percent (81%).

(3) Achieve an alternative overall emission reduction with the application of reasonably available control technology (RACT) that has been determined as reasonably available by the U.S. EPA and the department. A petition developed in accordance with the procedures in 326 IAC 8-1-5 shall accompany the request for an alternative overall emission reduction. The petition shall be submitted to the department on or before December 31, 1994. The department may approve an extension until February 28, 1995, for submittal of the petition provided the request is received by the department prior to December 31, 1994.

(Air Pollution Control Division; 326 IAC 8-7-3; filed Dec 22, 1994, 11:45 a.m.: 18 IR 1225)

326 IAC 8-7-4 Compliance methods

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

Sec. 4. (a) If compliance with section 3(1) or 3(2) of this rule is to be achieved with the application of an add-on control system or systems, the following requirements shall apply:

(1) On or before December 31, 1994, the source shall submit to the department a compliance plan containing the following information:
(A) A description of the processes that will be controlled.
(B) A description of the add-on control systems.
(C) A description of the expected control efficiency that will be achieved.

(2) A compliance test shall be performed on the add-on control systems according to the schedule and situations described in section 9(4) of this rule. The test results will be used to demonstrate compliance with the applicable emission limit and establish process and control system operating parameters.

(3) After August 31, 1995, compliance shall continue to be demonstrated by monitoring the process and control system operating parameters established in the initial compliance test unless the parameters are revised by a subsequent test. Any

subsequent test and revision to process and control system operating parameters must be submitted to the department as a revision to the compliance plan and be approved by the department. A copy of the most recent compliance test shall be located at the facility and shall be made available to any department or U.S. EPA inspector upon request.

(4) Results of the compliance test required by subdivision (2) shall be submitted to the department on or before September 30, 1995, and shall contain, at a minimum, all of the following:

(A) Test methods and procedures.

(B) Overall control efficiency.

(C) Process operating parameters during the compliance test, including, but not limited to, the following:

(i) Production rate.

(ii) Temperature.

(iii) Pressure.

(iv) Moisture content of process stream.

(v) Characteristics of process materials.

(vi) Other parameters relevant to the emissions of VOC.

(b) If compliance with section 3(1) or 3(2) of this rule is to be achieved through the reduction in the use of VOC containing materials, the owner or operator shall submit a compliance plan on or before December 31, 1994.

(1) The compliance plan shall contain, at a minimum, all of the following information:

(A) The name and address of the source, and the name and telephone number of a company representative.

(B) A complete description of the baseline actual emissions.

(C) A complete description of the VOC containing materials, such as chemicals, coatings, solvents, and cleaning materials used at the facility with an identification of the VOC containing materials that will be replaced along with a complete description of the replacement materials. The owner or operator shall also include a description of the operations in which the VOC containing materials are used.

(D) A comprehensive record keeping and monitoring plan that will be used to insure and demonstrate compliance. The plan must follow the test methods and procedures as described in section 7 of this rule.

(2) The owner or operator shall also submit a copy of the approved compliance plan with the source's Part 70 permit application. The Part 70 permit application must be submitted to the department no later than six (6) months, and issued no later than twelve (12) months, from the effective date of Indiana's Part 70 permit program. The department shall incorporate the approved compliance plan into the source's Part 70 permit which shall include specific enforceable permit conditions. These permit conditions shall reflect limits, with no longer than daily averaging, on VOC content of process materials, capture and control efficiencies, or other conditions that will limit VOC emissions and demonstrate compliance with the requirements of this rule. The permit shall also include appropriate test methods that are consistent with the methods incorporated within 326 IAC 8 *[this article]*, and sufficient monitoring record keeping and reporting requirements to assure that information is available to document continuous compliance with the VOC limits. The department will submit a copy of the compliance plan to the U.S. EPA for review. On or after May 31, 1995, the owner or operator shall operate the facility as described in the approved compliance plan unless request by the department to modify the plan as described in section 5 of this rule.

(c) If a source intends to comply with section 3(2) of this rule, it shall submit to the department on or before December 31, 1994, for review and approval, documentation demonstrating that ninety-eight percent (98%) control is not reasonably achievable taking into account availability of alternative materials, technical feasibility, cost, and any other factors considered by the source. A demonstration that ninety-eight percent (98%) control is not achieved at similar operations, if any, in other ozone nonattainment areas within the United States is an acceptable demonstration.

(d) Owners or operators who elect to comply with section 3(3) of this rule are subject to the following requirements:

(1) Compliance shall be achieved with the application of one (1) or more emission reduction systems including, but not limited to, the following:

(A) add-on controls;

(B) elimination or reduction in use of VOC containing materials; or

(C) work practices.

(2) On or before December 31, 1994, the owner or operator shall submit to the department a compliance plan containing all of the following information:

(A) The name and address of the source and the name and telephone number of a company representative.

(B) A petition for a site specific RACT control plan developed in accordance with the procedures in 326 IAC 8-1-5.
(C) Identification of all VOC emitting facilities along with the description of the purpose each facility serves.
(D) A list of the facilities that meet the applicability criteria of section 2(a) of this rule.
(E) Baseline actual emissions for each facility identified in clause (D) along with the following information:
(i) Maximum design rate, maximum production, or maximum throughput.
(ii) Identification, amount, and VOC emission factor of process materials such as coatings, chemicals, and fuels.
(iii) Baseline year.
(F) A complete description of the emission reduction measures that the source intends to implement, the percent VOC reduction to be achieved by these measures, and calculations that demonstrate that the measures will meet the projected VOC reductions described in the source's petition for site specific RACT. The compliance plan shall also describe the expected percentage of overall emission reduction from baseline actual emissions. Supporting documentation such as:
(i) a manufacturer's warranty on a control system;
(ii) the difference in the VOC emission factor of the baseline coating or process chemicals; or
(iii) an increase in transfer efficiency;
shall be included.
(G) The operation, maintenance, monitoring, and record keeping procedures that will ensure continued compliance.
(H) The expected annual VOC emission in tons per year (tpy) after applying the emission reduction systems.

(e) Owners or operators who elect to comply with this rule with the application of enforceable permit limits, in accordance with section 2(d) of this rule shall, prior to December 31, 1994, submit an application for a federally enforceable state operating permit (FESOP) in accordance with 326 IAC 2-8. Until such time as 326 IAC 2-8 has been approved by the U.S. EPA, the operating permit will be submitted to the U.S. EPA by the department as a SIP revision. The source shall include as a part of the permit application, the following information:
(1) The name and address of the source and the name and telephone number of a company representative.
(2) Identification of all VOC emitting facilities together with a description of the purpose each facility serves.
(3) A list of facilities that meet the requirements of section 2(a) of this rule.
(4) Baseline actual emissions for each facility identified in subdivision (3) along with the following information:
(A) Baseline year.
(B) Maximum design rate, maximum production, or maximum throughput.
(C) Identification, amount, and VOC emission factor of process materials such as coatings, chemicals, and fuels.
(5) Identification of facilities for which limitation on hours of operation or limitation on amount of production has been proposed along with the proposed number of hours or amount of production.
(6) The monitoring and record keeping procedures that will be used to demonstrate compliance with the limitation on hours of operation or limitations in amount of production.
(7) A signed statement providing that the proposed limitation on hours of operation or limitation on amount of production shall be fully implemented prior to or on May 31, 1995.
The monitoring and record keeping procedures that will demonstrate compliance with the limitation on hours of operation or limitations in amount of production will be incorporated into the source's operating permit.

(f) The department may approve an extension until February 28, 1995, for any compliance plan, demonstration, or application required by this section, provided the request is received by the department prior to December 31, 1994. *(Air Pollution Control Division; 326 IAC 8-7-4; filed Dec 22, 1994, 11:45 a.m.: 18 IR 1225)*

326 IAC 8-7-5 Compliance plan

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

Sec. 5. Compliance plans required by this rule must be approved by the department. The department may:
(1) Request additional information if the information contained in the compliance plan is found to be incomplete or indicates noncompliance with the rule.
(2) Request modifications in the proposed operation, maintenance, monitoring, and record keeping procedures.
(3) If the department requests modifications in the proposed operation, maintenance, monitoring, or record keeping procedures,

the owner or operator shall resubmit a new compliance plan containing the modification within sixty (60) days of the initial notification.

(4) Compliance plans required by this rule must be approved by the department by November 30, 1995.

(Air Pollution Control Division; 326 IAC 8-7-5; filed Dec 22, 1994, 11:45 a.m.: 18 IR 1227)

326 IAC 8-7-6 Certification, record keeping, and reporting requirements for coating facilities

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

Sec. 6. On or before December 31, 1994, or upon the startup of any new coating facility meeting the aggregate potential emissions criteria of section 2(c) of this rule, each source or facility shall submit to the department a certification that the facility is exempt from the requirements of section 3 of this rule. The certification shall contain all of the following information:

(1) The name and address of the source and the name and telephone number of the company representative.

(2) Identification of each VOC emitting facility together with a description of the purpose each facility serves.

(3) A listing of facilities which meet the requirements of section 2(a) of this rule.

(4) Baseline actual emissions for each facility identified in subdivision (3) together with the following information:

(A) Maximum design rate, maximum production, or maximum throughput.

(B) VOC emission factors with reference to the source of the emission factors and procedures as to how the emission factors were estimated, for example, the type of each fuel or process chemicals used and the baseline year used.

(5) Procedures that will be used to monitor the source's potential emissions to ensure that they remain below twenty-five (25) tpy.

(Air Pollution Control Division; 326 IAC 8-7-6; filed Dec 22, 1994, 11:45 a.m.: 18 IR 1227)

326 IAC 8-7-7 Test methods and procedures

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

Sec. 7. The owner or operator of any source subject to this rule shall be subject to the applicable test method requirements of 326 IAC 8-1-4 and in 40 CFR 60, Appendix A*.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-7-7; filed Dec 22, 1994, 11:45 a.m.: 18 IR 1228; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Aug 26, 2004, 11:30 a.m.: 28 IR 51)*

326 IAC 8-7-8 General record keeping and reports

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

Sec. 8. In addition to complying with specific recording and reporting requirements in other sections of this rule, sources shall comply with all of the following requirements:

(1) All records required by this rule shall be maintained for at least three (3) years.

(2) Records required by this rule or records used to demonstrate that a source is exempt from the requirements of this rule shall be submitted to the department or the U.S. EPA within thirty (30) days of the receipt of a written request. If such records are not available, the source shall be considered to be subject to the emission limits contained in section 3 of this rule.

(3) Sources subject to this rule shall notify the department at least thirty (30) days prior to the addition or modification of a facility which may result in a potential increase in VOC emissions.

(Air Pollution Control Division; 326 IAC 8-7-8; filed Dec 22, 1994, 11:45 a.m.: 18 IR 1228)

326 IAC 8-7-9 Control system operation, maintenance, and testing

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

Sec. 9. The following requirements shall apply to sources that choose to meet the emission limit requirements of section 3 of this rule at any facility using a control device or devices:

(1) The control system shall be operated and maintained according to the manufacturer's recommendations but may be modified based on the results of the initial or subsequent compliance test or upon the written request of the department.

(2) The operating and maintenance procedures shall be followed beginning no later than May 31, 1995. A copy of the procedures shall be submitted to the department no later than September 30, 1995.

(3) A copy of the operating and maintenance procedures shall be maintained in a convenient location at the source property and as close to the control system as possible for the reference by plant personnel and department inspectors.

(4) The control system shall be tested according to the following schedule and under the following situations:

(A) An initial compliance test shall be conducted on or before August 31, 1995, and every two (2) years after the date of the initial test.

(B) A compliance test shall also be conducted whenever the owner or operator chooses to operate a control system under conditions different from those that were in place at the time of the previous test.

(C) If the owner or operator chooses to change the method of compliance with section 3 of this rule, a compliance test shall be performed within three (3) months of the change.

(D) A compliance test shall also be performed within ninety (90) days of the startup of a new facility or upon written request by the department or the U.S. EPA.

(5) All compliance tests shall be conducted according to a protocol approved by the department at least thirty (30) days before the test. The protocol shall contain, at a minimum, the following information:

(A) Test procedures.

(B) Operating and control system parameters.

(C) Type of VOC containing process material being used.

(D) The process and control system parameters which will be monitored during the test.

(Air Pollution Control Division; 326 IAC 8-7-9; filed Dec 22, 1994, 11:45 a.m.: 18 IR 1228)

326 IAC 8-7-10 Control system monitoring, record keeping, and reporting

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

Sec. 10. (a) Sources that choose to meet the emission limit requirements of section 3 of this rule with the use of a control device or devices shall install, calibrate, maintain, and operate, according to the manufacturer's specification, the following monitoring equipment unless an alternative monitoring procedure has been approved by the department:

(1) If a thermal incinerator is used for VOC reduction, a temperature monitoring device capable of continuously recording the temperature of the gas stream in the combustion zone of the incinerator shall be used. The temperature monitoring device shall have an accuracy of one percent (1%) of the temperature being measured in degrees centigrade or plus or minus five-tenths degree Centigrade (± 0.5°C), whichever is greater.

(2) If a catalytic incinerator is used for VOC reduction, a temperature device capable of continuously recording the temperature in the gas stream immediately before and after the catalyst bed of the incinerator shall be used. The temperature monitoring device shall have an accuracy of one percent (1%) of the temperature being measured in degrees centigrade plus or minus five-tenths degree Centigrade (± 0.5°C), whichever is greater.

(3) If a carbon adsorber is used to remove and recover VOC from the gas stream, a VOC monitoring device capable of continuously recording the concentration level of VOC at the outlet of the carbon bed shall be used. The monitoring device shall be based on a detection principle such as infrared, photoionization, or thermal conductivity.

(4) Where a VOC recovery device other than a carbon adsorber is used, the source shall provide to the department information describing the operation of the device and the process parameters which would indicate proper operation and maintenance of the control device. The department may request further information and will specify appropriate monitoring procedures and

reporting requirements.

(b) Sources subject to the requirements of this section shall maintain the following records:

(1) A log of the operating time of the facility and the facility's capture system, control device, and monitoring equipment.

(2) A maintenance log for the capture system, the control device, and the monitoring equipment detailing all routine and nonroutine maintenance performed. The log shall include the dates and duration of any outages of the capture system, the control device, or the monitoring system.

(3) The following additional records shall be maintained for facilities using thermal incinerators:

(A) Continuous records of the temperature in the gas stream in the combustion zone of the incinerator.

(B) Records of all three (3) hour periods of operation for which the average combustion temperature of the gas stream in the combustion zone was more than fifty degrees Fahrenheit (50°F) below the combustion zone temperature which existed during the most recent compliance test that demonstrated that the facility was in compliance.

(4) The following additional records shall be maintained for facilities using catalytic incinerators:

(A) Continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator.

(B) Records of all three (3) hour periods of operation for which the average temperature measured at the process vent stream immediately before the catalyst bed is more than fifty degrees Fahrenheit (50°F) below the average temperature of the process vent stream which existed during the most recent compliance test that demonstrated that the facility was in compliance.

(C) Records of all three (3) hour periods of operation for which the average temperature difference across the catalyst bed is less than eighty percent (80%) of the temperature difference measured during the most recent compliance test that demonstrated that the facility was in compliance.

(5) The following additional records shall be maintained for facilities using carbon adsorbers:

(A) Continuous records of the VOC concentration level or reading in the exhaust stream of the carbon adsorber.

(B) Records of all three (3) hour periods of operation during which the average VOC concentration level or reading in the exhaust gas is more than twenty percent (20%) greater than the average exhaust gas concentration level or reading measured by the organic monitoring device during the most recent determination of the recovery efficiency of the carbon adsorber that demonstrated that the facility was in compliance.

(6) Facilities using VOC recovery devices other than carbon adsorbers shall maintain the monitoring records and meet the reporting requirements specified by subsection (a)(4).

(7) Information requirements in subdivisions (3)(B), (4)(B), (4)(C), and (5)(B) shall be submitted to the department within thirty (30) days of occurrence. The following information shall accompany the submittal:

(A) The name and location of the facility.

(B) Identification of the control system where the excess emission occurred and the facility it served.

(C) The time, date, and duration of the exceedance.

(D) Corrective action taken.

(Air Pollution Control Division; 326 IAC 8-7-10; filed Dec 22, 1994, 11:45 a.m.: 18 IR 1229; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568)

Rule 8. Municipal Solid Waste Landfills Located in Clark, Floyd, Lake, and Porter Counties

326 IAC 8-8-1 Applicability

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

Sec. 1. The provisions of this rule shall apply to new and existing municipal solid waste (MSW) landfills in Clark, Floyd, Lake, and Porter Counties meeting either of the following requirements:

(1) MSW landfills emitting greater than fifty-five (55) tons per year of non-methane organic compounds (NMOC).

(2) MSW landfills with a minimum design capacity of one hundred eleven thousand (111,000) tons (one hundred thousand (100,000) megagrams (Mg)) of solid waste.

(Air Pollution Control Division; 326 IAC 8-8-1; filed Dec 19, 1995, 3:00 p.m.: 19 IR 1050; readopted filed Jan 10, 2001, 3:20 p.m.:

24 IR 1477)

326 IAC 8-8-2 Definitions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-14
Affected: IC 13-15; IC 13-17

Sec. 2. (a) For purposes of this rule, the definitions listed in 40 CFR 60, Subpart WWW*, Sec. 60.751 Standards of Performance for Municipal Solid Waste Landfills, and in this section shall apply.

(b) "Existing municipal solid waste (MSW) landfill" means an MSW landfill that has accepted waste since November 8, 1987, or that has capacity available for future use and for which construction commenced prior to May 30, 1991. It may be active, either currently accepting waste, or having additional capacity to accept waste, or may be closed, neither any longer accepting waste, nor having available capacity for future waste deposition.

(c) "New MSW landfill" means a landfill for which construction, modification, or reconstruction commences on or after the effective date of this rule.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-8-2; filed Dec 19, 1995, 3:00 p.m.: 19 IR 1050; filed Sep 8, 1997, 9:40 a.m.: 21 IR 31; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed May 21, 2002, 10:20 a.m.: 25 IR 3077)*

326 IAC 8-8-3 Requirements; incorporation by reference of federal standards

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-14
Affected: IC 13-15; IC 13-17

Sec. 3. (a) The air pollution control board incorporates by reference the following provisions of 40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills:

(1) 40 CFR 60.751 Definitions*.
(2) 40 CFR 60.752 Standards for air emissions from MSW landfills*.
(3) 40 CFR 60.753 Operational standards for collection and control systems*.
(4) 40 CFR 60.754 Test methods and procedures*.
(5) 40 CFR 60.755 Compliance provisions*.
(6) 40 CFR 60.756 Monitoring operations*.
(7) 40 CFR 60.757 Reporting requirements*.
(8) 40 CFR 60.758 Record keeping requirements*.
(9) 40 CFR 60.759 Specifications for active collection systems*.

(b) An MSW landfill subject to the requirements of this rule may be subject to permit requirements under 326 IAC 2. An MSW landfill that makes modifications to comply with the requirements of this rule may be subject to permit requirements contained in 329 IAC 10.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-8-3; filed Dec 19, 1995, 3:00 p.m.: 19 IR 1050; filed Sep 8, 1997, 9:40 a.m.: 21 IR 31; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed May 21, 2002, 10:20 a.m.: 25 IR 3077)*

326 IAC 8-8-4 Compliance deadlines

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-14
Affected: IC 13-15; IC 13-17

Sec. 4. The landfills meeting the requirements of this rule shall install an air emission collection and control system capable of meeting the emission guidelines established in section 3(a)(2) of this rule no later than May 1, 1996. *(Air Pollution Control*

Division; 326 IAC 8-8-4; filed Dec 19, 1995, 3:00 p.m.: 19 IR 1051; filed Sep 8, 1997, 9:40 a.m.: 21 IR 31; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

Rule 8.1. Municipal Solid Waste Landfills Not Located in Clark, Floyd, Lake, and Porter Counties

326 IAC 8-8.1-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. This rule shall apply to any existing municipal solid waste (MSW) landfill located in any county except the following:
(1) Clark County.
(2) Floyd County.
(3) Lake County.
(4) Porter County.
(Air Pollution Control Division; 326 IAC 8-8.1-1; filed Sep 8, 1997, 9:40 a.m.: 21 IR 32; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568)

326 IAC 8-8.1-2 Definitions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. (a) The definitions listed in 40 CFR 60, Subpart WWW, Sec. 60.751 Standards of Performance for Municipal Solid Waste Landfills*, and this section shall apply throughout this rule.

(b) "Existing municipal solid waste (MSW) landfill" means an MSW landfill that has accepted waste since November 8, 1987, or that has capacity available for future use and for which construction commenced prior to May 30, 1991. It may be active, either currently accepting waste, or having additional capacity to accept waste, or may be closed, neither any longer accepting waste, nor having available capacity for future waste deposition.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-8.1-2; filed Sep 8, 1997, 9:40 a.m.: 21 IR 32; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed May 21, 2002, 10:20 a.m.: 25 IR 3077)*

326 IAC 8-8.1-3 Requirements; incorporation by reference of federal standards

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17; IC 13-20-21

Sec. 3. (a) The air pollution control board incorporates by reference the following provisions of 40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills*:
(1) 40 CFR 60.751 Definitions*.
(2) 40 CFR 60.752 Standards for air emissions from MSW landfills*.
(3) 40 CFR 60.753 Operational standards for collection and control systems*.
(4) 40 CFR 60.754 Test methods and procedures*.
(5) 40 CFR 60.755 Compliance provisions*.
(6) 40 CFR 60.756 Monitoring of operations*.
(7) 40 CFR 60.757 Reporting requirements*.
(8) 40 CFR 60.758 Record keeping requirements*.
(9) 40 CFR 60.759 Specifications for active collection systems*.

(b) An MSW landfill subject to the requirements of this rule may be subject to permit requirements contained in 326 IAC 2. An MSW landfill that makes modifications to comply with the requirements of this rule may be subject to permit requirements

contained in 329 IAC 10.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-8.1-3; filed Sep 8, 1997, 9:40 a.m.: 21 IR 32; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed May 21, 2002, 10:20 a.m.: 25 IR 3078)*

326 IAC 8-8.1-4 Compliance deadlines

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 4. (a) The owner or operator of an existing MSW landfill required to install an air emissions collection and control system capable of meeting the emission guidelines established in section 3(a)(2) of this rule shall have the installation completed not later than thirty (30) months after the effective date of this rule.

(b) The owner or operator of an existing MSW landfill meeting the requirements of section 1 of this rule whose nonmethane organic compounds (NMOC) emission rate is less than fifty (50) megagrams per year on the effective date of this rule, shall comply with section 3(a)(2) of this rule not later than thirty (30) months after the date that the landfill's annual NMOC emission rate equals or exceeds fifty (50) megagrams per year. *(Air Pollution Control Division; 326 IAC 8-8.1-4; filed Sep 8, 1997, 9:40 a.m.: 21 IR 32; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 8-8.1-5 Alternative requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. (a) This section applies to a MSW landfill that has been issued a closure certification under 329 IAC 10-22-8 and has an approved post-closure plan under 329 IAC 10-23-3.

(b) An MSW landfill may apply for an alternative compliance option from any requirement of this rule, except the submittal of the initial design capacity report, from the department, provided the following criteria can be demonstrated for each landfill:

(1) Unreasonable cost of control resulting from landfill age, location, or design.
(2) Physical impossibility of installing necessary control equipment.
(3) Other factors specific to the landfill that make application of an alternative control option significantly more reasonable.

(c) The application must include, at a minimum, the following:

(1) The current amount of solid waste in place.
(2) An NMOC emission rate report for the current year and a projected estimate of NMOC emissions for each of the subsequent five (5) years. The NMOC emission rate report shall include all the data, calculations, sample reports, and measurements used to estimate the annual and five (5) year emissions.
(3) A copy of the certification of closure issued under 329 IAC 10-22-8.
(4) A copy of the approved post-closure plan issued under 329 IAC 10-23-3.
(5) A detailed description of the alternative control option or options proposed.
(6) A discussion on how the criteria listed in subsection (b) is a factor for application of an alternative compliance option.

(d) The application for an alternative compliance option must be submitted to the department within ninety (90) days of the effective date of this rule.

(e) The application for an alternative compliance option must be approved by the department and by U.S. EPA. *(Air Pollution Control Division; 326 IAC 8-8.1-5; filed Sep 8, 1997, 9:40 a.m.: 21 IR 32; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

Rule 9. Volatile Organic Liquid Storage Vessels

326 IAC 8-9-1 Applicability

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

Sec. 1. (a) This rule applies to stationary vessels used to store volatile organic liquid (VOL) that are located in Clark, Floyd, Lake, and Porter counties.

(b) Stationary vessels with a capacity of less than thirty-nine thousand (39,000) gallons are:

(1) subject to the reporting and record keeping provisions of section 6(a) and 6(b) of this rule; and

(2) exempt from all other provisions of this rule.

(c) Stationary vessels with a capacity greater than or equal to thirty-nine thousand (39,000) gallons that store a VOL with a maximum true vapor pressure less than five-tenths (0.5) pound per square inch absolute (psia) are:

(1) subject to section 6(a), 6(b), and 6(h) of this rule; and

(2) exempt from all other provisions of this rule.

(d) Stationary vessels with a capacity greater than or equal to thirty-nine thousand (39,000) gallons that store a VOL with a maximum true vapor pressure greater than or equal to five-tenths (0.5) psia but less than seventy-five hundredths (0.75) psia are:

(1) subject to section 6(a), 6(b), 6(g), and 6(h) of this rule; and

(2) exempt from all other provisions of this rule.

(e) Stationary vessels with a capacity greater than or equal to thirty-nine thousand (39,000) gallons that store a VOL with a maximum true vapor pressure greater than or equal to seventy-five hundredths (0.75) psia but less than eleven and one-tenth (11.1) psia are subject to the following sections of this rule:

(1) 4(a).

(2) 4(c) through 4(e), as applicable.

(3) 5(a) through 5(e), as applicable.

(4) 6(a) and 6(b).

(5) 6(c) through 6(f), and 6(j), as applicable.

(f) Stationary vessels with a capacity greater than or equal to thirty-nine thousand (39,000) gallons that store a VOL with a maximum true vapor pressure greater than or equal to eleven and one-tenth (11.1) psia are subject to the following sections of the rule:

(1) 4(b) and 4(d).

(2) 5(e).

(3) 6(a), 6(b), 6(e), and 6(f).

(4) 6(j), as applicable.

(Air Pollution Control Division; 326 IAC 8-9-1; filed Dec 19, 1995, 3:10 p.m.: 19 IR 1056; filed Jul 16, 2018, 1:37 p.m.: 20180815-IR-326150427FRA)

326 IAC 8-9-2 Exemptions

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

Sec. 2. This rule does not apply to the following vessels:

(1) Vessels at coke oven byproduct plants.

(2) Pressure vessels designed to operate in excess of twenty-nine and four-tenths (29.4) pounds per square inch absolute and without emissions to the atmosphere.

(3) Vessels that are permanently attached to mobile vehicles such as trucks, rail cars, barges, or ships.

(4) Vessels with a design capacity less than or equal to four hundred twenty thousand (420,000) gallons used for petroleum or condensate stored, processed, or treated prior to custody transfer.

(5) Vessels located at bulk gasoline plants.

(6) Storage vessels located at gasoline service stations.

(7) Vessels used to store beverage alcohol.

(8) Stationary vessels that are:

(A) subject to any provision of 40 CFR 60, Subpart Kb*; or

(B) complying with the control requirements in 40 CFR 63.1063*.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review at the Indiana Department of Environmental Management,

Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-9-2; filed Dec 19, 1995, 3:10 p.m.: 19 IR 1056; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Aug 26, 2004, 11:30 a.m.: 28 IR 51; filed Jul 16, 2018, 1:37 p.m.: 20180815-IR-326150427FRA)*

326 IAC 8-9-3 Definitions

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

Sec. 3. The following definitions apply throughout this rule:

(1) "Condensate" means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

(2) "Custody transfer" means the transfer of produced petroleum and condensate, or both, after processing or treatment, or both, in the producing operations, from storage vessels or automatic transfer facilities to pipelines or any other forms of transportation.

(3) "Fill" means the introduction of VOL into a storage vessel but not necessarily to complete capacity.

(4) "Gasoline service station" means any site where gasoline is dispensed to motor vehicle fuel tanks from stationary storage vessels.

(5) "Maximum true vapor pressure" means the equilibrium partial pressure exerted by a VOL.

(6) "Petroleum" means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

(7) "Petroleum liquids" means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery.

(8) "Seal gap" means the gap areas and maximum gap widths between the:

(A) primary seal and the wall of the vessel; and

(B) secondary seal and the wall of the vessel.

(9) "Vessel" means each tank, reservoir, or container used for the storage of VOLs but does not include either of the following:

(A) Frames, housing, auxiliary supports, or other components that are not directly involved in the containment of liquids or vapors.

(B) Subsurface caverns or porous rock reservoirs.

(10) "Volatile organic liquid" or "VOL" means any organic liquid that can emit volatile organic compounds (VOCs) into the atmosphere except those VOLs that emit only those compounds that do not contribute appreciably to the formation of ozone, as defined in 326 IAC 1-2-90.

(11) "Waste" means any liquid resulting from industrial, commercial, mining, or agricultural operations, or from community activities that is discarded or is being accumulated, stored, or physically, chemically, or biologically treated prior to being discarded or recycled.

(Air Pollution Control Division; 326 IAC 8-9-3; filed Dec 19, 1995, 3:10 p.m.: 19 IR 1056; errata filed Dec 19, 1995, 3:15 p.m.: 19 IR 1141; errata, 19 IR 1372; errata filed Apr 9, 1996, 2:30 p.m.: 19 IR 2045; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Aug 26, 2004, 11:30 a.m.: 28 IR 51; filed Jul 16, 2018, 1:37 p.m.: 20180815-IR-326150427FRA)

326 IAC 8-9-4 Standards

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

Sec. 4. (a) The owner or operator of each vessel with a capacity greater than or equal to thirty-nine thousand (39,000) gallons, that stores VOL with a maximum true vapor pressure greater than or equal to seventy-five hundredths (0.75) pound per square inch absolute (psia) but less than eleven and one-tenth (11.1) psia shall complete the following:

(1) For each vessel having a permanently affixed roof, install one (1) of the following:

(A) An internal floating roof meeting the standards in subsection (c).

(B) A closed vent system and control device meeting the standards in subsection (d).

(C) An emissions control system that has been approved by the department and U.S. EPA based on equivalent emissions reductions to that obtained in clause (A).

(2) For each vessel having an internal floating roof, install one (1) of the following:

(A) An internal floating roof meeting the standards in subsection (c).

(B) A closed vent system and control device meeting the standards in subsection (d).

(C) An emissions control system that has been approved by the department and U.S. EPA based on equivalent emissions reductions to that obtained in clause (A).

(3) For each vessel having an external floating roof, install one (1) of the following:

(A) An external floating roof meeting the standards in subsection (e).

(B) A closed vent system meeting the standards in subsection (d).

(C) An emissions control system that has been approved by the department and U.S. EPA based on equivalent emissions reductions to that obtained in clause (A).

(4) For each vessel subject to this subsection, either:

(A) install emission control equipment; or

(B) submit a schedule for vessel cleaning and installation of the emission control equipment.

(b) The owner or operator of each vessel with a capacity greater than or equal to thirty-nine thousand (39,000) gallons, that stores VOL with a maximum true vapor pressure greater than or equal to eleven and one-tenth (11.1) psia shall equip each vessel with a closed vent system with a control device meeting the standards of subsection (d).

(c) Standards applicable to each internal floating roof are as follows:

(1) The internal floating roof must float on the liquid surface, but not necessarily in complete contact with it, inside a vessel that has a permanently affixed roof.

(2) The internal floating roof must float on the liquid surface at all times, except during initial fill and during those intervals when the vessel is completely emptied or subsequently emptied and refilled.

(3) When the roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and shall be accomplished as rapidly as possible.

(4) Each internal floating roof must be equipped with one (1) of the following closure devices between the wall of the vessel and the edge of the internal floating roof:

(A) A foam or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal).

(B) Two (2) seals mounted one (1) above the other so that each forms a continuous closure that completely covers the space between the wall of the vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

(C) A mechanical shoe seal that consists of a metal sheet held vertically against the wall of the vessel by springs or weighted levers and that is connected by braces to the floating roof. A flexible coated fabric, or envelope, must span the annular space between the metal sheet and the floating roof.

(5) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents must provide a projection below the liquid surface.

(6) Openings in the internal floating roof must meet the following requirements:

(A) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains must be equipped with a cover or lid that is maintained in a closed position at all times, with no visible gap, except when the device is in actual use.

(B) The cover or lid must be equipped with a gasket.

(C) Covers on each access hatch and automatic gauge float well must be bolted except when they are in use.

(7) Automatic bleeder vents must be:

(A) equipped with a gasket; and

(B) closed at all times when the roof is floating except when the roof is being:

(i) floated off; or

(ii) landed on the roof leg supports.

(8) Rim space vents must be:

(A) equipped with a gasket; and

(B) set:

(i) to open when the internal floating roof is not floating; or

(ii) at the manufacturer's recommended setting.

(9) Each penetration of the internal floating roof for the purpose of sampling must be through a sample well opening. The sample well must have a slit fabric cover that covers at least ninety percent (90%) of the opening.
(10) Each penetration of the internal floating roof that allows for passage of a ladder must have a gasketed sliding cover.
(d) Standards applicable to each closed vent system and control device are as follows:
(1) The closed vent system must be:
(A) designed to collect all VOC vapors and gases discharged from the vessel; and
(B) operated with no detectable emission as indicated by:
(i) an instrument reading of less than five hundred (500) parts per million (ppm) above background; and
(ii) visual inspections as determined by the methods specified in 40 CFR 60.485(c)*.
(2) The control device must be designed and operated to reduce inlet VOC emissions by at least ninety-five percent (95%). If a flare is used as the control device, it must meet the specifications described in the general control device requirements in 40 CFR 60.18*.
(e) Standards applicable to each external floating roof are as follows:
(1) Each external floating roof must be equipped with a closure device between the wall of the vessel and the roof edge consisting of two (2) seals, with one (1) above the other, as follows:
(A) The lower seal is the primary seal.
(B) The upper seal is the secondary seal.
(2) Except as provided in section 5(c)(4) of this rule, the primary seal must:
(A) completely cover the annular space between the edge of the floating roof and vessel wall; and
(B) be either a:
(i) liquid-mounted seal; or
(ii) shoe seal.
(3) Except as allowed in section 5(c)(4) of this rule, the secondary seal must completely cover the annular space between the external floating roof and the wall of the vessel in a continuous fashion.
(4) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof must provide a projection below the liquid surface.
(5) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof must be equipped with a gasketed cover, seal, or lid that is maintained in a closed position at all times, without visible gap, except when the device is in actual use.
(6) Automatic bleeder vents must be:
(A) equipped with a gasket; and
(B) closed at all times when the roof is floating except when the roof is being:
(i) floated off; or
(ii) landed on the roof leg supports.
(7) Rim vents must be:
(A) equipped with a gasket; and
(B) set:
(i) to open when the roof is being floated off the roof leg supports; or
(ii) at the manufacturer's recommended setting.
(8) Each emergency roof drain must be provided with a slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening.
(9) The roof must float on the liquid at all times, except when the vessel is completely emptied and subsequently refilled.
(10) The process of filling, emptying, or refilling when the roof is resting on the leg supports must be continuous and accomplished as rapidly as possible.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-9-4; filed Dec 19, 1995, 3:10 p.m.: 19 IR 1057; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Aug 26, 2004, 11:30 a.m.: 28 IR 52; filed Jul 16, 2018, 1:37 p.m.: 20180815-IR-326150427FRA)*

326 IAC 8-9-5 Testing and procedures

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

Sec. 5. (a) The owner or operator of each vessel subject to section 4(a) of this rule shall meet the applicable requirements of subsection (b), (c), or (d).

(b) Except as provided in section 4(a)(2) of this rule, the owner or operator of each vessel equipped with an internal floating roof shall meet the following requirements:

(1) Prior to filling the vessel with VOL, the owner or operator shall do the following:
- (A) Visually inspect the:
  - (i) internal floating roof;
  - (ii) primary seal; and
  - (iii) secondary seal, if one is in service.
- (B) Conduct repairs prior to filling the vessel if there are:
  - (i) holes, tears, or other openings in the:
    - (AA) primary seal;
    - (BB) secondary seal; or
    - (CC) seal fabric; or
  - (ii) defects in the internal floating roof.

(2) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, complete the following:
- (A) Visually inspect the internal floating roof, primary seal, and secondary seal if one is in service:
  - (i) through manholes and roof hatches on the fixed roof; and
  - (ii) at least once every twelve (12) months after the initial fill.
- (B) Conduct repairs or empty and remove the vessel from service within forty-five (45) days if:
  - (i) the internal floating roof is not resting on the surface of the VOL inside the vessel;
  - (ii) there is liquid accumulated on the roof;
  - (iii) the seal is detached; or
  - (iv) there are holes or tears in the seal fabric.
- (C) The owner or operator may request a thirty (30) day extension to the requirement in clause (B) as follows:
  - (i) The extension may be requested from the department if:
    - (AA) a failure that is detected during inspections required in this section cannot be repaired in forty-five (45) days; and
    - (BB) the vessel cannot be emptied within forty-five (45) days.
  - (ii) A request for an extension must:
    - (AA) be made in the inspection report required in section 6(c)(3) of this rule;
    - (BB) document that alternate storage capacity is unavailable; and
    - (CC) specify a schedule of actions the owner or operator will take that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(3) For vessels equipped with both primary and secondary seals, visually inspect the vessel as specified in:
- (A) subdivision (4), at least every five (5) years; or
- (B) subdivision (2).

(4) Each time the vessel is emptied and degassed, complete the following:
- (A) Visually inspect the:
  - (i) internal floating roof;
  - (ii) primary seal;
  - (iii) secondary seal, if one is in service;
  - (iv) gaskets;
  - (v) slotted membranes; and
  - (vi) sleeve seals.
- (B) Perform an internal out-of-service inspection in accordance with 40 CFR 60.113b(a)(4)*.

(C) Conduct repairs as necessary before refilling the vessel with VOL so that none of the following conditions exist:
(i) The internal floating roof has defects.
(ii) The primary seal has holes, tears, or other openings in the seal or the seal fabric.
(iii) The secondary seal has holes, tears, or other openings in the seal or the seal fabric.
(iv) The gaskets no longer close off the liquid surfaces from the atmosphere.
(v) The slotted membrane has more than ten percent (10%) open area.

(5) If a vessel that is subject to the annual visual inspection specified in subdivisions (2) and (3)(B) has not been emptied and degassed within ten (10) years, or if a vessel specified in subdivision (3)(A) has not been emptied and degassed within five (5) years, conduct an inspection while the vessel is in service in:
(A) accordance with 40 CFR 63.1063(d)(1)(i) through 40 CFR 63.1063(d)(1)(v)*; and
(B) its entirety from the top side of the internal floating roof.

(6) Provide notification to the department as follows:
(A) Except under clause (B), notify the department in writing at least thirty (30) days prior to the filling or refilling of each vessel for which an inspection is required by subdivisions (1) and (4) to afford the department the opportunity to have an observer present.
(B) Notify the department at least seven (7) days prior to the refilling of the vessel in accordance with clause (C) if:
(i) the inspection required by subdivision (4) is not planned; and
(ii) the owner or operator could not have known about the inspection thirty (30) days in advance of refilling the vessel.
(C) Notification under clause (B) must be made:
(i) by telephone immediately followed by written documentation demonstrating why the inspection was unplanned; or
(ii) in writing, including documentation, and sent, either electronically or by express mail so that it is received by the department at least seven (7) days prior to the refilling.

(c) Except as provided in section 4(a)(3) of this rule, the owner or operator of each vessel equipped with an external floating roof shall meet the following requirements:

(1) Determine the seal gaps as follows:
(A) Measurements of gaps between the vessel wall and the primary seal must be performed:
(i) during the hydrostatic testing of the vessel or within sixty (60) days of the initial fill with VOL; and
(ii) at least once every five (5) years thereafter.
(B) Measurements of gaps between the vessel wall and the secondary seal must be performed:
(i) within sixty (60) days of the initial fill with VOL; and
(ii) at least once per year thereafter.
(C) If any source ceases to store VOL for a period of one (1) year or more, subsequent introduction of VOL into the vessel is considered an initial fill for purposes of this subdivision.

(2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:
(A) Measure seal gaps, if any, at one (1) or more floating roof levels when the roof is floating off the roof leg supports.
(B) Measure seal gaps around the entire circumference of the vessel in each location where a one-eighth (1/8) inch diameter uniform probe passes freely between the seal and the wall of the vessel, without forcing or binding against the seal, and measure the circumferential distance of each location.
(C) The total surface area of each gap described in clause (B) must be determined by:
(i) using probes of various widths to measure accurately the actual distance from the vessel wall to the seal; and
(ii) multiplying each width by its respective circumferential distance.

(3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each by the nominal diameter of the vessel and compare each ratio to the respective standards in subdivision (4).

(4) Make necessary repairs or empty the vessel within forty-five (45) days of identification of the seals not meeting the requirements listed in clauses (A) through (C) as follows:
(A) The accumulated area of gaps between the vessel wall and the mechanical shoe or liquid-mounted primary seal must not exceed ten (10) square inches per foot of vessel diameter, and the width of any portion of any gap must not exceed one and five-tenths (1.5) inches.

(B) There must be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(C) The secondary seal must meet the following requirements:

(i) The secondary seal must be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in subdivision (2)(C).

(ii) The accumulated area of gaps between the vessel wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal must not exceed one (1) square inch per foot of vessel diameter, and the width of any portion of any gap shall not exceed five-tenths (0.5) inch.

(iii) There must be no gaps between the vessel wall and the secondary seal when used in combination with a vapor-mounted primary seal.

(iv) There must be no holes, tears, or other openings in the seal or seal fabric.

(D) The owner or operator may request a thirty (30) day extension to the requirements of this subdivision as follows:

(i) The extension may be requested from the department if:

(AA) a failure that is detected during inspections required in subdivision (1) cannot be repaired within forty-five (45) days; and

(BB) the vessel cannot be emptied within forty-five (45) days.

(ii) A request for an extension must:

(AA) be made in the inspection report required in section 6(d)(3) of this rule;

(BB) document that alternate storage capacity is unavailable; and

(CC) specify a schedule the owner or operator will take that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(5) Notify the department thirty (30) days in advance of any gap measurements required by subdivision (1) to afford the department the opportunity to have an observer present.

(6) Prior to filling the vessel with VOL, complete the following:

(A) Visually inspect the:

(i) external floating roof;

(ii) primary seal;

(iii) secondary seal; and

(iv) fittings.

(B) Conduct repairs as necessary before filling or refilling the vessel with VOL so that none of the following conditions exist:

(i) The external floating roof has defects.

(ii) The primary seal has holes, tears, or other openings in the seal or the seal fabric.

(iii) The secondary seal has holes, tears, or other openings in the seal fabric.

(C) Provide notification to the department as follows:

(i) Notify the department in writing at least thirty (30) days prior to the filling or refilling of each vessel to afford the department the opportunity to inspect the vessel prior to the filling.

(ii) Notify the department at least seven (7) days prior to the refilling of the vessel if the:

(AA) inspection required by this subdivision is not planned; and

(BB) owner or operator could not have known about the inspection thirty (30) days in advance of refilling the vessel.

(iii) Notification under item (ii) must be made:

(AA) by telephone immediately followed by written documentation demonstrating why the inspection was unplanned; or

(BB) in writing, including documentation, and sent, either electronically or by express mail so that it is received by the department at least seven (7) days prior to the refilling.

(d) The owner or operator of each vessel that is equipped with a closed vent system and control device described in section 4(a)(1)(B), 4(a)(2)(B), or 4(a)(3)(B) of this rule and meeting the requirements of section 4(d) of this rule, other than a flare, shall meet the following requirements:

(1) Prior to the initial filling of the vessel, submit to the department an operating plan containing the following information:

(A) Documentation demonstrating that the control device will achieve the required control efficiency during maximum

loading conditions including the following:

(i) A description of the gas stream that enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static).

(ii) The manufacturer's design specifications for the control device.

(iii) If the control device or the closed vent capture system receives vapor gases, or liquid other than fuels from sources that are not subject to this rule, the efficiency demonstration must include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device.

(iv) If an enclosed combustion device with a minimum residence time of seventy-five hundredths (0.75) second and a minimum temperature of eight hundred sixteen (816) degrees Centigrade is used to meet the ninety-five percent (95%) requirement, documentation that those conditions will exist is sufficient to meet the requirements of this subdivision.

(B) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used to monitor the parameter or parameters.

(2) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the department in accordance with subdivision (1) unless the plan was modified by the department during the review process, in which case the modified plan applies.

(e) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in section 4(a)(4) or 4(d) of this rule shall meet the requirements specified in the general control device requirements in 40 CFR 60.18(e)* and 40 CFR 60.18(f)*.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-9-5; filed Dec 19, 1995, 3:10 p.m.: 19 IR 1059; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Aug 26, 2004, 11:30 a.m.: 28 IR 54; filed Jul 16, 2018, 1:37 p.m.: 20180815-IR-326150427FRA)*

326 IAC 8-9-6 Record keeping and reporting requirements

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

Sec. 6. (a) The owner or operator of each vessel subject to this rule shall keep all records required by this section for three (3) years unless specified otherwise. Records required by subsection (b) must be maintained for the life of the vessel.

(b) The owner or operator of each vessel shall maintain a record and submit to the department a report containing the following information for each vessel:

(1) The vessel identification number.

(2) The vessel dimensions.

(3) The vessel capacity.

(4) A description of the emission control equipment for each vessel described in section 4(a) and 4(b) of this rule, or a schedule for installation of emission control equipment on vessels described in section 4(a) or 4(b) of this rule with a certification that the emission control equipment meets the applicable standards.

(c) The owner or operator of each vessel equipped with a permanently affixed roof and internal floating roof shall comply with the following record keeping and reporting requirements:

(1) Keep a record of each inspection performed as required by section 5(b)(1) through 5(b)(4) of this rule. Each record must identify the following:

(A) The vessel inspected by identification number.

(B) The date the vessel was inspected.

(C) The observed condition of each component of the control equipment, including the following:

(i) Seals.

(ii) Internal floating roof.

(iii) Fittings.

(2) If any of the conditions described in section 5(b)(2) of this rule are detected during the required annual visual inspection,

a record must be maintained and a report must be submitted to the department within thirty (30) days of the inspection that includes the following:

(A) The vessel by identification number.

(B) The nature of the defects.

(C) The date the vessel was emptied, or the nature of and date the repair was made.

(3) After each inspection required by section 5(b)(3) of this rule that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in section 5(b)(2) of this rule, a record must be maintained and a report must be submitted to the department within thirty (30) days of the inspection that includes the following:

(A) The vessel by identification number.

(B) The reason the vessel did not meet the specifications of section 4(a)(1)(A), 4(a)(2)(A), or 5(b) of this rule.

(C) A list of each repair made.

(d) The owner or operator of each vessel equipped with an external floating roof shall comply with the following record keeping and reporting requirements:

(1) Keep a record of each gap measurement performed as required by section 5(c) of this rule including the following:

(A) The vessel by identification number in which the measurement was made.

(B) The date of measurement.

(C) The raw data obtained in the measurement.

(D) The calculations described in section 5(c)(2) and 5(c)(3) of this rule.

(2) Within sixty (60) days of performing the seal gap measurements required by section 5(c)(1) of this rule, submit a report to the department that contains the following:

(A) The date of measurement.

(B) The raw data obtained in the measurement.

(C) The calculations described in section 5(c)(2) and 5(c)(3) of this rule.

(3) After each seal gap measurement that detects gaps exceeding the limitations specified in section 5(c) of this rule, submit a report to the department within thirty (30) days of the inspection that includes the following:

(A) The vessel by identification number.

(B) The information specified in subdivision (2).

(C) The date the vessel was emptied or repaired.

(e) The owner or operator of each vessel equipped with a closed vent system with a control device shall comply with the following record keeping and reporting requirements:

(1) An owner or operator that equips the vessel with a control device other than a flare shall do the following:

(A) Submit an operating plan as required by section 5(d) of this rule.

(B) Maintain records of the following:

(i) The operating plan.

(ii) Measured values of the parameters monitored according to section 5(d)(2) of this rule.

(2) An owner or operator that equips the vessel with a closed vent system and a flare shall meet the following requirements:

(A) Keep records of all periods of operation during which the flare pilot flame is absent.

(B) Submit a report to the department:

(i) containing the measurements required by 40 CFR 60.18(f)(1)* through 40 CFR 60.18(f)(5)*, as required by 40 CFR 60.8*; and

(ii) within six (6) months of the initial start-up date.

(C) Submit a semiannual report to the department of all periods recorded under 40 CFR 60.115b(d)(2)* in which the pilot flame was absent.

(f) The owner or operator of each vessel equipped with a closed vent system and control device meeting the standards of section 4 of this rule is exempt from the requirements of subsections (g) and (h).

(g) Except as provided in subsections (f) and (j), the owner or operator of each vessel with a design capacity greater than or equal to thirty-nine thousand (39,000) gallons storing a VOL with a maximum true vapor pressure greater than or equal to five-tenths (0.5) pound per square inch absolute (psia) but less than seventy-five hundredths (0.75) psia shall maintain a record of the maximum true vapor pressure of the VOL stored in each vessel including the following information:

(1) The type of VOL stored.

(2) The dates of the VOL storage.

(3) For each day of VOL storage, the:

(A) average:

(i) stored temperature for VOLs stored above or below the ambient temperature; or

(ii) ambient temperature for VOLs stored at ambient temperature; and

(B) corresponding maximum true vapor pressure.

(h) Except as provided in subsection (f), the owner or operator of each vessel with a design capacity greater than or equal to thirty-nine thousand (39,000) gallons storing a liquid with a maximum true vapor pressure, as measured in accordance with subsection (f), that is normally less than seventy-five hundredths (0.75) psia shall maintain a record and notify the department within thirty (30) days when the maximum true vapor pressure of the liquid exceeds seventy-five hundredths (0.75) psia.

(i) Available data on the storage temperature may be used to determine the maximum true vapor pressure as follows:

(1) The maximum true vapor pressure for VOLs stored at temperatures above or below the ambient temperature must be calculated based on the highest calendar-month average storage temperature.

(2) The maximum true vapor pressure for VOLs stored at the ambient temperature must be calculated based on the local maximum monthly average ambient temperature, as reported by the National Weather Service.

(3) For other liquids, the maximum true vapor pressure may be determined by any of the following methods:

(A) ASTM Method D2879-10**, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.

(B) A reasonably equivalent method approved by the department and U.S. EPA.

(4) Maximum true vapor pressure for VOLs stored at or above ambient temperatures must be determined by using one (1) of the following:

(A) Unless a method is required under clause (C), seventy-three (73) degrees Fahrenheit in Lake and Porter counties.

(B) Unless a method is required under clause (C), seventy-seven and seven-tenths (77.7) degrees Fahrenheit in Clark and Floyd counties.

(C) If required by the department or U.S. EPA, by using:

(i) ASTM Method D323-08**, Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method); or

(ii) a reasonably equivalent method approved by the department and U.S. EPA.

(j) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition is subject to the following requirements:

(1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored must be determined using the methods described in subsection (i).

(2) For vessels in which the vapor pressure of the anticipated liquid composition is greater than or equal to five-tenths (0.5) psia but less than seventy-five hundredths (0.75) psia, the following tests are required:

(A) An initial physical test of the vapor pressure.

(B) A physical test at least once every six (6) months thereafter using one (1) of the following methods:

(i) ASTM Method D2879-10**, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.

(ii) ASTM Method D323-08**, Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method).

(iii) A reasonably equivalent method approved by the department and U.S. EPA.

*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

**These documents are incorporated by reference. Copies are available from the American Society for Testing and Materials, 100 Barr Harbor Drive, Conshohocken, Pennsylvania 19429, or for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-9-6; filed Dec 19, 1995, 3:10 p.m.: 19 IR 1061; errata filed Dec 19, 1995, 3:15 p.m.: 19 IR 1141; errata filed Apr 9, 1996, 2:30 p.m.: 19 IR 2045; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Aug 26, 2004, 11:30 a.m.: 28 IR 56; filed Jul 16, 2018, 1:37 p.m.: 20180815-IR-326150427FRA)*

Rule 10. Automobile Refinishing

326 IAC 8-10-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to any person who does the following:
(1) Sells, offers for sale, or manufactures for sale refinishing coatings or surface preparation products in the following:
(A) Clark, Floyd, Lake, or Porter County.
(B) All other counties on or after June 1, 2009.
(2) Owns, leases, operates, or controls a facility, as defined in 326 IAC 1-2-27, that refinishes motor vehicles, motor vehicle parts, motor vehicle components, or mobile equipment, as defined in section 2(25) and 2(26) of this rule, in the following:
(A) Clark, Floyd, Lake, or Porter County.
(B) All other counties on or after June 1, 2009.
(b) The following activities are exempt from this rule:
(1) Application of aerosol coating products.
(2) Graphic design application.
(3) Touch-up coating application.
(c) This rule does not apply to individuals who:
(1) own;
(2) lease;
(3) operate; or
(4) control;
a facility, as defined in 326 IAC 1-2-27, that refinishes three (3) or fewer motor vehicles per calendar year.
(d) The exemption provided by 326 IAC 8-2-9(b)(4) shall not exempt any facility from the requirements of this rule. *(Air Pollution Control Division; 326 IAC 8-10-1; filed Oct 3, 1995, 3:00 p.m.: 19 IR 194; filed Jul 14, 1998, 5:04 p.m.: 21 IR 4518; filed Apr 23, 1999, 2:12 p.m.: 22 IR 2856; filed Mar 27, 2009, 9:58 a.m.: 20090422-IR-326060603FRA)*

326 IAC 8-10-2 Definitions

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

Sec. 2. The following definitions apply throughout this rule:
(1) "Adhesion promoter" means a coating:
(A) used to promote adhesion of a topcoat on surfaces such as:
(i) trim moldings;
(ii) door locks; and
(iii) door sills; or
(B) that provides adhesion to plastic substrates, where sanding is impracticable.
The term excludes primers, primer sealers, primer surfacers, and topcoats.
(2) "Aerosol coating products" means a mixture of:
(A) resins;
(B) pigments;
(C) liquid solvents; and
(D) gaseous propellants;
packaged in a disposable can for hand-held application.
(3) "Anti-glare/safety coating" means a low gloss coating formulated to eliminate or reduce glare for safety purposes on interior surfaces of a vehicle, as specified under the United States Department of Transportation Motor Vehicle Safety Standards.
(4) "Application station" means the part of an automobile refinishing facility where coatings are applied.
(5) "Automobile refinishing" means refinishing operations for after-market motor vehicles, motor vehicle parts, motor vehicle

components, or mobile equipment performed in:

(A) auto body and repair shops;

(B) production paint shops;

(C) new car dealer repair and paint shops;

(D) fleet operation repair and paint shops; and

(E) any other facility that coats vehicles under the Standard Industrial Classification (SIC) code 7532 (top, body, and upholstery repair shops and paint shops).

The term includes dealer repair of vehicles damaged in transit.

(6) "Basecoat" means a pigmented topcoat that is the first topcoat applied as part of a multistage topcoat system.

(7) "Basecoat/clearcoat system" means a topcoat system composed of a pigmented basecoat portion and a transparent clearcoat portion. The VOC content of a basecoat/clearcoat system shall be calculated according to the following formula:

$$VOC_{Tbc/cc} = \frac{VOC_{bc} + 2VOC_{cc}}{3}$$

Where: $VOC_{Tbc/cc}$ = VOC content as applied of the basecoat (bc) and clearcoat (cc) systems.

VOC_{bc} = VOC content as applied of any given basecoat.

VOC_{cc} = VOC content as applied of any given clearcoat.

(8) "Catalyst" means a substance whose presence enhances the reaction between chemical compounds.

(9) "Clearcoat" means a topcoat that:

(A) contains no pigments or only transparent pigments; and

(B) is the final topcoat applied as a part of a multistage topcoat system.

(10) "Coating" means a protective, decorative, or functional material with VOC content greater than zero (0) used in automobile refinishing operations.

(11) "Color match" means the ability of a repair coating to blend in an existing coating so that color difference is not visible.

(12) "Container" means a vessel or tank used to store any of the following:

(A) Coatings.

(B) Surface preparation products.

(C) Solvents.

(D) Waste.

(13) "Disposed off site" means sending outside of the refinishing facility the used:

(A) coatings;

(B) surface preparation products;

(C) solvents; or

(D) wastes.

(14) "Elastomeric materials" means topcoats and primers that are specifically formulated for application over flexible parts such as the following:

(A) Filler panels.

(B) Elastomeric bumpers.

(15) "Electrostatic application" means the application to a substrate of charged atomized paint droplets that are deposited by electrostatic attraction.

(16) "Equipment" means devices that are used to transfer or apply coating, surface preparation product, or solvent, such as, but not limited to, the following:

(A) Spray guns.

(B) Brushes.

(C) Nonrefillable aerosol cans.

(17) "Exempt compounds" means a nonphotochemically reactive hydrocarbon as defined in 326 IAC 1-2-48.

(18) "Gloss flatteners" means coatings that are formulated to provide low gloss to match original equipment manufacturer's (OEM) specifications.

(19) "Graphic design application" means the application of:

(A) logos;

(B) letters;
(C) numbers; and
(D) graphics;
to a painted surface, with or without the use of a template.
(20) "Ground support" means vehicles used in support of aircraft activities at airports.
(21) "Hardener" means an additive designed to promote a faster cure of coatings that cure by cross-linking of the resin components.
(22) "High-volume, low-pressure (HVLP) spray" means technology used to apply coating to a substrate by means of coating application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.
(23) "Material safety data sheet" or "MSDS" means the chemical, physical, technical, and safety information document supplied by the manufacturer of the coating, solvent, or other chemical product, usually through the distribution network or retailers.
(24) "Midcoat" means a semitransparent topcoat that is the middle topcoat applied as part of a three (3) stage topcoat system.
(25) "Mobile equipment" means any equipment that may be driven or drawn on a roadway, including, but not limited to, the following:
(A) Truck bodies.
(B) Truck trailers.
(C) Cargo vaults.
(D) Utility bodies.
(E) Camper shells.
(F) Construction equipment, such as the following:
(i) Mobile cranes.
(ii) Bulldozers.
(iii) Concrete mixers.
(G) Farming equipment, such as the following:
(i) Tractors.
(ii) Plows.
(iii) Pesticide sprayers.
(H) Miscellaneous equipment, such as the following:
(i) Street cleaners.
(ii) Golf carts.
(iii) Ground support vehicles.
(iv) Tow motors.
(v) Fork lifts.
(26) "Motor vehicles" means the following:
(A) Automobiles.
(B) Buses.
(C) Trucks.
(D) Vans.
(E) Motor homes.
(F) Recreational vehicles.
(G) Motorcycles.
(27) "Multicolored topcoat" means a topcoat that:
(A) exhibits more than one (1) color;
(B) is packaged in a single container; and
(C) camouflages surface defects on areas of heavy use, such as cargo beds and other surfaces of trucks and other utility vehicles.
(28) "Multistage topcoat system" means any basecoat/clearcoat topcoat system or any three (3) stage topcoat system:
(A) manufactured as a system; and

(B) used as specified by the manufacturer.

(29) "Precoat" means any coating that is applied to bare metal primarily to deactivate the metal surface to provide corrosion resistance against a subsequent water-based primer.

(30) "Pretreatment wash primer" means the first coat applied to bare metal if solvent-based primers will be applied. This coating:

(A) contains a minimum of five-tenths percent (0.5%) acid by weight;

(B) is necessary to provide surface etching; and

(C) is applied directly to bare metal surfaces to provide corrosion resistance.

(31) "Primer" means any coating applied to a substrate prior to the application of a topcoat for the purpose of providing any of the following:

(A) Corrosion resistance.

(B) Adhesion of subsequent coatings.

(C) Color uniformity.

(32) "Primer sealer" means any coating applied to a substrate prior to the application of a topcoat to:

(A) provide:

(i) corrosion resistance;

(ii) adhesion of the topcoat; and

(iii) color uniformity; and

(B) promote the ability of an undercoat to resist penetration by the topcoat.

(33) "Primer surfacer" means any coating applied to a substrate prior to the application of a topcoat to:

(A) provide:

(i) corrosion resistance; and

(ii) adhesion of the topcoat; and

(B) promote a uniform surface by filling in surface imperfections.

(34) "Reducer" means the solvent added to dilute a coating, usually for the purpose of lowering the viscosity of a coating.

(35) "Refinishing" means any coating of motor vehicles, motor vehicle parts, motor vehicle components, or mobile equipment, including partial body collision repairs, for the purpose of protection or beautification and that is subsequent to the original coating applied at an original equipment manufacturing (OEM) plant coating assembly line.

(36) "Refinishing job" means for each motor vehicle or piece of mobile equipment any or all of the following:

(A) Surface preparation.

(B) Primer application.

(C) Primer surfacer application.

(D) Primer sealer application.

(E) Topcoat application.

(37) "Repair coating" means a coating that is used in the repair of:

(A) a motor vehicle;

(B) a motor vehicle part;

(C) a motor vehicle component; or

(D) mobile equipment.

(38) "Reused on site" means the reuse of a:

(A) coating;

(B) surface preparation product; or

(C) solvent;

in the refinishing facility.

(39) "Solvent" means a liquid containing VOCs that is used for:

(A) dissolving or dispersing constituents in a coating;

(B) adjusting the viscosity of a coating; or

(C) cleaning application stations, equipment, or containers.

(40) "Specialty coatings" means coatings that are necessary due to unusual and uncommon job performance requirements, including, but not limited to, the following:

(A) Weld-through primers.
(B) Adhesion promoters.
(C) Uniform finish blenders.
(D) Elastomeric materials.
(E) Gloss flatteners.
(F) Bright metal trim repair.
(G) Anti-glare/safety coatings.
(H) Multicolored topcoat.

(41) "Spot repairs" means repairs to motor vehicles in which the damaged area to be repaired is limited to only a portion of any given panel so that an entire panel need not be repaired.

(42) "Substrate" means the surface onto which coatings or surface preparation products are applied.

(43) "Surface preparation products" means products with VOC content greater than zero (0) used to remove:
(A) wax;
(B) tar;
(C) grease; and
(D) other undesirable contaminants;
from the surface to be refinished.

(44) "Three (3) or four (4) stage topcoat system" means a topcoat system composed of a pigmented basecoat portion, a semitransparent midcoat portion, and a transparent clearcoat portion. The VOC content of a three (3) stage coating system shall be calculated according to the following formula:

$$VOC_{T3\text{-}stage} = \frac{VOC_{bc} + VOC_{mc} + 2VOC_{cc}}{4}$$

Where: $VOC_{T3\text{-}stage}$ = VOC content as applied of the three (3) stage coating system.
VOC_{bc} = VOC content as applied of any given basecoat.
VOC_{mc} = VOC content as applied of any given midcoat.
VOC_{cc} = VOC content as applied of any given clearcoat.

The VOC content of a four (4) stage system shall be calculated using the same formula specified for the three (3) stage coating system except that there would be an additional coating in the numerator, and the denominator would be five (5).

(45) "Topcoat" means the final film or series of films of coating applied to a substrate for the purpose of protection or appearance.

(46) "Touch-up coating" means a coating applied by brush or hand-held, nonrefillable aerosol cans to repair minor surface damage and imperfections.

(47) "Uniform finish blenders" means coatings that are utilized to ensure that the coatings applied during the refinishing of a vehicle imperceptibly blend in with the undamaged finish of repaired and undamaged portions of the:
(A) motor vehicle;
(B) motor vehicle parts;
(C) motor vehicle components; or
(D) mobile equipment.

(48) "VOC content" of coating or surface preparation products means the weight of VOC, less water, and less exempt compounds, per unit volume, of coating or surface preparation product.

(49) "VOC content as applied" of coatings or surface preparation products means the VOC content of the coating or surface preparation product, as applied to the substrate.

(50) "VOC content as supplied" means the VOC content of coating or surface preparation products, sold and delivered by the manufacturer to the user.

(51) "Volatile organic compound" or "VOC" has the meaning set forth in 326 IAC 1-2-90.

(52) "Weld-through primer" means primers that have the characteristics of withstanding high temperatures associated with welding without catching fire.

(Air Pollution Control Division; 326 IAC 8-10-2; filed Oct 3, 1995, 3:00 p.m.: 19 IR 194; errata filed Dec 11, 1995, 3:00 p.m.: 19

IR 674; filed Mar 27, 2009, 9:58 a.m.: 20090422-IR-326060603FRA)

326 IAC 8-10-3 Requirements

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

Sec. 3. (a) Each manufacturer or distributor of coatings or surface preparation products manufactured or distributed for use in Indiana shall comply with the following:

(1) The VOC content limits listed in section 4(a) of this rule.

(2) The compliance procedures outlined in section 6(a) of this rule.

(b) Any person commercially providing refinishing coatings or surface preparation products for use in Indiana that were manufactured after January 11, 1999, shall comply with the following:

(1) The VOC content limits listed in section 4(a) of this rule.

(2) The compliance procedures outlined in section 6(b) of this rule.

(c) Any person applying any coating or surface preparation product in Indiana shall comply with the following:

(1) The provisions of section 4 of this rule.

(2) The work practice standards of section 5 of this rule.

(3) The compliance procedures outlined in section 6(c) of this rule.

(4) The test procedures in section 7 of this rule.

(5) The record keeping and reporting provisions in section 9 of this rule.

(d) No person shall solicit or require any refinishing facility subject to this rule to use a refinishing coating or surface preparation product that does not comply with the VOC content limits listed in section 4(a) of this rule. *(Air Pollution Control Division; 326 IAC 8-10-3; filed Oct 3, 1995, 3:00 p.m.: 19 IR 197; filed Apr 23, 1999, 2:12 p.m.: 22 IR 2856; filed Mar 27, 2009, 9:58 a.m.: 20090422-IR-326060603FRA)*

326 IAC 8-10-4 Means to limit volatile organic compound emissions

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

Sec. 4. (a) The owner or operator of a refinishing facility subject to this rule shall limit emissions of VOCs from refinishing operations by using coatings or surface preparation products with VOC limits based on the VOC content as applied. The VOC content shall not exceed the following limits:

Coating Category	VOC Limit	
	grams liter	lbs gallon
Pretreatment wash primer	780	6.5
Precoat	660	5.5
Primer/primer surfacer	576	4.8
Primer sealer	552	4.6
Topcoat		
Single and two stage	600	5.0
Three and four stage	624	5.2
Multicolored topcoat	680	5.7
Specialty	840	7.0

For surface preparation products:

Type of Substrate	VOC Limit	
	grams liter	lbs gallon
Plastic	780	6.5
Other	168	1.4

(b) Application of all specialty coatings except anti-glare/safety coatings shall not exceed five percent (5%) by volume of all coatings applied on a monthly basis. *(Air Pollution Control Division; 326 IAC 8-10-4; filed Oct 3, 1995, 3:00 p.m.: 19 IR 197; filed Mar 27, 2009, 9:58 a.m.: 20090422-IR-326060603FRA)*

326 IAC 8-10-5 Work practice standards

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

Sec. 5. (a) The owner or operator of a refinishing facility subject to this rule shall ensure that spray guns are cleaned in an enclosed device that:

(1) is closed during:

(A) spray gun equipment cleaning operations except when depositing and removing objects to be cleaned; and

(B) noncleaning operations with the exception of the maintenance and repair of the cleaning device itself; and

(2) recirculates cleaning solvent during the cleaning operation so that the solvent is available for reuse on site or for disposal off site.

The cleaning device shall be operated and maintained according to the manufacturer's recommendations. The owner or operator of the refinishing facility subject to this rule shall have the cleaning device manufacturer's recommendations available for inspection upon request by the department or the U.S. EPA.

(b) The owner or operator of a refinishing facility subject to this rule shall use one (1) or a combination of the following equipment for coating application:

(1) Electrostatic equipment.

(2) High-volume, low-pressure (HVLP) spray equipment.

(3) Any other coating application equipment that has been demonstrated, by the owner or operator, to the satisfaction of the department to be capable of achieving at least sixty-five percent (65%) transfer efficiency. The owner or operator must submit sufficient data for the department to be able to determine the accuracy of the transfer efficiency claims.

Coating application equipment shall be operated and maintained according to the manufacturer's recommendations. The owner or operator shall have the manufacturer's recommendations available for inspection upon request by the department or the U.S. EPA.

(c) The owner or operator of a refinishing facility subject to this rule shall implement housekeeping practices, which include the following:

(1) All:

(A) paper;

(B) cloth;

(C) plastic; or

(D) other materials;

used for activities such as surface preparation and surface cleanup that have been contaminated with coatings or solvent shall be stored in closed containers until disposed of off site. The containers shall remain closed unless being filled or emptied.

(2) Except when actively or directly applying, store in closed containers, all fresh or used refinishing materials including, but not limited to, the following:

(A) Solvents.

(B) Coatings.

(C) VOC-containing additives and materials.

(D) VOC-containing waste materials.

(3) Storage containers and equipment shall be free from:

(A) cracks;

(B) holes; and

(C) leaks.

(4) Waste coatings and used automotive fluids shall be stored in closed containers.

(5) Equipment cleanup shall be performed with methods that minimize the use of solvents. Reasonable efforts shall be made to reclaim the bulk of used solvents. No cleaning shall be performed by direct spraying of solvents into the atmosphere.

(6) Effort shall be made to schedule operations of a similar nature to significantly reduce total VOC material consumption.

(7) Coatings or surface preparation products shall be applied in a manner that minimizes overspray.

(d) The owner or operator of a refinishing facility subject to this rule shall comply with the training requirements of this rule as follows:

(1) Develop a written training program. The training program may include training provided by the manufacturer or supplier and shall include written procedures and hands-on demonstration, as appropriate, on the following topics:

(A) Identification of appropriate coatings or surface preparation products.

(B) Preparation of coatings or surface preparation products according to coating manufacturer, distributor, or owner or operator's recommendations.

(C) Application of coatings or surface preparation products or organic solvents using techniques that minimize their usage.

(D) Operation and maintenance of spray gun cleaning equipment to minimize evaporation of organic solvents to the atmosphere.

(E) Work practice standards established in subsection (c).

(F) Procedures to:

(i) gather;

(ii) record;

(iii) monitor; and

(iv) report;

data in accordance with section 9 of this rule.

(2) Provide annual refresher training prior to May 1 of each year to any employee performing one (1) or more of the activities listed in subdivision (1). The training shall be appropriate to the job responsibilities of the employee.

(3) Any person may perform one (1) or more activities addressed in subdivision (1), for not more than one hundred eighty (180) days, notwithstanding the requirement of subdivision (2), provided each of the following:

(A) The untrained person works under the supervision of a person who meets the training requirements of subdivision (2).

(B) The owner or operator keeps the following records:

(i) The date the person was assigned to the activity.

(ii) The date training was completed.

(iii) The name of the person providing the supervision.

(4) The owner or operator of the refinishing operation subject to this rule shall keep records of the training program. The records shall consist of the following:

(A) The date training was completed.

(B) A list of persons, by name and activity and the topics in which they have been trained.

(C) A statement signed by the trainer certifying each trainee who satisfactorily has completed training in the topics and is proficient in the procedures specified in subdivision (1).

(Air Pollution Control Division; 326 IAC 8-10-5; filed Oct 3, 1995, 3:00 p.m.: 19 IR 198; errata filed Dec 11, 1995, 3:00 p.m.: 19 IR 674; filed Jul 14, 1998, 5:04 p.m.: 21 IR 4518; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Mar 27, 2009, 9:58 a.m.: 20090422-IR-326060603FRA)

326 IAC 8-10-6 Compliance procedures

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

Sec. 6. (a) Each manufacturer of coatings or surface preparation products who supplies coatings or surface preparation products to a distributor, retailer, or owner or operator of a refinishing facility subject to this rule shall, for each coating or surface preparation product supplied, keep records of and provide the owner or operator of a refinishing facility with a written record or document containing the following coating or surface preparation product information:

(1) Product description.

(2) Date of manufacture, date code, or batch number.

(3) Thinning instructions.

(4) The VOC content in grams per liter and pounds per gallon, as packaged or as supplied:

(A) for single coat products, the VOC as applied after any thinning recommended by the manufacturer; or

(B) for multistage systems in which the VOC as applied is dependent upon the VOC content of a combination of products with varying VOC levels, provide:

(i) a list of the maximum allowable packaged VOC for the individual layers;

(ii) a comprehensive chart of color combinations and the as-applied VOC content; or

(iii) a simple to use formula or grid for the end user to calculate the as-applied VOC content of their multistage system.

(5) A statement that the coating is, or is not, in compliance with the VOC limits in section 4(a) of this rule.

(6) The:

(A) name;

(B) address;

(C) telephone number; and

(D) signature;

of the person purchasing the product.

(b) Any person who is engaged in commercially providing coatings or surface preparation products in Indiana shall provide to the recipient and shall keep the following records of all coatings or surface preparation products supplied. The records shall include the following:

(1) The product description.

(2) The amount supplied.

(3) The date supplied, date code, or batch number.

(4) The VOC content in grams per liter and pounds per gallon, as packaged or as supplied:

(A) for single coat products, the VOC as applied after any thinning recommended by the manufacturer; or

(B) for multistage systems in which the VOC as applied is dependent upon the VOC content of a combination of products with varying VOC levels, provide:

(i) a list of the maximum allowable packaged VOC for the individual layers;

(ii) a comprehensive chart of color combinations and their as-applied VOC content; or

(iii) a simple to use formula or grid for the end user to calculate the as-applied VOC content of their multistage system.

(5) The:

(A) name;

(B) address;

(C) telephone number; and

(D) signature;

of the person purchasing the product.

(c) The owner or operator of a refinishing facility subject to this rule shall submit to the department a statement signed by a responsible official of the facility certifying that the facility has acquired and will continuously employ coatings or surface preparation products meeting the VOC limits of section 4(a) of this rule. *(Air Pollution Control Division; 326 IAC 8-10-6; filed Oct 3, 1995, 3:00 p.m.: 19 IR 199; filed Jul 14, 1998, 5:04 p.m.: 21 IR 4519; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Mar 27, 2009, 9:58 a.m.: 20090422-IR-326060603FRA)*

326 IAC 8-10-7 Test procedures

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

Sec. 7. (a) Owners or operators of refinishing facilities subject to this rule shall be subject to the applicable test methods and requirements of 326 IAC 8-1-4 and 40 CFR 60, Appendix A*.

(b) Owners or operators may use data provided with coatings or surface preparation products formulation information such as the:

(1) container label;

(2) product data sheet; and
(3) MSDS sheet;
in order to comply with sections 4 and 9(a) of this rule. The department and U.S. EPA may require VOC content determination and verification of any coating or surface preparation product using 40 CFR 60, Appendix A, Method 24*. In the event of any inconsistency between 40 CFR 60, Appendix A, Method 24 and formulation data, 40 CFR 60, Appendix A, Method 24 shall govern.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-10-7; filed Oct 3, 1995, 3:00 p.m.: 19 IR 199; errata filed Dec 11, 1995, 3:00 p.m.: 19 IR 674; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Aug 26, 2004, 11:30 a.m.: 28 IR 58; filed Mar 27, 2009, 9:58 a.m.: 20090422-IR-326060603FRA)*

326 IAC 8-10-8 Control system operation, maintenance, and monitoring *(Repealed)*

Sec. 8. *(Repealed by Air Pollution Control Division; filed Mar 27, 2009, 9:58 a.m.: 20090422-IR-326060603FRA)*

326 IAC 8-10-9 Record keeping and reporting

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

Sec. 9. (a) Owners or operators of refinishing facilities subject to the provisions of section 4(a) of this rule shall keep records of the following:
(1) For each batch of coating mixed or refinishing job performed, the following information:
(A) Batch or job identification number or name.
(B) Date batch made or job performed.
(C) Coating category, consistent with the coating categories in section 4(a) of this rule.
(D) Coating manufacturer's name and identification number.
(E) Either the quantity used in making the mix or the mix ratio used.
(F) VOC content as supplied or packaged.
(G) Manufacturer's name and identification number of added components, such as the following:
(i) Catalysts.
(ii) Reducers.
(iii) Hardeners.
(H) Either the quantity of components added or the mix ratio used.
(2) For each surface preparation product used, the following information:
(A) Manufacturer's name and identification number.
(B) Substrate to which the product is applied.
(C) VOC content as supplied per calendar month for:
(i) number of containers used; and
(ii) volume of each container in suitable units, such as quarts, gallons, pints, other similar units, and the ratio of components added.
(3) Documents such as MSDS, or product or other data sheets for a period of three (3) years following use of the product. MSDS or product or other data sheets may be used by the U.S. EPA or the department to verify the VOC content, as supplied, provided by the coating manufacturer, distributor, or supplier, of the coatings or surface preparation products.
(b) Owners or operators of refinishing facilities subject to this rule shall maintain the following records:
(1) Records of training programs as required in section 5(d) of this rule.
(2) Initial compliance statements as required in section 6(c) of this rule.
(3) Records as required in this section.
(c) Owners or operators of refinishing facilities subject to this rule shall:
(1) maintain all records for a minimum of three (3) years; and

(2) make records available to the department and the U.S. EPA upon request.

(d) Failure to maintain records required by subsections (a) and (b) shall constitute a violation of this rule for each day records are not maintained.

(e) Owners or operators of refinishing facilities subject to this rule shall report within thirty (30) days to the department the following:

(1) Any incidence in which noncompliant coating was used.

(2) The reasons for use of the noncompliant coating.

(3) Corrective actions taken.

(Air Pollution Control Division; 326 IAC 8-10-9; filed Oct 3, 1995, 3:00 p.m.: 19 IR 200; errata filed Dec 11, 1995, 3:00 p.m.: 19 IR 674; filed Jul 14, 1998, 5:04 p.m.: 21 IR 4520; filed Mar 27, 2009, 9:58 a.m.: 20090422-IR-326060603FRA)

Rule 11. Wood Furniture Coatings

326 IAC 8-11-1 Applicability

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

Sec. 1. This rule applies to any person performing wood furniture manufacturing operations in Lake, Porter, Clark, or Floyd County meeting the following criteria:

(1) The wood furniture manufacturing operations have potential emissions of volatile organic compounds (VOCs) of twenty-five (25) tons or more per year.

(2) The wood furniture manufacturing operations occur at a source classified by any of the following Standard Industrial Classification (SIC) codes:

(A) SIC code 2434: wood cabinets (kitchen, bath and vanity).

(B) SIC code 2511: wood household furniture, including tables, beds, chairs, sofas (nonupholstered).

(C) SIC code 2512: wood household furniture (upholstered).

(D) SIC code 2517: wood television, radios, phonographs, and sewing machine cabinets.

(E) SIC code 2519: household furniture, not elsewhere classified.

(F) SIC code 2521: wood office furniture.

(G) SIC code 2531: public building and related furniture.

(H) SIC code 2541: wood office and store fixtures, partitions, shelving, and lockers.

(I) SIC code 2599: furniture and fixtures and any other coated furnishings made of solid wood, wood composition, or simulated wood material not elsewhere classified.

(Air Pollution Control Division; 326 IAC 8-11-1; filed Dec 5, 1995, 8:30 a.m.: 19 IR 1063)

326 IAC 8-11-2 Definitions

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

Sec. 2. The following definitions apply throughout this rule:

(1) "Adhesive" means any chemical substance that is applied for the purpose of bonding two (2) surfaces together other than by mechanical means.

(2) "Alternative method" means any method of sampling and analyzing for an air pollutant that is not a reference or equivalent method but that has been demonstrated to the satisfaction of the commissioner and the U.S. EPA to, in specific cases, produce results adequate for a determination of compliance.

(3) "As-applied" means the VOC and solids content of the finishing material that is actually used for coating the substrate. It includes the contribution of materials used for in-house dilution of the finishing material.

(4) "Basecoat" means a coat of colored material, usually opaque, that is applied before graining inks, glazing coats, or other opaque finishing materials and is usually topcoated for protection.

(5) "Capture device" means a hood, enclosed room, floor sweep, or other means of collecting solvent emissions or other

pollutants into a duct. The pollutant can be directed to a pollution control device such as an incinerator or carbon adsorber.
(6) "Capture efficiency" means the fraction of all organic vapors generated by a process that are directed to and captured by a control device.
(7) "Cleaning operations" means operations that use an organic solvent to remove coating materials from equipment used in wood furniture manufacturing operations.
(8) "Commissioner" means the commissioner of the Indiana department of environmental management, or the commissioner's duly authorized representative.
(9) "Continuous coater" means a finishing system that continuously applies finishing materials onto furniture parts moving along a conveyor system. Finishing materials that are not transferred to the part are recycled to the finishing material reservoir. Several types of application methods can be used with a continuous coater, including spraying, curtain coating, roll coating, dip coating, and flow coating.
(10) "Control device" means any equipment, including, but not limited to, incinerators, carbon adsorbers, and condensers, that reduces the quantity of a pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery.
(11) "Conventional air spray" means a spray coating method that atomizes the coating by mixing it with compressed air at an air pressure greater than ten (10) pounds per square inch (psi) (gauge) at the point of atomization. Airless and air assisted airless spray technologies are not conventional air spray because the coating is not atomized by mixing it with compressed air.
(12) "Day" means a period of twenty-four (24) consecutive hours beginning at midnight local time, or beginning at a time consistent with a facility's operating schedule.
(13) "Department" means the Indiana department of environmental management.
(14) "Enamel" means a coat of colored material, usually opaque, that is applied as a protective topcoat over a basecoat, primer, or a previously applied enamel coat. In some cases, another finishing material may be applied as a topcoat over the enamel.
(15) "Equipment leak" means emissions of volatile organic compounds from pumps, valves, flanges, or other equipment used to transfer or apply finishing materials or organic solvents.
(16) "Equivalent method" means any method of sampling and analyzing for an air pollutant that has been demonstrated to the satisfaction of the commissioner and the U.S. EPA to have a consistent and quantitatively known relationship to the reference method under specific conditions.
(17) "Final touch-up and repair" means the application of finishing materials after completion of the finishing operation to cover minor imperfections.
(18) "Finishing application station" means the part of a finishing operation where the finishing material is applied, such as a spray booth.
(19) "Finishing material" means a coating other than an adhesive. For the wood furniture manufacturing industry, such materials include, but are not limited to, the following:
(A) Basecoats.
(B) Stains.
(C) Washcoats.
(D) Sealers.
(E) Topcoats.
(F) Enamels.
(20) "Finishing operation" means those activities in which a finishing material is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.
(21) "Incinerator" means an enclosed combustion device that thermally oxidizes volatile organic compounds to carbon monoxide (CO) and carbon dioxide (CO_2). The term does not include devices that burn municipal or hazardous waste material.
(22) "Material safety data sheet" or "MSDS" means the documentation required by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910)* for a solvent, cleaning material, finishing material, or other material that identifies select reportable hazardous ingredients of the material, safety and health considerations, and handling procedures.
(23) "Normally closed container" means a container that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

(24) "Operating parameter value" means a minimum or maximum value established for a control device or process parameter that, if achieved by itself or in combination with one (1) or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limit.
(25) "Organic solvent" means a liquid containing volatile organic compounds that is used for dissolving or dispersing constituents in a coating, adjusting the viscosity of a coating, or cleaning equipment. When used in a coating, the organic solvent evaporates during drying and does not become a part of the dried film.
(26) "Overall control efficiency" means the efficiency of a control system, calculated as the product of the capture and control device efficiencies, expressed as a percentage.
(27) "Recycled on-site" means the reuse of an organic solvent in a process other than cleaning or washoff.
(28) "Reference method" means any method of sampling and analyzing for an air pollutant that is published in 40 CFR 60, Appendix A*.
(29) "Responsible official" has the meaning given in 326 IAC 2-7-1.
(30) "Sealer" means a finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. Special purpose finishing materials that are used in some finishing systems to optimize aesthetics are not sealers.
(31) "Stain" means any color coat having a solids content by weight of no more than eight percent (8.0%) that is applied in single or multiple coats directly to the substrate. Stains include, but are not limited to, the following:
(A) Nongrain raising stains.
(B) Equalizer stains.
(C) Sap stains.
(D) Body stains.
(E) No-wipe stains.
(F) Penetrating stains.
(G) Toners.
(32) "Storage containers" means vessels or tanks, including mix equipment, used to hold finishing or cleaning materials.
(33) "Strippable booth coating" means a coating that:
(A) is applied to a booth wall to provide a protective film to receive overspray during finishing operations;
(B) is subsequently peeled off and disposed; and
(C) by means of clauses (A) and (B), reduces or eliminates the need to use organic solvents to clean booth walls.
(34) "Substrate" means the surface onto which coatings are applied or into which coatings are impregnated.
(35) "Topcoat" means the last film-building finishing material applied in a finishing system.
(36) "Touch-up and repair" means the application of finishing materials to cover minor imperfections.
(37) "Washcoat" means a transparent special purpose coating having a solids content by weight of twelve percent (12.0%) or less. Washcoats are applied over initial stains to protect and control color and to stiffen wood fibers to aid sanding.
(38) "Washoff operations" means those operations that use an organic solvent to remove coating from a substrate.
(39) "Waterborne coating" means a coating that contains more than five percent (5.0%) water by weight in its volatile fraction.
(40) "Wood furniture manufacturing operations" means the finishing and cleaning operations conducted at a wood furniture source.
(41) "Wood furniture source" means all of the pollutant emitting activities that belong to the same wood furniture industrial grouping, are located on one (1) or more contiguous or adjacent properties, and are under the control of the same person, or persons under common control. The wood furniture industrial grouping includes the following standard industrial classification (SIC) codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, and 2599.
(42) "Working day" means a day, or any part of a day, in which a facility is engaged in manufacturing.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-11-2; filed Dec 5, 1995, 8:30 a.m.: 19 IR 1064; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Aug 26, 2004, 11:30 a.m.: 28 IR 59; errata filed Jan 2, 2013, 2:19 p.m.: 20130123-IR-326130002ACA)*

326 IAC 8-11-3 Emission limits

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

Sec. 3. (a) On and after January 1, 1996, each owner or operator of a wood furniture manufacturing operation subject to this rule shall limit VOC emissions from finishing operations by doing one (1) of the following:

(1) Using topcoats with a VOC content no greater than eight-tenths (0.8) kilogram of VOC per kilogram of solids (kg VOC/kg solids) or eight-tenths (0.8) pound of VOC per pound of solids (lb VOC/lb solids), as-applied.

(2) Using a finishing system of sealers with a VOC content no greater than one and nine-tenths (1.9) kg VOC/kg solids (one and nine-tenths (1.9) lb VOC/lb solids), as-applied and topcoats with a VOC content no greater than one and eight-tenths (1.8) kg VOC/kg solids (one and eight-tenths (1.8) lb VOC/lb solids), as-applied.

(3) Using sealers and topcoats based on the following criteria, for sources using acid-cured alkyd amino vinyl sealers or acid-cured alkyd amino conversion varnish topcoats:

(A) For wood furniture manufacturing operations using acid-cured alkyd amino vinyl sealers and acid-cured alkyd amino conversion varnish topcoats, the following:

(i) The sealer shall contain no more than two and three-tenths (2.3) kg VOC/kg solids, (two and three-tenths (2.3) lb VOC/lb solids), as-applied.

(ii) The topcoat shall contain no more than two (2.0) kg VOC/kg solids, (two (2.0) lb VOC/lb solids), as-applied.

(B) For wood furniture manufacturing operations using a sealer other than an acid-cured alkyd amino vinyl sealer and acid-cured alkyd amino conversion varnish topcoats, the following:

(i) The sealer shall contain no more than one and nine-tenths (1.9) kg VOC/kg solids (one and nine-tenths (1.9) lb VOC/lb solids), as-applied.

(ii) The topcoat shall contain no more than two (2.0) kg VOC/kg solids, (two (2.0) lb VOC/lb solids), as-applied.

(C) For wood furniture manufacturing operations using an acid-cured alkyd amino vinyl sealer and a topcoat other than an acid-cured alkyd amino conversion varnish topcoat, the following:

(i) The sealer shall contain no more than two and three-tenths (2.3) kg VOC/kg solids (two and three-tenths (2.3) lb VOC/lb solids), as-applied.

(ii) The topcoat shall contain no more than one and eight-tenths (1.8) kg VOC/kg solids (one and eight-tenths (1.8) lb VOC/lb solids), as-applied.

(4) Using finishing materials such that actual emissions are less than or equal to allowable emissions using one (1) of the following averaging equations:

Equation 1:

$$0.9\ (\Sigma_{i=1\to N}(0.8)(TC_i)) \geq \Sigma_{i=1\to N}\ ER_{TCi}\ (TC_i)$$

Equation 2:

$$0.9\ (\Sigma_{i=1\to N}(1.8)(TC_i) + (1.9)(SE_i) + (9.0)(WC_i) + (1.2)(BC_i) + (0.791)\ (ST_i)) \geq \Sigma_{i=1\to N}\ ER_{TCi}(TC_i) + ER_{SEi}(SE_i) + ER_{WCi}(WC_i) + ER_{BCi}(BC_i) + ER_{STi}(ST_i)$$

Where:

N	=	number of finishing materials participating in averaging.
TC_i	=	kilograms of solids of topcoat "i" used.
SE_i	=	kilograms of solids of sealer "i" used.
WC_i	=	kilograms of solids of washcoat "i" used.
BC_i	=	kilograms of solids of basecoat "i" used.
ST_i	=	liters of stain "i" used.
ER_{TCi}	=	VOC content of topcoat "i" in kg VOC/kg solids, as-applied.
ER_{SEi}	=	VOC content of sealer "i" in kg VOC/kg solids, as-applied.
ER_{WCi}	=	VOC content of washcoat "i" in kg VOC/kg solids, as-applied.
ER_{BCi}	=	VOC content of basecoat "i" in kg VOC/kg solids, as-applied.
ER_{STi}	=	VOC content of stain "i" in kg VOC/liter (kg/l), as-applied.

(5) Using a control system that will achieve an equivalent reduction in emissions as the requirements of subdivision (1), (2), or (3), as calculated using the compliance provisions in section 6(a)(2) of this rule, as appropriate.

(6) Using a combination of the methods presented in this subsection.

(b) On and after January 1, 1996, each owner or operator of a wood furniture manufacturing operation subject to this rule shall limit VOC emissions from cleaning operations when using a strippable booth coating. A strippable booth coating shall contain no more than eight-tenths (0.8) kg VOC/kg solids (eight-tenths (0.8) lb VOC/lb solids), as-applied. *(Air Pollution Control Division; 326 IAC 8-11-3; filed Dec 5, 1995, 8:30 a.m.: 19 IR 1066; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568)*

326 IAC 8-11-4 Work practice standards

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

Sec. 4. (a) On and after July 23, 1995, the owner or operator of a source or facility subject to this rule shall implement housekeeping practices that include the following:

(1) All equipment shall be maintained according to the manufacturer's specifications.

(2) All fresh or used solvent shall be stored in closed containers.

(3) All organic solvents used for line cleaning shall be pumped or drained into a closed container.

(4) Finishing materials and cleaning materials shall be stored in closed containers.

(b) On and after July 23, 1995, emissions from washoff operations shall be controlled by the following:

(1) Using closed tanks for washoff.

(2) Minimizing dripping by tilting or rotating the part to drain as much organic solvent as possible.

(c) On and after July 23, 1995, conventional air spray guns shall not be used for applying finishing materials except under the following circumstances:

(1) To apply finishing materials that have a VOC content no greater than one (1.0) kilogram of VOC per kilogram of solids (kg VOC/kg solids) (one (1.0) pound of VOC per pound of solid (lb VOC/lb solids)), as-applied.

(2) For final touch-up and repair under one (1) of the following circumstances:

(A) The finishing materials are applied after completion of the finishing operation.

(B) The finishing materials are applied after the stain and before any other type of finishing material is applied, and the finishing materials are applied from a container that has a volume of no more than two (2) gallons.

(3) If spray is automated, that is, the spray gun is aimed and triggered automatically, not manually.

(4) If emissions from the finishing application station are directed to a control device.

(5) The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is less than five percent (5.0%) of the total number of gallons of finishing material used during that semiannual reporting period.

(6) The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. Technical or economic infeasibility shall be demonstrated by submitting to the department a videotape, a technical report, or other documentation that supports the claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the claim of technical or economic infeasibility:

(A) The production speed is too high or the part shape is too complex for one (1) operator to coat the part, and the application station is not large enough to accommodate an additional operator.

(B) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.

(d) On and after May 1, 1996, the owner or operator of a wood furniture manufacturing operation subject to this rule shall ensure that spray guns are cleaned in an enclosed device that does the following:

(1) Minimizes solvent evaporation during cleaning, rinsing, and draining operations.

(2) Recirculates solvents during the cleaning operation so that the solvent is reused.

(3) Collects solvent so that it is available for proper disposal or recycling.

(e) On and after July 23, 1995, the owner or operator of a wood furniture manufacturing operation subject to this rule shall not use organic solvents containing more than eight percent (8.0%) by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is, the spray booth coating or other material used to cover the booth is being replaced, no more than one (1.0) gallon of organic solvent shall be used to clean the booth.

(f) On and after May 1, 1996, the owner or operator of a wood furniture manufacturing operation shall implement a written

training program for all new and existing personnel, including contract personnel, involved in the implementation of this rule and shall provide initial and thereafter annual training. Records of training programs shall be kept on-site with the continuous compliance plan (CCP) for a minimum of three (3) years. Documentation of the training program shall include, at a minimum, the following:

(1) A list of all personnel who are required to be trained by name and job description.

(2) An outline of the topics to be addressed in the initial and annual training program for each person, or group of personnel. Topics to be addressed shall include, at a minimum, the following:

(A) Applicable application techniques.

(B) Applicable cleaning procedures.

(C) Applicable equipment setup and adjustment to minimize finishing material usage and overspray.

(D) Appropriate management of clean-up wastes.

(3) Documentation of successful training completion for personnel involved in implementing this rule shall include the following:

(A) A listing of topics addressed at the initial or annual training. At a minimum, topics addressed shall include those listed in subdivision (2).

(B) A hands-on demonstration of the following:

(i) Correct coating application techniques.

(ii) Correct cleaning procedures.

(iii) Correct equipment setup and adjustment to minimize coating usage and overspray.

(iv) Appropriate management of clean-up wastes.

(g) On and after May 1, 1996, each owner or operator of a wood furniture manufacturing operation subject to this rule shall implement a written leak inspection and maintenance plan that specifies the following:

(1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply finishing materials or organic solvents.

(2) An inspection schedule.

(3) Methods for documenting the date and results of each inspection and any repairs that were made.

(4) The time frame between identifying a leak and making the repair that adheres to the following schedule:

(A) A first attempt at repair (such as tightening of packing glands) shall be made no later than five (5) working days after the leak is detected.

(B) Final repairs shall be made within fifteen (15) working days, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three (3) months.

(h) On and after May 1, 1996, an organic solvent accounting form shall be maintained to record the following:

(1) The quantity and type of organic solvent used each month for washoff and cleaning.

(2) The number of pieces washed off, and the reason for the washoff.

(3) The quantity of spent organic solvent generated from each activity, and the quantity that is recycled on-site or disposed off-site each month.

(Air Pollution Control Division; 326 IAC 8-11-4; filed Dec 5, 1995, 8:30 a.m.: 19 IR 1066; errata filed Apr 9, 1996, 2:30 p.m.: 19 IR 2045)

326 IAC 8-11-5 Continuous compliance plan

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

Sec. 5. (a) On or before May 1, 1996, each owner or operator of a source or facility subject to this rule shall submit to the department a continuous compliance plan (CCP). The CCP shall address, at a minimum, the topics addressed in section 4 of this rule.

(b) The CCP shall include a statement signed by a responsible official certifying that the wood furniture manufacturing operation is in compliance with the following:

(1) The emission limits of section 3 of this rule.

(2) The work practice standards of section 4 of this rule.

(c) A copy of the CCP shall be maintained on-site and shall be available for inspection by the department upon request.

(d) If the department determines that the CCP does not adequately address each of the topics specified in subsection (a), the

department shall require the owner or operator of the wood furniture manufacturing operation to modify the CCP. *(Air Pollution Control Division; 326 IAC 8-11-5; filed Dec 5, 1995, 8:30 a.m.: 19 IR 1068)*

326 IAC 8-11-6 Compliance procedures and monitoring requirements

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

Sec. 6. (a) The owner or operator of a wood furniture manufacturing operation subject to the emission limits in section 3 of this rule shall demonstrate compliance with the provisions of section 3 of this rule by using any of the following methods:

(1) To support that each sealer, topcoat, and strippable booth coating meets the requirements of section 3(a)(1) through 3(a)(3) or 3(b) of this rule, maintain documentation that uses 40 CFR 60, Appendix A, Method 24* data, or data from an equivalent or alternative method, to determine the VOC and solids content of the as-supplied finishing material. If solvent or other VOC is added to the finishing material before application, the wood furniture manufacturing operation shall maintain documentation showing the VOC content of the finishing material as-applied, in kilograms of VOC per kilogram of solids (kg VOC/kg solids).

(2) To comply through the use of a control system as described in section 3(a)(5) of this rule the following are required:

(A) Determine the overall control efficiency needed to demonstrate compliance using Equation 3:

$$\text{Equation 3: } O = ((V - E)/V)(100)$$

Where:
O = overall control efficiency of the capture system and control device as percentage.
V = actual VOC content of the finishing system material or, if multiple finishing materials are used, the daily weighted average VOC content of all finishing materials, as-applied to the substrate in pounds of VOC per pound of solids (lbs VOC/lb solids).
E = equivalent VOC emission limits in lbs VOC/lb solids.

(B) Document that the value of V in Equation 3 is obtained from the VOC and solids content of the as-applied finishing material.

(C) Calculate the overall efficiency of the capture system and control device, using the procedures in section 7 of this rule, and demonstrate that the value of the overall control efficiency thus estimated is equal to or greater than the value of O calculated by Equation 3.

(b) Initial compliance shall be demonstrated as follows:

(1) Owners or operators of a wood furniture manufacturing operation subject to the provisions of section 3(a)(1) through 3(a)(3) or 3(b) of this rule that are complying through the procedures established in subsection (a)(1) shall submit an initial compliance status report, as required by sections 5 and 9 of this rule, stating that compliant sealers and topcoats and strippable booth coatings are being used by the wood furniture manufacturing operations.

(2) Owners or operators of a wood furniture manufacturing operation subject to the provisions of section 3(a)(1) through 3(a)(3) or 3(b) of this rule that are complying through the procedures established in subsection (a)(1) and are applying sealers and topcoats using continuous coaters shall demonstrate initial compliance by either of the following:

(A) Submitting an initial compliance status report stating that compliant sealers and topcoats, as determined by the VOC content of the finishing material in the reservoir and the VOC content as calculated from records, are being used.

(B) Submitting an initial compliance status report stating that compliant sealers or topcoats, as determined by the VOC content of the finishing material in the reservoir, are being used and the viscosity of the finishing material in the reservoir is being monitored. The wood furniture manufacturing operation shall also provide data that demonstrates the correlation between the viscosity of the finishing material and the VOC content of the finishing material in the reservoir.

(3) Owners or operators of a wood furniture manufacturing operation using a control system or capture or control device to comply with the requirements of this rule, as allowed by section 3(a)(5) of this rule and subsection (a)(2) shall demonstrate initial compliance by doing the following:

(A) On or before January 1, 1996, conducting an initial compliance test using the procedures and test methods listed in section 7 of this rule.

(B) On or before January 1, 1996, calculating the overall control efficiency.

(C) On or before January 1, 1996, determining those operating conditions critical to determining compliance and establishing operating parameters that will ensure compliance with the standards as follows:

(i) For compliance with a thermal incinerator, minimum combustion temperature shall be the operating parameter.
(ii) For compliance with a catalytic incinerator equipped with a fixed catalyst bed, the minimum gas temperature both upstream and downstream of the catalyst bed shall be the operating parameter.
(iii) For compliance with a catalytic incinerator equipped with a fluidized catalyst bed, the minimum gas temperature upstream of the catalyst bed and the pressure drop across the catalyst bed shall be the operating parameters.
(iv) For compliance with a carbon adsorber, the operating parameters shall be either the total regeneration mass stream flow for each regeneration cycle and the carbon bed temperature after each regeneration, or the concentration level of organic compounds exiting the adsorber, unless the owner or operator requests and receives approval from the commissioner to establish other operating parameters.
(v) For compliance with a control device not listed in this rule, the owner or operator shall submit to the department a description of the control device, test data, verifying the performance of the device, and appropriate operating values that will be monitored to demonstrate continuous compliance with the standard. Compliance using this device is subject to the commissioner's approval.

(D) Owners or operators complying with this subdivision shall calculate the site-specific operating parameter value as the arithmetic average of the maximum or minimum operating parameter values, as appropriate, that demonstrate compliance with the standards, during the initial compliance test required in subsection (c)(3)(A)(iv).

(E) On or before May 1, 1996, submitting a monitoring plan that identifies the operating parameter to be monitored for the capture device and discusses why the parameter is appropriate for demonstrating ongoing compliance.

(4) Owners or operators of a wood furniture manufacturing operation subject to the continuous compliance plan (CCP) in section 5 of this rule shall submit an initial compliance status report, as required by section 9(b) of this rule, stating that the CCP has been developed and procedures have been established for implementing the provisions of the plan.

(c) Continuous compliance shall be demonstrated as follows:

(1) Owners or operators of a wood furniture manufacturing operation subject to the provisions of section 3 of this rule that are complying through the procedures established in subsection (a)(1) shall demonstrate continuous compliance by using compliant materials, maintaining records that demonstrate the finishing materials are compliant, and submitting a compliance certification with the semiannual report required by section 9(c) of this rule. The compliance certification requirements shall be as follows:

(A) State that compliant sealers and topcoats and strippable booth coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. A wood furniture manufacturing operation is in violation of the standard whenever a noncompliant material, as determined by records or by a sample of the finishing material, is used. Use of a noncompliant material is a separate violation for each day the noncompliant material is used.

(B) The compliance certification shall be signed by a responsible official.

(2) Owners or operators of a wood furniture manufacturing operation subject to the provisions of section 3 of this rule that are complying through the procedures established in subsection (a)(1) and are applying sealers and topcoats using continuous coaters shall demonstrate continuous compliance by use of the following procedures:

(A) Using compliant materials, as determined by the VOC content of the finishing material in the reservoir and the VOC content as calculated from records, and submitting a compliance certification with the semiannual report required by section 9(c) of this rule. The compliance certificate requirements shall be as follows:

(i) State that compliant sealers and topcoats have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. A wood furniture manufacturing operation is in violation of the standard whenever a noncompliant material, as determined by records or by a sample of the finishing material, is used. Use of a noncompliant material is a separate violation for each day the noncompliant material is used.
(ii) The compliance certification shall be signed by a responsible official.

(B) Using compliant materials, as determined by the VOC content of the finishing material in the reservoir, maintaining a viscosity of the finishing material in the reservoir that is no less than the viscosity of the initial finishing material by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial finishing material and retesting the material in the reservoir each time solvent is added, maintaining records of solvent additions, and submitting a

compliance certification with the semiannual report required by section 9(c) of this rule. The compliance certification requirements shall be as follows:

(i) State that compliant sealers and topcoats, as determined by the VOC content of the finishing material in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the finishing material in the reservoir has not been less than the viscosity of the initial finishing material, that is, the material that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period.

(ii) The compliance certification shall be signed by a responsible official.

(iii) A wood furniture manufacturing operation is in violation of the standard when a sample of the as-applied finishing material exceeds the applicable limit established in section 3(a)(1) through 3(a)(3) of this rule, as determined using EPA Method 24*, or an equivalent or alternative method, or the viscosity of the finishing material in the reservoir is less than the viscosity of the initial finishing material.

(3) Owners or operators of a wood furniture manufacturing operation subject to the provisions of section 3 of this rule that are complying through the use of a control system or a capture or control device shall demonstrate continuous compliance by complying with the control system operation, maintenance, and testing, and control system monitoring, record keeping, and reporting requirements as follows:

(A) For sources choosing to meet the emission limit requirements of section 3(a)(5) of this rule at any facility using a control device or devices, the following requirements apply:

(i) The control system shall be operated and maintained according to the manufacturer's recommendations but may be modified based upon the results of the initial or subsequent compliance test or upon the written request of the department.

(ii) The operating and maintenance procedures shall be followed beginning no later than January 1, 1996. A copy of the procedures shall be submitted to the department no later than May 1, 1996.

(iii) A copy of the operating and maintenance procedures shall be maintained in a convenient location at the source property and as close to the control system as possible for the reference of plant personnel and department inspectors.

(iv) The control system shall be tested according to the following schedule and under the following situations:

(AA) An initial compliance test shall be conducted on or before January 1, 1996, and every two (2) years after the date of the initial test.

(BB) A compliance test shall also be conducted whenever the owner or operator chooses to operate a control system under conditions different from those that were in place at the time of the previous compliance test.

(CC) If the owner or operator chooses to change the method of compliance with section 3 of this rule, a compliance test shall be performed within three (3) months of the change.

(DD) A compliance test shall also be performed within ninety (90) days of the receipt of a written request from the department or the U.S. EPA.

(EE) All compliance tests shall be conducted according to a protocol approved by the department at least thirty (30) days before the test. The protocol shall contain, at a minimum, the following information:

(aa) Test procedures.

(bb) Operating and control system parameters.

(cc) Type of VOC containing process material being used.

(dd) The process and control system parameters that will be monitored during the test.

(B) Control system monitoring, record keeping, and reporting requirements are as follows:

(i) Sources that choose to meet the emission limit requirements of section 3 of this rule with the use of a control device or devices shall install, calibrate, maintain, and operate, according to the manufacturer's specification, the following monitoring equipment unless an alternative monitoring procedure has been approved by the commissioner:

(AA) If a thermal incinerator is used for VOC reduction, a temperature monitoring device capable of continuously recording the temperature of the gas stream in the combustion zone of the incinerator shall be used. The temperature monitoring device shall have an accuracy of one percent (1%) of the temperature

being measured in degrees centigrade or plus or minus five-tenths degree Centigrade (0.5°C), whichever is greater.

(BB) If a catalytic incinerator is used for VOC reduction, a temperature device capable of continuously recording the temperature in the gas stream immediately before and after the catalyst bed of the incinerator shall be used. The temperature monitoring device shall have an accuracy of one percent (1%) of the temperature being measured in degrees centigrade plus or minus five-tenths degree Centigrade (0.5°C), whichever is greater.

(CC) If a carbon adsorber is used to remove and recover VOC from the gas stream, a VOC monitoring device capable of continuously recording the concentration level of VOC at the outlet of the carbon bed shall be used. The monitoring device shall be based on a detection principle such as infrared, photoionization, or thermal conductivity.

(DD) Where a VOC recovery device other than a carbon adsorber is used, the source shall provide to the department information describing the operation of the device and the process parameters that would indicate proper operation and maintenance of the control device. The department may request further information and will specify appropriate monitoring procedures and reporting requirements.

(ii) Sources subject to the requirements of this rule shall maintain the following records:

(AA) A log of the operating time of the facility, the facility's capture system, control device, and monitoring equipment.

(BB) A maintenance log for the capture system, the control device, and the monitoring equipment detailing all routine and nonroutine maintenance performed. The log shall include the dates and duration of any outages of the capture system, the control device, or the monitoring system.

(CC) The following additional records shall be maintained for facilities using thermal incinerators:

(aa) Continuous records of the temperature in the gas stream in the combustion zone of the incinerator.

(bb) Records of all three (3) hour periods of operation for which the average combustion temperature of the gas stream in the combustion zone was more than fifty degrees Fahrenheit (50°F) below the combustion zone temperature that existed during the most recent compliance test that demonstrated that the facility was in compliance.

(DD) The following additional records shall be maintained for facilities using catalytic incinerators:

(aa) Continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator.

(bb) Records of all three (3) hour periods of operation for which the average temperature measured at the process vent stream immediately before the catalyst bed is more than fifty degrees Fahrenheit (50°F) below the average temperature of the process vent stream that existed during the most recent compliance test that demonstrated that the facility was in compliance.

(cc) Records of all three (3) hour periods of operation for which the average temperature difference across the catalyst bed is less than eighty percent (80%) of the temperature difference measured during the most recent compliance test that demonstrated that the facility was in compliance.

(EE) The following additional records shall be maintained for facilities using carbon adsorbers:

(aa) Continuous records of the VOC concentration level or reading in the exhaust stream of the carbon adsorber.

(bb) Records of all three (3) hour periods of operation during which the average VOC concentration level or reading in the exhaust gas is more than twenty percent (20%) greater than the average exhaust gas concentration level or reading measured by the organic monitoring device during the most recent determination of the recovery efficiency of the carbon adsorber that demonstrated that the facility was in compliance.

(FF) Facilities using VOC recovery devices other than carbon adsorbers shall maintain the monitoring records and meet the reporting requirements specified by item (i)(DD).

(GG) Information requirements in subitems (BB), (CC)(bb), (DD)(bb), (DD)(cc), and (EE)(bb) shall be submitted to the department within thirty (30) days of occurrence. The following information shall

accompany the submittal:

(aa) The name and location of the facility.

(bb) Identification of the control system where the excess emission occurred and the facility it served.

(cc) The time, date, and duration of the exceedance.

(dd) Corrective action taken.

(4) Owners or operators of a wood furniture manufacturing operation subject to the CCP in section 5 of this rule shall demonstrate continuous compliance by following the provisions of the CCP and submitting a compliance certification with the semiannual report required by section 9(c) of this rule. The compliance certification requirements shall be as follows:

(A) State that the CCP is being followed, or shall otherwise identify the periods of noncompliance with the work practice standards. Each failure to implement an obligation under the plan during any particular day is a separate violation.

(B) The compliance certification shall be signed by a responsible official.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-11-6; filed Dec 5, 1995, 8:30 a.m.: 19 IR 1068; errata filed Apr 9, 1996, 2:30 p.m.: 19 IR 2045; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Aug 26, 2004, 11:30 a.m.: 28 IR 61)*

326 IAC 8-11-7 Test procedures

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

Sec. 7. (a) Compliance with the emission limits in section 3 of this rule shall be determined by the procedures and methods contained in 326 IAC 8-1-4 and 40 CFR 60, Appendix A*. The owner or operator of the wood furniture manufacturing operation may request approval from the department and the U.S. EPA to use an equivalent or alternative method.

(b) If it is demonstrated to the satisfaction of the department and the U.S. EPA that a finishing material does not release VOC byproducts during the cure, for example, all VOC is solvent, then batch formulation information shall be accepted. In the event of any inconsistency between a 40 CFR 60, Appendix A, Method 24* test and a facility's formulation data, that is, if the 40 CFR 60, Appendix A, Method 24* value is higher, the 40 CFR 60, Appendix A, Method 24* shall govern.

(c) Owners or operators complying with the provision of this rule through use of a control system shall demonstrate initial compliance by demonstrating the overall control efficiency determined by using procedures in 326 IAC 8-1-4 and 40 CFR 60, Appendix A*, is at least equal to the required overall control efficiency determined by using the equation in section 6(a)(2)(A) of this rule.

(d) All tests required in this section shall be conducted according to protocol developed in consultation with the department.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-11-7; filed Dec 5, 1995, 8:30 a.m.: 19 IR 1072; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1569; filed Aug 26, 2004, 11:30 a.m.: 28 IR 64)*

326 IAC 8-11-8 Record keeping requirements

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

Sec. 8. (a) The owner or operator of a wood furniture manufacturing operation subject to the emission limits in section 3 of this rule shall maintain records of the following:

(1) A list of each finishing material and strippable booth coating subject to the emission limits in section 3 of this rule.

(2) The VOC and solids content, as-applied, of each finishing material and strippable booth coating subject to the emission limits in section 3 of this rule, and copies of data sheets documenting how the as-applied values were determined.

(b) The owner or operator of a wood furniture manufacturing operation following the compliance procedures of section 6(c)(2) of this rule shall maintain the records required by subsection (a) and daily records of the following:

(1) Solvent and finishing material additions to the continuous coater reservoir.

(2) Viscosity measurements.

(c) The owner or operator of a wood furniture manufacturing operation following the compliance method of section 6(a)(2) of this rule in addition to complying with the record keeping requirement of section 6(c)(3)(B) of this rule shall maintain the following records:

(1) Copies of the calculations to support the equivalency of using a control system, as well as the data that are necessary to support the calculation of the required overall control efficiency and actual determined control efficiency.

(2) Records of the daily average value of each continuously monitored parameter for each operating day. If all recorded values for a monitored parameter are within the range established during the initial performance test, the owner or operator may record that all values were within the range rather than calculating and recording an average for that day.

(d) The owner or operator of a wood furniture manufacturing operation subject to the work practice standards in section 4 of this rule shall maintain on-site the continuous compliance plan (CCP) and all records associated with fulfilling the requirements of that plan, including, but not limited to, the following:

(1) Records demonstrating compliance with the operator training program.

(2) Records maintained in accordance with the leak inspection and maintenance plan.

(3) Records associated with the cleaning solvent accounting system.

(4) Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual reporting period.

(5) Records showing the VOC content of solvent used for cleaning booth components, except for solvent used to clean conveyors, continuous coaters and their enclosures, or metal filters.

(6) Copies of logs and other documentation developed to demonstrate that the other provisions of the CCP are followed.

(e) In addition to the records required by subsection (a), the owner or operator of a wood furniture manufacturing operation shall maintain a copy of the compliance certifications submitted in accordance with section 9(c) of this rule for each semiannual period following the compliance date.

(f) The owner or operator of a wood furniture manufacturing operation source shall maintain a copy of all other information submitted with the initial report required by section 9(b) of this rule and the semiannual reports required by section 9(c) of this rule.

(g) The owner or operator of a wood furniture manufacturing operation shall maintain all records for a minimum of three (3) years.

(h) Failure to maintain the records required by this section shall constitute a violation of the rule for each day records are not maintained. *(Air Pollution Control Division; 326 IAC 8-11-8; filed Dec 5, 1995, 8:30 a.m.: 19 IR 1072)*

326 IAC 8-11-9 Reporting requirements

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

Sec. 9. (a) The owner or operator of a wood furniture manufacturing operation using a control system to fulfill the requirements of this rule is subject to the reporting requirements of section 6(c)(3)(B)(ii)(GG) of this rule.

(b) On or before May 1, 1996, the owner or operator of a wood furniture manufacturing operation shall submit to the department the following:

(1) The continuous compliance plan required by section 5 of this rule.

(2) The initial compliance report for sources using add-on controls as required by section 6(b)(3) of this rule.

(c) The owner or operator of a wood furniture manufacturing operation subject to this rule and demonstrating compliance in accordance with section 6(a)(1) or 6(a)(2) of this rule shall submit a semiannual report covering the previous six (6) months of wood furniture manufacturing operations according to the following schedule:

(1) The first report shall be submitted thirty (30) calendar days after the end of the first six (6) month period following the compliance date.

(2) Subsequent reports shall be submitted within thirty (30) calendar days after the end of each six (6) month period following the first report.

(3) Each semiannual report shall include the information required by section 6(c) of this rule, a statement of whether the wood furniture manufacturing operation was in compliance or noncompliance, and, if the wood furniture manufacturing operation was not in compliance, the measures taken to bring the wood furniture manufacturing operation source into compliance.
(Air Pollution Control Division; 326 IAC 8-11-9; filed Dec 5, 1995, 8:30 a.m.: 19 IR 1073)

326 IAC 8-11-10 Provisions for sources electing to use emissions averaging
Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-17

Sec. 10. (a) The owner or operator of the wood furniture manufacturing operation electing to comply with the emissions standards in section 3(a)(4) of this rule shall submit to the department for approval a plan addressing the following provisions:
(1) Program goals and rationale as follows:
(A) Provide a summary of the reasons why the wood furniture manufacturing operation would like to comply with the emission limitation through the procedures established in section 3(a)(4) of this rule.
(B) Provide a summary of how averaging can be used to meet the emission limitation.
(C) Document that the additional environmental benefit requirement is being met through the use of the equations in section 3(a)(4) of this rule. These equations ensure that the wood furniture manufacturing operation achieves an additional ten percent (10%) reduction in emissions when compared to wood furniture manufacturing operations using a compliant coatings approach to meet the requirements of the rule.
(2) Program scope as follows:
(A) Include the types of finishing materials that will be included in the wood furniture manufacturing operations' averaging program.
(B) Stains, basecoats, washcoats, sealers, and topcoats may be used in the averaging program.
(C) Finishing materials that are applied using continuous coaters may only be used in an averaging program if the wood furniture manufacturing operation can determine the amount of finishing material used each day.
(3) For program baseline, each finishing material included in the averaging program shall be the lower of the actual or allowable emission rate as of the effective date of this rule.
(4) Quantification procedures as follows:
(A) Describe how emissions and changes in emissions will be quantified, including methods for quantifying usage of each finishing material. Quantification procedures for VOC content are included in section 7 of this rule.
(B) Quantification methods used shall be accurate enough to ensure that the wood furniture manufacturing operations' actual emissions are less than the allowable emissions, as calculated using Equation 1 or 2 in section 3(a)(4) of this rule, on a daily basis.
(5) Monitoring, record keeping, and reporting as follows:
(A) Provide a summary of the monitoring, record keeping, and reporting procedures that will be used to demonstrate daily compliance with the equations presented in section 3(a)(4) of this rule.
(B) Monitoring, record keeping, and reporting procedures shall be structured in such a way that the department and facility owners can determine a wood furniture manufacturing operations' compliance status for any day.
(b) Pending approval by the department and the U.S. EPA of the proposed emissions averaging plan, the owner or operator shall continue to comply with the provisions of this rule. *(Air Pollution Control Division; 326 IAC 8-11-10; filed Dec 5, 1995, 8:30 a.m.: 19 IR 1073)*

Rule 12. Shipbuilding or Ship Repair Operations in Clark, Floyd, Lake, and Porter Counties

326 IAC 8-12-1 Applicability
Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-17

Sec. 1. On and after November 1, 1995, this rule applies to shipbuilding or ship repair facilities that meet the following conditions:

(1) Are located in Clark or Floyd County and emit or have the potential to emit a total of one hundred (100) tons per year or more of volatile organic compounds (VOC) from all operations at the shipbuilding or ship repair facility.
(2) Are located in Lake or Porter County and emit or have the potential to emit a total of twenty-five (25) tons per year or more of VOC from all operations at the shipbuilding or ship repair facility.

(Air Pollution Control Division; 326 IAC 8-12-1; filed Apr 1, 1996, 10:00 a.m.: 19 IR 1750)

326 IAC 8-12-2 Exemptions

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

Sec. 2. The following marine coatings are exempt from the volatile organic compound emissions limiting requirements contained in section 4 of this rule:
(1) Any marine coating used in volumes of less than twenty-five (25) gallons in any one (1) calendar year. The total of all exempt coatings shall not exceed two hundred sixty-four (264) gallons in any one (1) calendar year.
(2) Any marine coating applied using a hand-held aerosol can.
(3) Any marine coating used in a touch-up operation.

(Air Pollution Control Division; 326 IAC 8-12-2; filed Apr 1, 1996, 10:00 a.m.: 19 IR 1751; filed Jun 15, 2001, 12:08 p.m.: 24 IR 3613)

326 IAC 8-12-3 Definitions

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

Sec. 3. The following definitions apply throughout this rule:
(1) "Add-on control system" means an air pollution control device, such as a carbon absorber or incinerator, that reduces pollution in an air stream by destruction or removal prior to discharge to the ambient air.
(2) "As applied" means the condition of a coating at the time of application to the substrate, including any thinning solvent.
(3) "As supplied" means the condition of a coating before any thinning, as sold and delivered by the coating manufacturer to the user.
(4) "Batch" means the product of an individual production run of a coating manufacturer's process. A batch is characterized by uniform composition that may vary slightly from other batches of the same product.
(5) "Capture efficiency" means the weight per unit time of VOC entering a capture system and delivered to a control device divided by the weight per unit time of VOC generated by a source of VOC, expressed as a percentage.
(6) "Capture system" means all equipment, including, but not limited to:
(A) hoods;
(B) ducts;
(C) fans;
(D) booths;
(E) ovens; and
(F) dryers;
that contains, collects, and transports an air pollutant to a control device.
(7) "Certify" means, in reference to the VOC content of a coating, to attest to the VOC content as determined through analysis by the U.S. Environmental Protection Agency (U.S. EPA) Method 24 in 40 CFR 60, Appendix A*, or through use of the forms and procedures outlined in the U.S. EPA Publication EPA 450/3-84-019, revised June 1986*. In the case of conflicting results, the U.S. EPA Method 24* shall be the reference method.
(8) "Cleaning materials" means materials with a VOC content exceeding zero (0), used to remove contaminants, such as paints and coatings, from paint guns, hoses, and containers by flushing and spraying.
(9) "Commercial vessel" means any vessel not owned and operated by the United States military or the United States Coast Guard.
(10) "Container of coating" means, for purposes of demonstrating compliance under section 5(3) and 5(4) of this rule, the

container from which the coating is applied, such as a bucket or pot.
(11) "Control device" means equipment, such as an incinerator or carbon adsorber, used to reduce, by destruction or removal, the amount of air pollutant or pollutants in an air stream prior to discharge to the ambient air.
(12) "Control system" means a combination of one (1) or more capture systems and control devices working in concert to reduce discharge of pollutants to the ambient air.
(13) "Destruction or removal efficiency" means the amount of VOC destroyed or removed by a control device expressed as a percent of the total amount of VOC entering the device.
(14) "Epoxy" means any thermoset coating formed by reaction of an epoxy resin, that is, a resin containing a reactive epoxide or oxirane function, such as the condensation product of epichlorohydrin and bisphenol A, with a curing agent, such as a polyamide or polyamine.
(15) "Exempt compounds" has the meaning of nonphotochemical reactive hydrocarbon as established in 326 IAC 1-2-48.
(16) "General use coating" means a coating that is applied over the preconstruction primer to provide long term protection for both the substrate and the underlying coating and that is not a specialty coating.
(17) "Normally closed" means a container or piping system is closed unless an operator is actively engaged in adding or removing material.
(18) "Operating day" means a twenty-four (24) hour period between midnight (12:00 a.m.) and the following midnight during which a facility is engaged in manufacturing or repair operations. It is not necessary for the facility to operate continuously for the entire twenty-four (24) hour period.
(19) "Overall emission reduction efficiency" means the weight per unit time of VOC removed or destroyed by a control system divided by the weight per unit time of VOC generated by a source, expressed as a percentage. The overall emission reduction efficiency is the product of the capture efficiency and the control device destruction or removal efficiency.
(20) "Ship" means any marine or freshwater vessel made of steel and used for military or commercial operations, including self-propelled vessels, those propelled by other craft (barges), and navigational aids (buoys). The term includes, but is not limited to, all of the following:

(A) Military and United States Coast Guard vessels.
(B) Commercial cargo and passenger (cruise) ships.
(C) Ferries.
(D) Barges.
(E) Tankers.
(F) Container ships.
(G) Patrol and pilot boats.
(H) Dredges.

As used in this rule, offshore oil and gas drilling platforms are not considered ships.
(21) "Shipbuilding or ship repair facility" means any facility that builds, repairs, repaints, converts, or alters ships.
(22) "Specialty coating" means any coating that is manufactured and used for one (1) of the following specialized applications:

(A) "Air flask coating" means any special composition coating applied to interior surfaces of high pressure breathing air flasks to provide corrosion resistance and that is certified safe for use with breathing air supplies.
(B) "Antenna coating" means any coating applied to equipment through which electromagnetic signals must pass for reception or transmission.
(C) "Antifoulant coating" means any coating that is applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms and that is registered with the U.S. EPA as a pesticide under the federal Insecticide, Fungicide, and Rodenticide Act.
(D) "Heat resistant coating" means any coating that, during normal use, must withstand a temperature of at least two hundred four (204) degrees Centigrade (four hundred (400) degrees Fahrenheit).
(E) "High-gloss coating" means any coating that achieves at least eighty-five percent (85%) reflectance on a sixty (60) degree meter when tested by ASTM Method D-523**.
(F) "High-temperature coating" means any coating that, during normal use, must withstand a temperature of at least four hundred twenty-six (426) degrees Centigrade (eight hundred (800) degrees Fahrenheit).
(G) "Inorganic zinc (high-build) coating" means a coating that contains eight (8) pounds or more elemental zinc incorporated into an inorganic silicate binder that is applied to steel to provide galvanic corrosion resistance. These

coatings are typically applied at more than two (2) mil dry film thickness.
(H) "Military exterior coating" means any exterior topcoat applied to military or United States Coast Guard vessels that are subject to specific chemical, biological, and radiological washdown requirements. These are also referred to as chemical agent resistant coatings (CARC).
(I) "Mist coating" means any low viscosity, thin film, epoxy coating applied to an inorganic zinc primer, that penetrates the porous zinc primer and allows the occluded air to escape through the paint film prior to curing, thus acting as a sealer coat and preventing formation of blisters or pinholes in the final coating system.
(J) "Navigational aids coating" means any coating applied to United States Coast Guard buoys or other United States Coast Guard waterway markers when they are recoated aboard ship at their usage site and immediately returned to the water.
(K) "Nonskid coating" means any coating applied to the horizontal surfaces of a marine vessel for the specific purpose of providing slip resistance for personnel, vehicles, or aircraft.
(L) "Nuclear coating" means any protective coating used to seal porous surfaces, such as steel or concrete, that otherwise would be subject to intrusion by radioactive materials. These coatings must be resistant to long term (service life) cumulative radiation exposure (ASTM D4082-83**), relatively easy to decontaminate (ASTM D4256-83**), and resistant to various chemicals to which the coatings are likely to be exposed (ASTM 3912-80**). General protective requirements are outlined by the Department of Energy (formerly United States Atomic Energy Commission Regulatory Guide 1.54**).
(M) "Organic zinc coating" means any coating derived from zinc dust incorporated into an organic binder that contains more than eight (8) pounds of elemental zinc per gallon of coating, as applied, and that is used for the express purpose of corrosion protection.
(N) "Pretreatment wash primer coating" means any coating that contains a minimum of five-tenths percent (0.5%) acid, by weight, and is applied only to bare metal to etch the surface and enhance adhesion of subsequent coatings.
(O) "Repair and maintenance of thermoplastic coating of commercial vessels" means any vinyl, chlorinated rubber, or bituminous resin coating that is applied over the same type of existing coating to perform the partial recoating of any in-use commercial vessel. The term does not include coal tar epoxy coatings, which are considered general use coatings.
(P) "Rubber camouflage coating" means any specially formulated epoxy coating used as a camouflage topcoat for exterior submarine hulls and sonar domes.
(Q) "Sealant coating for thermal spray aluminum" means any epoxy coating applied to thermal spray aluminum surfaces at a maximum thickness of one (1) dry mil.
(R) "Special marking coating" means any coating that is used for safety or identification applications, such as markings on flight decks and ships' numbers.
(S) "Specialty interior coating" means any coating used on interior surfaces aboard vessels according to a coating specification that requires that the coating have specified fire retardant properties and a toxicity index of less than three-hundredths (0.03), in addition to the otherwise applicable physical and performance requirements.
(T) "Tack coating" means any thin film epoxy coating applied at a maximum thickness of two (2) dry mils to prepare an epoxy coating that has dried beyond the time limit specified by the manufacturer for the application of the next coat.
(U) "Undersea weapons systems coating" means any coating applied to any component of a weapons system intended to be launched or fired from under the sea.
(V) "Waterbased weld-through (shop) preconstruction primer" means either of the following:

(i) A waterbased primer, having a VOC content of zero (0) consisting of water and liquid potassium silicate manufactured by the International Zinc, Coatings and Chemical Corporation and 330LL zinc dust manufactured by Meadowbrook Company.

(ii) An equivalent waterbased primer, having a VOC content of zero (0), that, when subject to testing under facility production conditions at inland river shipyards in Indiana, meets the same unique operational and performance criteria listed in clause (W), and characteristics and specifications of the waterbased primer in item (i).

(W) "Weld-through (shop) preconstruction primer" means a coating that:

(i) provides temporary corrosion protection for steel during inventory;

(ii) is typically applied at less than one (1) mil dry film thickness;

(iii) does not require removal prior to welding;
(iv) is temperature resistant, burn back from a weld is less than five-tenths (0.5) inch; and
(v) does not require removal before application of the film building primers including inorganic zinc high-build coatings.

(23) "Thinner" means a liquid used to reduce the viscosity of a coating that will evaporate before or during the cure of a film.

(24) "Volatile organic compound (VOC)" has the meanings set forth in 326 IAC 1-2-90.

(25) "VOC content" means the weight of VOC, per unit volume of any general use or specialty coating or cleaning material, less water and less exempt compounds.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

**These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-12-3; filed Apr 1, 1996, 10:00 a.m.: 19 IR 1751; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1569; filed Aug 26, 2004, 11:30 a.m.: 28 IR 65)*

326 IAC 8-12-4 Volatile organic compound emissions limiting requirements

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

Sec. 4. (a) The owner or operator of a shipbuilding or ship repair facility subject to this rule shall comply with the following VOC emissions limiting requirements:

(1) Provisions applicable to specialty coatings are as follows:
(A) Special marking coatings shall not exceed a VOC content of four and eight-hundredths (4.08) pounds per gallon.
(B) Heat resistant and high-gloss coatings shall not exceed a VOC content of three and fifty-hundredths (3.50) pounds per gallon.
(C) High-temperature coatings shall not exceed a VOC content of four and seventeen-hundredths (4.17) pounds per gallon.
(D) Antifoulant coatings shall not exceed a VOC content of three and thirty-three hundredths (3.33) pounds per gallon.
(E) Weld-through (shop) preconstruction primers shall comply with subdivisions (3) through (5).
(F) Any other specialty coating shall not exceed a VOC content of two and eighty-three hundredths (2.83) pounds per gallon.

(2) During application of any general use coating, VOC emissions shall be limited as follows:
(A) The VOC content of any general use coating shall not exceed two and eighty-three hundredths (2.83) pounds per gallon, as applied.
(B) From May 1 through September 30, no thinner shall be added to any general use coating.

(3) During application of any weld-through (shop) preconstruction primer, VOC emissions shall be limited throughout the year as follows:
(A) Waterbased weld-through (shop) preconstruction primer shall be used.
(B) The VOC content of weld-through (shop) preconstruction primer, as applied, shall not exceed zero (0).
(C) No cleaning material shall be used in the primer application facility.
(D) No thinner shall be added to the weld-through (shop) preconstruction primer.

(4) If the owner or operator of a shipbuilding or ship repair facility determines that a waterbased weld-through (shop) preconstruction primer can no longer be used due to an operational, performance, or availability constraint associated with the waterbased weld-through (shop) preconstruction primer, the source shall do the following:
(A) Notify the department within seven (7) days of discontinuing use of the waterbased weld-through (shop) preconstruction primer.
(B) Submit to the department for approval a plan for an alternative control within sixty (60) days of discontinuance. The alternative control shall consist of one (1) of the following:

(i) A waterbased weld-through (shop) preconstruction primer.
(ii) A control system with a minimum overall VOC emissions reduction efficiency of ninety-five percent (95%) that is subject to each of the following requirements:
(AA) The operation, maintenance, and testing requirements of 326 IAC 8-7-9.
(BB) The monitoring, record keeping, and reporting requirements of 326 IAC 8-7-10.
(C) Install the alternative control within nine (9) months of approval by the department of the plan required in clause (B).
(5) During the time between the date when the owner or operator of the shipbuilding or ship repair facility discontinues the use of the waterbased preconstruction primer and the date when the alternative control is installed, the weld-through (shop) preconstruction primer used by the owner or operator of such shipbuilding or ship repair facility shall not exceed a VOC content of five and sixty-five hundredths (5.65) pounds per gallon or the VOC content for weld-through (shop) preconstruction primer prescribed by the National Emission Standards for Shipbuilding and Ship Repair (Surface Coating), 40 CFR 63, Subpart II, whichever is lower.
(b) A source subject to this rule shall comply with the following work practice standards:
(1) Cleaning accessories, such as, but not limited to, paper, cloth, and rags that have been used for cleaning surfaces and equipment and that contain cleaning materials shall be stored in normally closed gasket sealed containers.
(2) VOC-containing solvents and coatings shall be stored in normally closed sealed containers prior to use. Spent VOC-containing solvents and coatings shall be stored in normally closed gasket sealed containers.
(3) Cleaning materials for cleaning spray equipment, including paint lines, shall not be used unless the equipment for collecting the cleaning materials and minimizing its evaporation to the atmosphere is used.
(4) All handling and transfer of VOC-containing materials to and from containers, tanks, vats, drums, and piping systems shall be conducted in a manner that minimizes drips and spills, and any drips and spills shall be cleaned up promptly.
(5) All containers, tanks, vats, drums, and piping systems shall be free of cracks, holes, and other defects and must be closed unless materials are being added to or removed from them.
(c) The owner or operator of sources subject to this rule shall comply with the following training requirements:
(1) The owner or operator shall develop a written worker training program. The training program shall be included in the compliance plan required to be submitted to the department for review by section 7(b)(1) of this rule.
(2) All workers, including contractors, shall have completed a training program if they engage in any of the activities listed in subdivision (3).
(3) The training program may include training provided by the manufacturer or supplier of coatings, cleaning materials, or the application equipment thereof, and shall include written procedures, hands-on demonstration, as appropriate, and certification by the trainer of the trainee's ability to perform the task, on the following activities:
(A) Identification of appropriate coatings or cleaning materials.
(B) Preparation of coatings or cleaning materials according to coating or cleaning material manufacturer, distributor, or owner or operator's recommendations.
(C) Application of coatings or cleaning materials, or organic solvents using techniques that minimize their usage.
(D) Procedures to clean spray guns to minimize evaporation of organic solvents to the atmosphere.
(E) Work practice standards established in subsection (b).
(F) Procedures to gather, record, monitor, and report data in accordance with section 7 of this rule.
(4) The owner or operator shall provide annual refresher training prior to May 1 to any worker performing one (1) or more of the activities listed in subdivision (3). Such training shall be appropriate to the job responsibilities of the worker.
(5) Any worker may perform one (1) or more activities listed in subdivision (3), for not more than one hundred eighty (180) days, notwithstanding the requirement of subdivision (2), provided:
(A) such untrained worker works under the supervision of a worker who meets the training requirements of subdivision (2); and
(B) the owner or operator keeps records of:
(i) the date the worker was assigned to the activity;
(ii) the date training was completed; and
(iii) the name of the worker providing the supervision.
(6) The owner or operator shall keep records of the training program. The records shall consist of the following:

(A) The date training was completed.

(B) A list of workers by name and worker activities listed in subdivision (3) in which each worker has been trained.

(C) A statement signed by the person providing the training certifying that the worker completed training and is proficient in the activities listed in subdivision (3) in which the worker will be engaged.

(Air Pollution Control Division; 326 IAC 8-12-4; filed Apr 1, 1996, 10:00 a.m.: 19 IR 1753; filed Jun 15, 2001, 12:08 p.m.: 24 IR 3613; filed May 22, 2015, 3:14 p.m.: 20150617-IR-326140441FRA)

326 IAC 8-12-5 Compliance requirements

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

Sec. 5. (a) Sources subject to the requirements of this rule and the requirements of 326 IAC 20-26 shall comply with the requirements of 40 CFR 63.784* and 40 CFR 63.785*, as incorporated by reference in 326 IAC 20-26, in lieu of this section.

(b) Compliance requirements applicable to surface coating operations at a source subject to this rule are as follows:

(1) Compliance with the VOC emissions limiting requirements of section 4(a) of this rule shall be achieved on as applied basis for each operating day for the following products:

(A) Coatings.

(B) Cleaning materials.

(2) Compliance with the work practice standards of section 4(b) of this rule shall be achieved each operating day.

(3) Compliance with the VOC emissions limiting requirements of section 4(a) of this rule shall be demonstrated using 40 CFR 60, Appendix A, Method 24*. However, in lieu of testing each container of coating for VOC content, the alternative procedures that follow may be used:

(A) If a coating as supplied by the manufacturer is applied to the substrate, in lieu of testing each container of coating using 40 CFR 60, Appendix A, Method 24*, a source subject to this rule may use the following alternative compliance procedure:

(i) Use a certificate issued by the manufacturer certifying the VOC content for each batch of coating.

(ii) Notify the coating applicators that they shall not add any thinner to the coatings.

(iii) Specify the procedure to be used to notify the coating applicators in the compliance plan required to be submitted in section 7(b)(1) of this rule.

(B) From May 1 through September 30, thinner may not be added to any general use coating. If a thinner is added to a coating before its application to the substrate, in lieu of testing the coating as applied using 40 CFR 60, Appendix A, Method 24*, a source subject to this rule may use the following alternative compliance procedure:

(i) Use a certification from the coating manufacturer for each batch of that coating certifying its VOC content as supplied.

(ii) Record the volume of coating used.

(iii) Record the volume of thinner used.

(iv) Record the VOC content of thinner used.

(v) Type of coating.

(4) In the compliance plan required to be submitted to the department by section 7(b)(1) of this rule, the source shall specify the compliance procedure or procedures allowed under subdivision (3) that it intends to use to demonstrate compliance with the VOC emissions limiting requirements of section 4(a) of this rule. If the source desires to use a compliance procedure other than one (1) of the three (3) described in subdivision (3), the source shall include in its compliance plan an application for approval by the department and the U.S. EPA of the proposed compliance procedure, subject to the following conditions:

(A) The application shall include a demonstration that there is a definite and consistent relationship between 40 CFR 60, Appendix A, Method 24* results and the alternative procedure results.

(B) The source shall ensure that the coatings it uses are supplied by coating manufacturers that use the procedures in "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paints, Ink, and Other Coatings" (revised June 1986), U.S. EPA 450/3-84-019** to certify the VOC content of coatings and thinners.

(C) The source may use the alternative procedure during the time the application is being reviewed by the department and the U.S. EPA.

(5) The department may test or have tested any coating for VOC content using 40 CFR 60, Appendix A, Method 24*. If there is a discrepancy between the results of testing for VOC content, Method 24 test results shall take precedence.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

**These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-12-5; filed Apr 1, 1996, 10:00 a.m.: 19 IR 1755; filed Jun 15, 2001, 12:08 p.m.: 24 IR 3615; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1569; filed Aug 26, 2004, 11:30 a.m.: 28 IR 67)*

326 IAC 8-12-6 Test methods and procedures

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

Sec. 6. (a) Sources subject to the requirements of this rule and the requirements of 326 IAC 20-26 shall comply with the requirements of 40 CFR 63.786*, as incorporated by reference in 326 IAC 20-26, in lieu of this section.

(b) The methods and procedures set forth in 326 IAC 8-1-4, U.S. EPA Method 24* of 40 CFR 60, Appendix A, and section 5 of this rule shall be used to ensure compliance with the VOC emissions limiting requirements of section 4(a) of this rule.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-12-6; filed Apr 1, 1996, 10:00 a.m.: 19 IR 1756; filed Jun 15, 2001, 12:08 p.m.: 24 IR 3616; errata filed Dec 12, 2002, 3:30 p.m.: 26 IR 1565; filed Aug 26, 2004, 11:30 a.m.: 28 IR 68)*

326 IAC 8-12-7 Record keeping, notification, and reporting requirements

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

Sec. 7. (a) Sources subject to the requirements of this rule and the requirements of 326 IAC 20-26 shall comply with the requirements of 40 CFR 63.787* and 40 CFR 63.788*, as incorporated by reference in 326 IAC 20-26, in lieu of this section.

(b) The following records shall be maintained at the facility for a minimum of three (3) years:

(1) Certification of the annual training program.

(2) The following records for each working day of the surface coating operation:

(A) The following for each coating:

(i) Trade name, manufacturer, coating category consistent with the definitions in section 3 of this rule, and applicable VOC content consistent with section 4 of this rule.

(ii) VOC content as supplied.

(iii) Certification from the coating manufacturer, MSDS, or product data sheet for each coating used.

(iv) Volume of coating used.

(v) Thinner added, if any, including the following:

(AA) Description.

(BB) VOC content.

(CC) Volume added.

(B) The following for each solvent:

(i) Description.

(ii) Description of use, including the following:

(AA) Thinning.

(BB) Cleanup.

(iii) VOC content.

(iv) Volume used for thinning.
(v) Volume used for cleanup.
(3) Copy of the compliance plan required by subsection (b)(1).
(4) Copy of the quarterly compliance report required by subsection (b)(2).
(c) Notification and reporting requirements are as follows:
(1) On or before January 1, 1996, each source subject to this rule shall submit to the department for review a compliance plan. The department may require revisions to the compliance plan. A source may revise its compliance plan upon notifying the department in writing that a change to the compliance plan is necessary because there has been a major change in its manufacturing practices. The compliance plan shall include and address the following:
(A) Compliance procedure and an application for using alternative demonstration procedure if the owner or operator of the shipbuilding and ship repair facility intends to use an alternative procedure to demonstrate compliance as specified in section 5 of this rule.
(B) Training program as specified in section 4(c) of this rule.
(C) Procedures to comply with record keeping, including data gathering requirements specified in subsection (a)(2).
(D) Procedures to comply with work practice standards of section 4(b) of this rule.
(2) Beginning May 1, 1996, and within sixty (60) days after the end of each quarter, each source subject to this rule shall submit a quarterly compliance report. Reporting frequency may be changed to semiannually after May 1, 1997, if a source complying with the requirements of this rule requests such change in writing and the department determines that semiannual reporting is adequate to assure compliance with this rule. The department shall examine the source's compliance records in considering such request. The quarterly report shall contain the following information:
(A) Compliance status as of the last day of the quarter for the following:
(i) Work practice standards.
(ii) Training program.
(iii) Emission standards.
(iv) Compliance procedures.
(v) Provisions of the compliance plan.
(B) Date, duration, nature, and cause of each instance of noncompliance with the requirements listed in clause (A) and the corrective action taken.
(C) An explanation for each instance of noncompliance with the requirements listed in clause (A), including whether the noncompliance is exempt due to a state or federal provision. If there is a state or federal provision providing an exemption for the noncompliance, the basis of the exemption must be cited.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Management, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-12-7; filed Apr 1, 1996, 10:00 a.m.: 19 IR 1756; filed Jun 15, 2001, 12:08 p.m.: 24 IR 3616; filed Aug 26, 2004, 11:30 a.m.: 28 IR 68)*

Rule 13. Sinter Plants

326 IAC 8-13-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. This rule applies to sintering processes that exist on the effective date of this rule at integrated iron and steel manufacturing sources in Lake and Porter Counties. *(Air Pollution Control Division; 326 IAC 8-13-1; filed Jun 24, 1998, 5:46 p.m.: 21 IR 4195)*

326 IAC 8-13-2 Definitions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. The following definitions apply throughout this rule:

(1) "Control device" means any equipment that reduces the quantity of a pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery. Control devices include, but are not limited to, the following:

(A) Incinerators.

(B) Carbon adsorbers.

(2) "Control measure" means a method to reduce volatile organic compound (VOC) emissions to the atmosphere. The control measure may consist of, but is not limited to, the following:

(A) A control device.

(B) A process material control, such as sinter burden oil and grease content control.

(C) A process change, such as recirculation of windbox exhaust gases.

(3) "Equivalent method" means any method of sampling and analyzing for an air pollutant or any characteristic, such as oil and grease content of the sinter burden, that has been demonstrated to the satisfaction of the commissioner to have a consistent and quantitatively known relationship to the reference method, under specified conditions, for example, approved composite oil and grease samples.

(4) "Exceedance" means the value of the operating parameter or VOC emissions outside the stated boundaries.

(5) "Integrated iron and steel manufacturing sources" means sources that have primary raw material and ironmaking facilities (blast furnaces), steelmaking facilities (basic oxygen furnaces), and finishing mills. Integrated iron and steel manufacturing sources do not include the following:

(A) Alloy and specialty steel facilities that produce alloys and specialty steel but do not include ironmaking facilities.

(B) Nonintegrated sources that operate melting and casting facilities and fabrication mills.

(6) "Operating day" means a twenty-four (24) hour period between midnight and the following midnight during which the sinter is produced. It is not necessary for the facility to operate continuously for the entire twenty-four (24) hour period. In the event sinter was not produced for twenty-four (24) consecutive hours, a fraction of an operating day is determined by dividing the actual hours of operation by twenty-four (24) hours.

(7) "Operating hour" means any sixty (60) minute period beginning at the start of an hour, for example, 1 a.m. or 2 a.m. through 12 a.m., during which sinter is produced.

(8) "Reference method" means any method of sampling and analyzing for an air pollutant or any characteristic, such as oil and grease content of the sinter burden, as specified in this rule.

(9) "Sinter" means a coherent mass formed by heating raw materials, such as, but not limited to, the following:

(A) Iron ore.

(B) Coke breeze.

(C) Limestone.

(D) Scale.

(E) Blast furnace flue dust.

(10) "Sinter burden" means the mixture of raw materials prior to use in the sintering process.

(11) "Sinter strand" means a belt that conveys the sinter burden through the sintering process. The burden is conveyed on the strand through a furnace that ignites the fuel in the burden and is then heated under an induced draft to form sinter.

(12) "Sintering process" means the process of igniting fuel in sinter burden and then heating it under an induced draft to form an agglomerate.

(13) "Windboxes" means compartments under the sinter strand that provide for a controlled distribution of combustion air as it is drawn through the sinter bed.

(Air Pollution Control Division; 326 IAC 8-13-2; filed Jun 24, 1998, 5:46 p.m.: 21 IR 4195; errata filed Feb 9, 1999, 4:04 p.m.: 22 IR 2006)

326 IAC 8-13-3 Emission limit

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

Affected: IC 13-15; IC 13-17

Sec. 3. (a) On and after January 1, 1999, sinter plant windbox exhaust gas VOC emissions shall be limited as provided in subsections (b) and (c).

(b) This subsection establishes three (3) VOC emission limits for the period from May 1 through September 30 for sinter plant windbox exhaust gas VOC emissions, a seasonal cap, a maximum daily limit, and a lower daily limit for days on which an exceedance of the national ambient air quality standard for ozone is predicted to be likely. The emission limits are based on a VOC emission rate equal to twenty-five hundredths (0.25) lb/ton sinter produced and a daily sinter production rate. The VOC emissions on any day are limited to an amount based on maximum actual daily sinter production. However, on a day expected to be a high ozone day, the VOC emissions shall be limited to an amount based on average daily sinter production. Sinter plant windbox exhaust gas VOC emissions shall not exceed the VOC emission limits calculated as follows:

(1) During the period May 1 through September 30, the total VOC emissions (the seasonal cap) shall not exceed the VOC emission limit calculated as follows:

VOC (lbs) = 0.25 lb/ton of sinter produced × average daily sinter production rate (tons/day) × 153 days

(2) Except as provided in subdivision (3), on any day from May 1 through September 30, the sinter plant windbox exhaust VOC emissions (the maximum daily limit) shall not exceed the VOC emission limit calculated as follows:

VOC (lbs/day) = 0.25 lb/ton of sinter produced × maximum actual daily sinter production rate (tons/day)

(3) On any day from May 1 through September 30 when ozone levels in Lake, Porter, or LaPorte County are expected to exceed the national ambient air quality standard for ozone (either one (1) hour or eight (8) hour), the sinter plant windbox exhaust VOC emissions (the lower daily limit) shall not exceed the VOC emission limit calculated as follows:

VOC (lbs/day) = 0.25 lb/ton of sinter produced × average daily sinter production rate (tons/day)

A high ozone level day shall be predicted by the owner or operator of a source in accordance with a high ozone day action plan developed by the source and submitted to the department as part of the report required by section 4(b) of this rule. Where sinter production rate shall be calculated as follows:

(A) Maximum actual daily sinter production equals the maximum actual sinter produced on an operating day during the period from 1990 to 1997.

(B) Average daily sinter production equals either of the following:

(i) The annual average sinter production in tons divided by the annual average number of operating days in the period 1990 through 1994.

(ii) In the event sinter production in 1990 through 1994 is not representative of the current sinter production due factors, such as, but not limited to, routine repair, maintenance, or replacement, a source may elect to use the average actual sinter production in tons per day during a calendar year up to the year 1997, which represents current sinter production. The averaging period must include and be not less than the ozone season (May 1 through September 30).

(c) From October 1 through April 30, sinter plant windbox exhaust gas VOC emissions shall be limited to thirty-six hundredths (0.36) pound per ton of sinter produced. The limit shall be complied with on an operating day average basis. *(Air Pollution Control Division; 326 IAC 8-13-3; filed Jun 24, 1998, 5:46 p.m.: 21 IR 4196; errata filed Feb 9, 1999, 4:04 p.m.: 22 IR 2006)*

326 IAC 8-13-4 Compliance requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 4. (a) On and after January 1, 1999, the owner or operator of a sintering process shall comply with the following:

(1) The applicable emission limits in section 3 of this rule.

(2) The control measure operation, maintenance, and monitoring requirements of the applicable subsection in section 6 of this rule.

(3) The record keeping and reporting requirements of section 7 or 8 of this rule, as applicable.

(b) By November 1, 1998, the owner or operator of a sintering process shall submit the following:

(1) A report detailing how the limits in section 3(b) and 3(c) of this rule will be met. The report shall contain the following:

(A) A list of the control measures selected to comply with section 3 of this rule. The list required by this clause shall contain, at a minimum, a control measure to reduce mill scale oil and grease content before its removal from scale pits for use at a sinter plant covered by this rule. The measure may consist of any of the following:

(i) Skimming oil and grease prior to removing the mill scale.

(ii) Removal of mill scale from the scale pit using a vacuum device.

(iii) A procedure that will prevent oil and grease from being entrained in the mill scale when it is being removed from the scale pits.

(B) The operating parameter that best describes the VOC control effectiveness of the selected control measure considering the following:

(i) If a control device is the selected control measure, the operating parameter shall meet the requirements of 326 IAC 8-10-8(b).

(ii) If sinter burden oil and grease content control is the selected control measure and the owner or operator chooses sinter burden oil and grease content as the operating parameter, the value of the operating parameter shall be determined using the procedure in section 5(d) of this rule or an alternative procedure in section 5(e) of this rule. The report shall include the alternative procedure.

(iii) If an alternative control measure is selected, the owner or operator shall include in the report the procedures to be followed to comply with the control measure operation, maintenance, and monitoring requirements of section 6 of this rule and the record keeping requirements of section 7 of this rule.

(iv) For the control measure in clause (A), the owner or operator shall include in the report a description of the mill scale removal equipment, procedure, expected removal efficiency, and procedures to maintain the efficiency at the expected value.

(C) The calculated VOC emission rates in accordance with section 3(b) of this rule and the data, such as the amount of sinter produced and the number of operating days used to estimate the same.

(2) If oil and grease content control is the selected control measure, then the owner or operator shall specify the alternative sampling frequency chosen in accordance with section 6(c)(3) of this rule.

(3) The procedure the source will use during the compliance testing to ensure that the operating parameter is consistent with VOC emissions.

(4) A statement of intent to use a VOC continuous emissions monitoring system (CEMS) according to section 8 of this rule, if this option is selected.

(5) A corrective action plan that will be implemented in the event of an exceedance. The corrective action plan shall contain control measures, such as, but not limited to, reducing sinter production, changing sinter burden characteristics, or modifying sintering process equipment operations.

(6) The calculated VOC emission rates in accordance with section 3(b) of this rule and data, such as the number of operating days and amount of sinter used to estimate the same, including the procedures to measure sinter produced.

(7) The procedure that the owner or operator shall use to determine the amount of sinter produced for the initial compliance demonstrations, subsequent compliance demonstrations, and other applicable requirements of this rule. If the procedure is different from that used to determine the emission rates in section 3(b) of this rule, provide the quantitative relationship between the results from the two (2) procedures.

(8) A high ozone day action plan that contains the following:

(A) Operating procedures, such as, but not limited to, limiting sinter production, controlling sinter burden characteristics, or changing sinter machine operations, to limit VOC emissions at or below the level required in section 3(b) of this rule.

(B) Procedures to predict high ozone days. The procedures may consist of monitoring for indicators, such as, but not limited to, ambient temperature, ambient ozone concentrations in Lake, Porter, or LaPorte County, and air stagnation forecasts.

The department shall review and approve a source's high ozone day action plan on or before May 1, 1999. The department shall provide a thirty (30) day review and public comment period prior to issuing a final approval of the high ozone day action plan. The plan shall be included in the source's operating permit.

(c) The department shall review the submission required by subsection (b) with the exception of subsection (b)(8) and within fifteen (15) days of receiving the submission may request the owner or operator in writing to make changes to the submission. The source shall respond in writing within thirty (30) days of the request. In its response, the source shall either make the changes requested by the department or provide alternatives for changes requested by the department.

(d) No later than sixty (60) days after the compliance dates in section 3 of this rule, a demonstration of initial compliance with the emission limits in section 3 of this rule shall be submitted. Demonstration of compliance with the emission rates in section 3 of this rule may be performed during the same testing and compliance demonstration. The initial compliance demonstration shall be performed as follows:

(1) Demonstrate compliance with the emission rates in section 3(b) and 3(c) of this rule in pounds per ton sinter produced.
(2) Follow the source sampling protocols in 326 IAC 3-6-2.
(3) Follow the emission testing procedures in 326 IAC 3-6-3 and section 5 of this rule.
(4) Submit to the department the results of the initial compliance test according to the reporting procedures in 326 IAC 3-6-4. In addition, include the following information in the test report:
(A) Sinter burden oil and grease content analysis procedure, if there were any deviations from the procedures in the report submitted in subsection (b)(1), for example, but not limited to, sampling frequency.
(B) Results of each sinter burden oil and grease content analysis.
(C) Sinter burden throughput in tons per hour and composition for each test run.
(D) Sinter production in tons per hour for each test run.
(E) The operating parameter value that corresponds to the emission rates expressed in pounds of VOC per ton of sinter produced and an explanation or basis if the operating parameter calculated according to Equation 4 in section 5(d)(10) of this rule is adjusted to correspond to the VOC emission rates in section 3 of this rule.
(F) Emission rates in pounds per ton sinter produced.
(G) Sinter burden oil and grease content value in pounds equivalent to one-hundredth (0.01) pound of VOC/ton sinter produced that will be used to determine compliance with section 6 of this rule.

(e) On and after January 1, 1999, the owner or operator shall ensure that the value of the operating parameter meets the requirements of the applicable subdivision of section 6(c) of this rule.

(f) An owner or operator may satisfy the requirements of subsection (d) by submitting a demonstration that was performed before the compliance date in section 3(a) of this rule if the owner or operator met the reporting requirements of subsection (b), the prior notification and submission schedules of 326 IAC 3-6-2, and the demonstration otherwise satisfies the requirements of subsection (d).

(g) An owner or operator of a sintering operation who elects to change the control measure after the most recent compliance test shall do the following:
(1) Notify the department at least twenty-one (21) days before implementing the change. Notification shall include the following:
(A) A description of the control measure and the appropriate operating parameter.
(B) The date the change will be implemented.
(C) The plan to comply with this rule with the changed control measure.
(2) Perform a compliance test within sixty (60) days of implementing the change according to procedures in section 8 of this rule or according to the procedures that follow:
(A) Follow the source sampling procedures in 326 IAC 3-6-2.
(B) Follow the applicable test procedures in section 5 of this rule.
(C) Calculate the operating parameter value that demonstrates compliance with the emission limit during the compliance test.
(D) Submit the compliance test results according to procedures in subsection (d)(4).
(3) Maintain the value of the operating parameter within the specified boundaries after the date that the compliance test is complete.

(h) An exceedance of the applicable operating parameter value constitutes prima facie evidence of a violation of the applicable mass emission limit. Evidence, including stack test data, may be presented to the department to refute the allegation of the violation of the applicable mass emission limit. Upon a written notification from the department of an exceedance, the source may perform a compliance test according to procedures in section 5 of this rule and petition the commissioner to revise the operating parameter value.

(i) An owner or operator who elects to change compliance demonstration procedures, for example, from sinter burden oil and grease content monitoring to a CEMS, shall notify the department at least thirty (30) days prior to making the change. *(Air Pollution Control Division; 326 IAC 8-13-4; filed Jun 24, 1998, 5:46 p.m.: 21 IR 4197; errata filed Feb 9, 1999, 4:04 p.m.: 22 IR 2006)*

326 IAC 8-13-5 Test procedures

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. (a) Windbox gas VOC emission tests are required under the following conditions:

(1) An initial test as required in section 4(d) or 8 of this rule.

(2) When there is a change in the control measure since the most recent compliance test.

(3) When required by the department or the U.S. EPA.

(b) Compliance with the emission limits in section 3 of this rule shall be demonstrated according to testing procedures in 326 IAC 3-5 or 326 IAC 3-6-3 and 326 IAC 3-6-5, or Method 25A "Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer", 40 CFR 60, Appendix A*, as applicable.

(c) Owners or operators of a sintering process in which the windbox gas exhausts into the atmosphere through more than one (1) stack shall test each stack for compliance with the emission limit in section 3 of this rule unless there is a demonstration that satisfies the commissioner that sampling a lesser number of stacks yields results comparable to those that will be obtained by testing all stacks. Owners or operators of a sintering process who intend to submit such demonstration shall include the demonstration in the protocol required in section 4 of this rule.

(d) If sinter burden oil and grease content control is the selected control measure and the owner or operator chooses to monitor the sinter burden oil and grease content, the operating parameter shall be determined as follows:

(1) Collect the sinter burden sample at a location such that the sample is representative of the sinter burden before it goes through the sintering process.

(2) Collect a sinter burden grab sample for analysis at least every fifteen (15) minutes for the duration of the test. The first sample shall be taken at the beginning of the test run. Each sample shall weigh at least one (1) pound.

(3) Analyze each sample for oil and grease content using procedures in Method 9071A "Oil and Grease Extraction Method for Sludge Samples" of U.S. EPA publication "Test Methods for Evaluating Solid Wastes", SW-846, Volume 1C, Chapter 5, revised September 1994*; n-hexane shall be used instead of trichlorotrifluorethane as an extraction reagent.

(4) Estimate oil and grease content as percent by weight of the sinter burden to three (3) places after the decimal.

(5) Analyze oil and grease data outliers using Chauvenet's Criterion at Page I-7 in "Guide to Statistical Problem Solving" prepared for U.S. EPA, Research Triangle Park, North Carolina, under contract number 68-02-1505, June 1975* or an alternative acceptable statistical procedure. Remove outliers that result from any cause other than the normal characteristics of the sinter burden.

(6) Repeat the procedures in subdivisions (1) through (4) if the number of representative data is less than ten (10).

(7) Using representative oil and grease content data from subdivisions (4) through (6), determine the oil content average and standard deviation as follows:

Equation 1:

$$\text{Average oil and grease content, percent (\%) by weight} = \Sigma x/n$$

Equation 2:

$$s = \sqrt{((\Sigma x^2 - ((\Sigma x)^2/n))/(n - 1))}$$

Where: n = Number of samples.

s = Standard deviation of oil and grease content percent by weight.

x = Percent oil and grease in each sample.

(8) Calculate oil and grease content as percent by weight sinter burden as follows:

Equation 3:

Oil and grease content (percent (%) by weight) = average oil content (%) + one (1) standard deviation (%)

(9) Calculate average sinter burden throughput during the test in tons.

(10) Calculate oil and grease content as an operating parameter in pounds as follows:

Equation 4:

Operating parameter oil content (pounds) = (oil and grease content (percent (%) by weight from Equation 3) × $^1/_{100}$) × average sinter burden throughput (tons) × 2,000 pounds/ton

(11) If the operating parameter in Equation 4 corresponds to a VOC emission rate in pounds VOC per ton sinter produced that is less than the VOC emission rates in pounds VOC per ton sinter produced in section 3 of this rule, calculate the operating parameter to represent the appropriate VOC emission rates in pounds VOC per ton sinter produced in section 3 of this rule and explain the basis as provided in section 4(d)(4)(E) of this rule.

(e) An owner or operator may request approval of an alternative oil and grease sampling and analysis procedure by submitting

to the department a written request. The request shall include all of the following:

(1) Sampling procedure that includes all of the following:

(A) A list of raw materials that will be sampled.

(B) Sampling equipment to be used.

(C) Sampling location.

(D) Number of samples to be collected.

(E) Sampling frequency.

(F) Amount of sample to be collected.

(2) Analytical procedure that includes all of the following:

(A) Sample preparation procedure.

(B) Analytical equipment.

(C) Analysis procedure.

(D) Reagents to be used.

(E) Accuracy and precision of measurements.

(F) Procedure to identify unrepresentative oil and grease content values.

(G) Expected variation in pounds in the oil and grease content value as determined by subsection (d)(10).

*These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-13-5; filed Jun 24, 1998, 5:46 p.m.: 21 IR 4199; errata filed Feb 9, 1999, 4:04 p.m.: 22 IR 2006; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1569; filed Aug 26, 2004, 11:30 a.m.: 28 IR 69)*

326 IAC 8-13-6 Control measure operation, maintenance, and monitoring

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

Affected: IC 13-15; IC 13-17

Sec. 6. (a) Owners or operators of a sintering process that meet the emission limits in section 3 of this rule by using a control device shall comply with the operation, maintenance, and monitoring requirements of 326 IAC 8-10-8.

(b) Owners or operators of a sintering process that meet the emission limits in section 3 of this rule by using a control device shall maintain the control device operating parameter values within the boundaries specified in 326 IAC 8-10-9(b)(3), 326 IAC 8-10-9(b)(4), 326 IAC 8-10-9(b)(5), or 326 IAC 8-10-9(b)(6).

(c) Owners or operators of a sintering process that meet the emission limits in section 3 of this rule by controlling the sinter burden oil and grease content shall, after the date that the initial or the subsequent compliance test is completed, comply with the following requirements:

(1) Following procedures in section 5 of this rule, analyze at least one (1) sample during each of the following operating periods of an operating day:

(A) 00:00 - 08:00.

(B) 08:00 - 16:00.

(C) 16:00 - 24:00.

(2) The owner or operator may composite a number of grab samples taken within each operating period. If sinter is produced for less than a total of sixty (60) minutes in any operating period, the owner or operator is not required to sample for oil and grease content during that operating period.

(3) Compliance with the oil and grease content requirements shall be determined in one (1) of the following ways:

(A) If the owner or operator takes one (1) sample per operating period, the sample may be a composite of multiple samples taken within the operating period. The three (3) values shall be averaged over the day, and:

(i) the daily average value may exceed the operating parameter on not more than five (5) days per month by an oil amount not to exceed one-hundredth (0.01) pound of VOC per ton of sinter produced as determined by the initial or subsequent compliance test;

(ii) the daily average of the samples taken the day after the day in which the excursion occurred must be in compliance with the operating parameter;

(iii) an excursion greater than the specified percentage in excess of the operating parameter shall be considered a violation of this rule; and

(iv) more than five (5) excursions in a single month shall be considered a violation of this rule.

(B) If the owner or operator analyzes four (4) or more samples per operating period and determines the daily average oil and grease content values, then:

(i) the daily average oil and grease content shall not exceed the operating parameter determined in section 5(d)(10) or 5(d)(11) of this rule;

(ii) an exceedance of the operating parameter is a violation of the rule; and

(iii) no excursions are allowed since the greater number of samples should decrease the sampling variation.

(d) Owners or operators of a sintering process that meet the emission limits in section 3 of this rule by means other than those specified in subsection (b) or (c) shall, in the notifications required by section 4 of this rule, describe the following:

(1) Operation and maintenance of the control measure.

(2) The process parameter or parameters and the value and range of the process parameter or parameters that indicate compliance with the emission limit.

(3) The operating records that will be maintained.

(Air Pollution Control Division; 326 IAC 8-13-6; filed Jun 24, 1998, 5:46 p.m.: 21 IR 4200; errata filed Feb 9, 1999, 4:04 p.m.: 22 IR 2006; errata, 22 IR 2007)

326 IAC 8-13-7 Record keeping and reporting

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 7. (a) Owners or operators of a sintering process that meet the emission limits in section 3 of this rule by using a control device shall comply with the record keeping and reporting requirements in 326 IAC 8-10-9(b).

(b) Owners or operators of a sintering process that meet the emission limits in section 3 of this rule by controlling the sinter burden oil and grease content shall do the following:

(1) Maintain the following records:

(A) Applicable operating parameter and actual operating parameter values.

(B) Materials sampled.

(C) Sampling date and time.

(D) Oil content values.

(E) For the period May 1 through September 30, maintain the following records:

(i) The VOC emitted each day.

(ii) The cumulative total of VOC emitted.

(iii) The sinter produced each operating day.

(2) In the event that the operating parameter exceeds the applicable value, submit to the department within thirty (30) days of the exceedance the following information:

(A) The name and location of the source.

(B) The information required in subdivision (1)(A) through (1)(D).

(C) The cause of the exceedance.

(D) The corrective action taken.

(c) In order to verify compliance with section 3(b) of this rule, the owner or operator shall keep the following records:

(1) Operating parameter values and the corresponding VOC emission rate in pounds per ton sinter produced.

(2) Sinter produced in tons each operating day.

(3) VOCs emitted in pounds each operating day.

(4) The cumulative total of VOCs emitted for the period May 1 through September 30.

(d) Owners or operators of a sintering process shall maintain all records for a minimum of five (5) years and shall make records available to the department and the U.S. EPA upon request. *(Air Pollution Control Division; 326 IAC 8-13-7; filed Jun 24, 1998, 5:46 p.m.: 21 IR 4200; errata filed Feb 9, 1999, 4:04 p.m.: 22 IR 2006)*

326 IAC 8-13-8 Continuous emissions monitoring

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 8. (a) Owners or operators who elect to demonstrate compliance with the emission limits in section 3 of this rule by continuously monitoring VOC emissions shall do the following:

(1) Before January 1, 1999, install and certify a continuous emissions monitoring (CEM) system to monitor for VOC emission in pounds per hour according to procedures in 326 IAC 3-5.

(2) After January 1, 1999, comply with the CEM maintenance, operating procedures, quality assurance procedures, and performance specifications in 326 IAC 3-5.

(3) After January 1, 1999, comply with the record keeping and reporting requirements in 326 IAC 3-5. In addition, the owner or operator shall comply with the following record keeping and reporting requirements:

(A) For the period May 1 through September 30, maintain the following records:

(i) The VOC emitted each day.

(ii) The cumulative total of VOC emitted.

(iii) The sinter produced each operating day.

(B) Within thirty (30) days of the exceedance of an applicable emission limit in section 3 of this rule, submit a report containing the following:

(i) The name and location of the source.

(ii) The nature of the exceedance.

(iii) The date of the occurrence.

(iv) The cause of the exceedance, such as, but not limited to, production rates or characteristics of the sinter burden.

(v) The corrective action taken according to the corrective action plan in section 4(b)(5) of this rule.

(4) Submit the CEM certification reports according to the procedures and schedule in 326 IAC 3-5.

(5) Within sixty (60) days of the compliance dates in section 3 of this rule, submit a report containing the following:

(A) A document certifying that the owner or operator was in compliance with the emission limits in section 3 of this rule.

(B) The appropriate CEM data.

(C) The applicable sinter production data, sinter burden composition, and oil and grease values.

(b) The following provisions of this rule do not apply to owners or operators who elect to demonstrate compliance with the emission limits in section 3 of this rule by using a CEM to monitor VOC emissions:

(1) Section 4(a)(2).

(2) Section 4(b)(1)(B)(i), 4(b)(1)(B)(ii), 4(b)(1)(B)(iii).

(3) Section 4(d).

(4) Section 4(e).

(5) Section 4(f).

(6) Section 4(g)(2)(A), 4(g)(2)(C), and 4(g)(2)(D).

(7) Section 4(h).

(8) Section 5.

(9) Section 6.

(10) Section 7(a), 7(b), and 7(c) of this rule.

(Air Pollution Control Division; 326 IAC 8-13-8; filed Jun 24, 1998, 5:46 p.m.: 21 IR 4201; errata filed Feb 9, 1999, 4:04 p.m.: 22 IR 2006)

Rule 14. Architectural and Industrial Maintenance (AIM) Coatings

326 IAC 8-14-1 Applicability

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

Sec. 1. This rule applies to any person who supplies, sells, offers for sale, or manufactures any AIM coating for use within the state of Indiana, as well as any person who applies or solicits the application of any AIM coating within the state of Indiana, except for the following:

(1) Any AIM coating that is sold or manufactured for:

(A) use outside of the state of Indiana; or

(B) shipment to other manufacturers for reformulation or repackaging.

(2) Any aerosol coating product.

(3) Any AIM coating that is sold in a container with a volume of one (1) liter (one and fifty-seven thousandths (1.057) quarts) or less.

(Air Pollution Control Division; 326 IAC 8-14-1; filed Nov 1, 2010, 11:58 a.m.: 20101201-IR-326060604FRA)

326 IAC 8-14-2 Definitions

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

Sec. 2. The following definitions apply throughout this rule:

(1) "Adhesive" means any chemical substance that is applied for the purpose of bonding two (2) surfaces together other than by mechanical means.

(2) "Aerosol coating product" means a pressurized coating product containing pigments or resins that:

(A) dispenses product ingredients by means of a propellant; and

(B) is packaged in a disposable can for hand-held application or for use in specialized equipment for ground traffic or ground marking applications.

(3) "AIM coatings" means architectural and industrial maintenance coatings.

(4) "Antenna coating" means a coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.

(5) "Antifouling coating" means a coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered with the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136).

(6) "Appurtenance" means any accessory to a stationary structure coated at the site of installation, whether installed or detached, including, but not limited to, any of the following:

(A) Bathroom and kitchen fixtures.

(B) Cabinets.

(C) Concrete forms.

(D) Doors.

(E) Elevators.

(F) Fences.

(G) Hand railings.

(H) Heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools.

(I) Lampposts.

(J) Partitions.

(K) Pipes and piping systems.

(L) Rain gutters and downspouts.

(M) Stairways.

(N) Fixed ladders.

(O) Catwalks and fire escapes.

(P) Window screens.

(7) "Architectural coating" means a coating to be applied to any of the following:

(A) Stationary structures or the appurtenances at the site of installation.

(B) Portable buildings at the site of installation.

(C) Pavements.
(D) Curbs.

The term does not include adhesives, coatings applied in shop applications, or coatings applied to nonstationary structures, such as airplanes, ships, boats, railcars, and automobiles.

(8) "Bitumens" means black or brown materials, including, but not limited to, asphalt, tar, pitch, or asphaltite, that:
(A) are soluble in carbon disulfide;
(B) consist mainly of hydrocarbons; and
(C) are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

(9) "Bituminous roof coating" means a coating that incorporates bitumens that is labeled and formulated exclusively for roofing.

(10) "Bituminous roof primer" means a primer that incorporates bitumens that is labeled and formulated exclusively for roofing.

(11) "Bond breaker" means a coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

(12) "Calcimine recoaters" means flat solvent borne coatings formulated and recommended specifically for recoating calcimine-painted ceilings and other calcimine-painted substrates.

(13) "Clear brushing lacquers" means clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, that are:
(A) intended exclusively for application by brush; and
(B) labeled as specified in section 4(5) of this rule.

(14) "Clear wood coatings" means clear and semitransparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.

(15) "Coating" means a material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, the following:
(A) Paints.
(B) Varnishes.
(C) Sealers.
(D) Stains.

(16) "Colorant" means a concentrated pigment dispersion of water, solvent, or binder that is added to an architectural coating after packaging in sale units to produce the desired color.

(17) "Concrete curing compound" means a coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water.

(18) "Concrete surface retarder" means a mixture of retarding ingredients, such as:
(A) extender pigments;
(B) primary pigments;
(C) resin; and
(D) solvent;

that interact chemically with the cement to prevent hardening on the surface where the retarder is applied, allowing the retarded mix of cement and sand at the surface to be washed away to create an exposed aggregate finish.

(19) "Conjugated oil varnish" means a clear or semitransparent wood coating, labeled as such, excluding lacquers or shellacs, based on a natural occurring conjugated vegetable oil (tung oil) and modified with other natural or synthetic resins, a minimum of fifty percent (50%) of the resin solids consisting of conjugated oil. Supplied as a single component product, conjugated oil varnishes penetrate and seal the wood. Film formation is due to polymerization of the oil. These varnishes may contain small amounts of pigment to control the final gloss or sheen.

(20) "Conversion varnish" means a clear acid-curing coating with an alkyd or other resin blended with amino resins and supplied as a single component or two (2) component product. Conversion varnishes produce a hard, durable, clear finish designed for professional application to wood flooring. Film formation is the result of an acid-catalyzed condensation reaction, affecting a transetherification at the reactive ethers of the amino resins.

(21) "Dry fog coating" means a coating labeled and formulated only for spray application such that overspray droplets dry

before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

(22) "Exempt compound" means a compound identified as exempt under the definition of VOC. The exempt compounds content of a coating shall be determined in accordance with Method 24 of 40 CFR Part 60, Appendix A* or SCAQMD Method 303-91 "Determination of Exempt Compounds", approved June 1, 1991, and revised February 1993*.

(23) "Faux finishing coating" means a coating labeled and formulated as a stain or a glaze to create artistic effects including, but not limited to, the following:

(A) Dirt.
(B) Old age.
(C) Smoke damage.
(D) Simulated marble.
(E) Simulated wood grain.

(24) "Fire-resistive coating" means an opaque coating labeled and formulated to protect structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, that has been:

(A) fire tested and rated by a nationally recognized testing organization; and
(B) approved for use in bringing assemblies of structural materials into compliance with federal, state, and local building code requirements.

The fire-resistive coating shall be tested in accordance with ASTM E119-05a "Standard Test Methods for Fire Tests of Building Construction and Materials", November 2005*.

(25) "Fire-retardant coating" means a coating labeled and formulated to retard ignition and flame spread, that has been:

(A) fire tested and rated by a nationally recognized testing organization; and
(B) approved for use in bringing building and construction materials into compliance with federal, state, and local building code requirements.

The fire-retardant coating shall be tested in accordance with ASTM E84-05e1 "Standard Test Method for Surface Burning Characteristics of Building Materials", February 2005*.

(26) "Flat coating" means a coating that:

(A) is not defined under any other definition in this rule; and
(B) registers a gloss less than fifteen (15) on an eighty-five (85) degree gloss meter or less than five (5) on a sixty (60) degree gloss meter according to ASTM D523-89 "Standard Test Method for Specular Gloss", May 1999*.

(27) "Floor coating" means an opaque coating that is labeled and formulated for application to flooring, including, but not limited to, the following:

(A) Decks.
(B) Porches.
(C) Steps.
(D) Other horizontal surfaces that may be subjected to foot traffic.

(28) "Flow coating" means a coating labeled and formulated exclusively for use by electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units.

(29) "Form-release compound" means a coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some material other than concrete.

(30) "Graphic arts coating or sign paint" means a coating labeled and formulated for hand application by artists using brush or roller techniques to indoor and outdoor signs, excluding structural components, and murals including the following:

(A) Letter enamels.
(B) Poster colors.
(C) Copy blockers.
(D) Bulletin enamels.

(31) "High-temperature coating" means a high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above two hundred four (204) degrees Celsius (four hundred (400) degrees Fahrenheit).

(32) "Impacted immersion coating" means a high performance maintenance coating formulated and recommended for application to steel structures subject to immersion in turbulent, debris-laden water. These coatings are specifically resistant to high energy impact damage by floating ice or debris.

(33) "Industrial maintenance coating" means a high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, or topcoats, formulated for application to substrates exposed to one (1) or more of the following extreme environmental conditions and labeled as specified in section 4(4) of this rule:

(A) Immersion in water, wastewater, or chemical solutions (aqueous and nonaqueous solutions), or chronic exposures of interior surfaces to moisture condensation.

(B) Acute or chronic exposure to:

(i) corrosive, caustic, or acidic agents;

(ii) chemicals;

(iii) chemical fumes; or

(iv) chemical mixtures or solutions.

(C) Repeated exposure to temperatures above one hundred twenty-one (121) degrees Celsius (two hundred fifty (250) degrees Fahrenheit).

(D) Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents.

(E) Exterior exposure of metal structures and structural components.

(34) "Lacquer" means a clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to:

(A) dry by evaporation without chemical reaction; and

(B) provide a solid, protective film.

(35) "Low-solids coating" means a coating containing twelve-hundredths (0.12) kilogram or less of solids per liter (one (1) pound or less of solids per gallon) of coating material.

(36) "Magnesite cement coating" means a coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

(37) "Manufacturer's maximum recommendation" means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

(38) "Mastic texture coating" means a coating labeled and formulated to:

(A) cover holes and minor cracks; and

(B) conceal surface irregularities;

that is applied in a single coat of at least ten mils (0.010 inch) dry film thickness.

(39) "Metallic pigmented coating" means a coating containing at least forty-eight (48) grams of elemental metallic pigment per liter of coating as applied (four-tenths (0.4) pounds per gallon) when tested in accordance with SCAQMD Method 318-95 "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction", July 1996*.

(40) "Multicolor coating" means a coating that:

(A) is packaged in a single container; and

(B) exhibits more than one (1) color when applied in a single coat.

(41) "Nonflat coating" means a coating that:

(A) is not defined under any other definition in this rule; and

(B) registers a gloss of fifteen (15) or greater on an eighty-five (85) degree gloss meter and five (5) or greater on a gloss meter when held at a sixty (60) degree angle according to ASTM D523-89 "Standard Test Method for Specular Gloss", May 1999*.

(42) "Nonflat-high-gloss coating" means a nonflat coating that registers a gloss of seventy (70) or above on a sixty (60) degree gloss meter according to ASTM D523-89 "Standard Test Method for Specular Gloss", May 1999*.

(43) "Nonindustrial" use means any use of architectural coatings except in the construction or maintenance of any of the following:

(A) Facilities used in the manufacturing of goods and commodities.

(B) Transportation infrastructures, including the following:

(i) Highways.

(ii) Bridges.

(iii) Airports.

(iv) Railroads.

(C) Facilities used in mining activities, including petroleum extraction.

(D) Utilities infrastructures, including power generation and distribution and water treatment and distribution systems.

(44) "Nuclear coating" means a protective coating formulated and recommended to seal porous surfaces, such as steel (or concrete), that otherwise would be subject to intrusions by radioactive materials. These coatings must be resistant to long-term (service life) cumulative radiation exposure and be tested in accordance with ASTM Method D4082-89 "Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants", January 2002*. These coatings must also be relatively easy to decontaminate and resistant to various chemicals to which coatings are likely to be exposed and be tested in accordance with ASTM Method D3912-80 "Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants", approved January 2001*.

(45) "Person" has the meaning set forth in IC 13-11-2-158(a).

(46) "Postconsumer coating" means a finished coating that would have been disposed of in a landfill, having completed its usefulness to a consumer. The term does not include manufacturing wastes.

(47) "Pretreatment wash primer" means a primer that:

(A) contains a minimum of five-tenths percent (0.5%) acid, by weight, when tested in accordance with ASTM D1613-03 "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products", October 2003*; and

(B) is labeled and formulated for application directly to bare metal surfaces to:

(i) provide corrosion resistance; and

(ii) promote adhesion of subsequent topcoats.

(48) "Primer" means a coating labeled and formulated for application to a substrate to provide a firm bond between the substrate and subsequent coats.

(49) "Quick-dry enamel" means a nonflat coating that is labeled as specified in section 4(8) of this rule and that is formulated to have the following characteristics:

(A) Is capable of being applied directly from the container under normal conditions with ambient temperatures between sixteen (16) and twenty-seven (27) degrees Celsius (sixty (60) and eighty (80) degrees Fahrenheit).

(B) When tested in accordance with ASTM D1640-03 "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature", December 2003*:

(i) sets to touch in two (2) hours or less;

(ii) is tack free in four (4) hours or less;

(iii) dries hard in eight (8) hours or less by the mechanical test method; and

(iv) has a dried film gloss of seventy (70) or above on a sixty (60) degree meter.

(50) "Quick-dry primer, sealer, and undercoater" means a primer, sealer, or undercoater that:

(A) is dry to the touch in thirty (30) minutes; and

(B) can be recoated in two (2) hours when tested in accordance with ASTM D1640-03 "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature", December 2003*.

(51) "Recycled coating" means an architectural coating formulated such that not less than fifty percent (50%) of the total weight consists of secondary and postconsumer coating, with not less than ten percent (10%) of the total weight consisting of postconsumer coating.

(52) "Residence" means areas where people reside or lodge, including, but not limited to, the following:

(A) Single and multiple family dwellings.

(B) Condominiums.

(C) Mobile homes.

(D) Apartment complexes.

(E) Motels.

(F) Hotels.

(53) "Roof coating" means a nonbituminous coating labeled and formulated exclusively for application to roofs for the primary purposes of preventing penetration of the substrate by water or reflecting heat and ultraviolet radiation. The term does not include metallic pigmented roof coatings that qualify as metallic pigmented coatings. These roof coatings shall be considered to be in the metallic pigmented coatings category.

(54) "Rust preventive coating" means a coating:

(A) formulated:
(i) exclusively for nonindustrial use; and
(ii) to prevent the corrosion of metal surfaces; and
(B) labeled as specified in section 4(6) of this rule.

(55) "Sanding sealer" means a clear or semitransparent wood coating labeled and formulated for application to bare wood to:
(A) seal the wood; and
(B) provide a coat that can be abraded to create a smooth surface for subsequent applications of coatings.

The term does not include a sanding sealer that also meets the definition of a lacquer, but it is included in the lacquer category.

(56) "SCAQMD" means the South Coast Air Quality Management District in California.

(57) "Sealer" means a coating labeled and formulated for application to a substrate to prevent:
(A) subsequent coatings from being absorbed by the substrate; or
(B) harm to subsequent coatings by materials in the substrate.

(58) "Secondary coating (rework)" means a fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value. The term does not include excess virgin resources of the manufacturing process.

(59) "Shellac" means a clear or opaque coating:
(A) formulated solely with the resinous secretions of the lac beetle (Laciffer lacca);
(B) thinned with alcohol; and
(C) formulated to dry by evaporation without a chemical reaction.

(60) "Shop application" means an application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a:
(A) manufacturing;
(B) production; or
(C) repairing;

process.

(61) "Solicit" means to require for use or to specify, by written or oral contract.

(62) "Specialty primer, sealer, and undercoater" means a coating:
(A) labeled as required in section 4(7) of this rule; and
(B) formulated for application to:
(i) a substrate to seal fire, smoke, or water damage;
(ii) condition excessively chalky surfaces;
(iii) seal in efflorescence; or
(iv) block stains.

An excessively chalky surface is one that is defined as having a chalk rating of four (4) or less as determined by ASTM D4214-98 "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films", August 1998*.

(63) "Stain" means a clear, semitransparent, or opaque coating labeled and formulated to change the color of a surface but not conceal the grain pattern or texture.

(64) "Stone consolidant" means a coating that is labeled and formulated for application to stone substrates to repair historical structures that have been damaged by weathering or other decay mechanisms. Stone consolidants must:
(A) penetrate into stone substrates to create bonds between particles and consolidate deteriorated material; and
(B) be specified and used in accordance with ASTM E2167-01 "Standard Guide for Selection and Use of Stone Consolidants"*.

(65) "Swimming pool coating" means a coating labeled and formulated to:
(A) coat the interior of swimming pools; and
(B) resist swimming pool chemicals.

(66) "Swimming pool repair and maintenance coating" means a rubber-based coating labeled and formulated to be used over existing rubber-based coatings for the repair and maintenance of swimming pools.

(67) "Temperature-indicator safety coating" means a coating labeled and formulated as a color-changing indicator coating for:
(A) the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment; and

(B) application to substrates exposed continuously or intermittently to temperatures above two hundred four (204) degrees Celsius (four hundred (400) degrees Fahrenheit).

(68) "Thermoplastic rubber coating and mastics" means a coating or mastic:

(A) formulated and recommended for application to roofing or other structural surfaces; and

(B) that incorporates not less than forty percent (40%) by weight of thermoplastic rubbers in the total resin solids and may also contain other ingredients including, but not limited to:

(i) fillers;

(ii) pigments; and

(iii) modifying resins.

(69) "Tint base" means an architectural coating to which colorant is added after packaging in sale units to produce a desired color.

(70) "Traffic marking coating" means a coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces, including, but not limited to, the following:

(A) Curbs.

(B) Berms.

(C) Driveways.

(D) Parking lots.

(E) Sidewalks.

(F) Airport runways.

(71) "Undercoater" means a coating labeled and formulated to provide a smooth surface for subsequent coatings.

(72) "U.S. EPA" means United States Environmental Protection Agency.

(73) "Varnish" means a clear or semitransparent wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction. Varnishes may contain small amounts of pigment to:

(A) color a surface; or

(B) control the final sheen or gloss of the finish.

(74) "Volatile organic compound" or "VOC" means a compound as defined in 326 IAC 1-2-90.

(75) "Waterproofing concrete or masonry sealer" means a clear or pigmented coating that is labeled and formulated for sealing concrete and masonry to provide resistance against the following:

(A) Water.

(B) Alkalis.

(C) Acids.

(D) Ultraviolet light.

(E) Staining.

(76) "Waterproofing sealer" means a coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water.

(77) "Wood preservative" means a coating:

(A) labeled and formulated to protect exposed wood from decay or insect attack; and

(B) that is registered with the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136).

* These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-14-2; filed Nov 1, 2010, 11:58 a.m.: 20101201-IR-326060604FRA)*

326 IAC 8-14-3 Standards for AIM coatings

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

Affected: IC 13-17

Sec. 3. (a) Except as provided in subsections (c) and (d), on or after October 1, 2011, no person shall:

(1) manufacture, blend, or repackage for sale within the state of Indiana;

(2) supply, sell, or offer for sale within the state of Indiana; or
(3) solicit for application or apply within the state of Indiana;
any AIM coating with a VOC content in excess of the corresponding limit specified in subsection (b).
(b) Compliance with the VOC content limits shall not exceed the following limits:

Coating Category	VOC Limit (grams/liter)	VOC Limit (pounds/gallon)
Flat coatings	100	0.835
Nonflat coatings	150	1.25
Nonflat-high-gloss coatings	250	2.09
Specialty coatings:		
Antenna coatings	530	4.42
Antifouling coatings	400	3.34
Bituminous roof coatings	300	2.50
Bituminous roof primers	350	2.92
Bond breakers	350	2.92
Calcimine recoaters	475	3.96
Clear wood coatings:		
Clear brushing lacquers	680	5.67
Lacquers, including clear lacquer sanding sealers	550	4.59
Sanding sealers, excluding clear lacquers	350	2.92
Varnishes other than conversion varnishes	350	2.92
Conjugated oil varnish	450	3.76
Conversion varnish	725	6.05
Concrete curing compounds	350	2.92
Concrete surface retarders	780	6.51
Dry fog coatings	400	3.34
Faux finishing coatings	350	2.92
Fire-resistive coatings	350	2.92
Fire-retardant coatings (clear)	650	5.42
Fire-retardant coatings (opaque)	350	2.92
Floor coatings	250	2.09
Flow coatings	420	3.51
Form-release compounds	250	2.09
Graphic arts coatings (sign paints)	500	4.17
High temperature coatings	420	3.51
Impacted immersion coatings	780	6.51
Industrial maintenance coatings	340	2.84
Low-solids coatings	120	1.00
Magnesite cement coatings	450	3.76
Mastic texture coatings	300	2.50
Metallic pigmented coatings	500	4.17
Multicolor coatings	250	2.09

Nuclear coatings	450	3.76
Pretreatment wash primers	420	3.51
Primers, sealers, and undercoaters	200	1.67
Quick-dry enamels	250	2.09
Quick-dry primers, sealers, and undercoaters	200	1.67
Recycled coatings	250	2.09
Roof coatings	250	2.09
Rust preventive coatings	400	3.34
Shellacs (clear)	730	6.09
Shellacs (opaque)	550	4.59
Specialty primers, sealers, and undercoaters	350	2.92
Stains	250	2.09
Stone consolidants	450	3.76
Swimming pool coatings	340	2.84
Swimming pool repair and maintenance coatings	340	2.84
Temperature-indicator safety coatings	550	4.59
Thermoplastic rubber coatings and mastics	550	4.59
Traffic marking coatings (ozone season-May 1 to September 30)	105	0.876
Traffic marking coatings (nonozone season- October 1 to April 30)	150	1.25
Waterproofing sealers	250	2.09
Waterproofing concrete or masonry sealers	400	3.34
Wood preservatives	350	2.92
Conversion factor: one gram VOC per liter = 0.0083454 pound per gallon.		

(c) If anywhere on the container of an AIM coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition or is recommended for use for more than one (1) of the categories listed in subsection (b), then the category with the most restrictive VOC content limit shall apply. This provision does not apply to the coating categories specified as follows:

(1) Lacquer coatings, including lacquer sending sealers.
(2) Metallic pigmented coatings.
(3) Shellacs.
(4) Fire-retardant coatings.
(5) Pretreatment wash primers.
(6) Industrial maintenance coatings.
(7) Low-solids coatings.
(8) Wood preservatives.
(9) High temperature coatings.
(10) Temperature-indicator safety coatings.
(11) Antenna coatings.
(12) Antifouling coatings.
(13) Flow coatings.
(14) Bituminous roof primers.
(15) Specialty primers, sealers, and undercoaters.
(16) Thermoplastic rubber coatings and mastics.
(17) Calcimine recoaters.
(18) Impacted immersion coatings.
(19) Nuclear coatings.

(d) The following sell through provisions apply to AIM coatings:

(1) A coating manufactured prior to October 1, 2011, may be sold, supplied, or offered for sale until October 1, 2014.
(2) A coating manufactured before October 1, 2011, may be applied at any time both before and after October 1, 2011, so long as the coating complied with the standards in effect at the time the coating was manufactured.
(3) The provisions in subdivisions (1) and (2) do not apply to any coating that does not display the date or date code required by section 4(1) of this rule.
(e) The following work practices are required:
(1) All AIM coatings containers used to apply the contents therein to a surface directly from the container by:
(A) pouring;
(B) siphoning;
(C) brushing;
(D) rolling;
(E) padding;
(F) ragging; or
(G) other means;
shall be closed when not in use.
(2) Containers of any VOC-containing materials used for thinning and cleanup shall be closed when not in use.
(f) No person who applies or solicits the application of any AIM coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in subsection (b).
(g) No person shall apply or solicit the application of any rust preventative coating for industrial use, unless the rust preventative coating complies with the industrial maintenance coating VOC content limit specified in subsection (b).
(h) If a coating does not meet any of the definitions for the specialty coatings categories listed in subsection (b), the VOC content limit shall be determined by classifying the coating as a flat coating, nonflat coating, or nonflat-high-gloss coating as defined in section 2 of this rule. The corresponding flat or nonflat coating VOC content limit shall apply. *(Air Pollution Control Division; 326 IAC 8-14-3; filed Nov 1, 2010, 11:58 a.m.: 20101201-IR-326060604FRA)*

326 IAC 8-14-4 Container labeling
Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-17

Sec. 4. On and after October 1, 2011, each manufacturer of any AIM coating subject to this rule shall prominently display the following information on the coating container or label in which the coating is sold or distributed:
(1) A date code, as follows:
(A) The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid, or bottom of the container.
(B) If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the department.
(2) Thinning recommendations, as follows:
(A) A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container.
(B) This requirement does not apply to the thinning of architectural coatings with water.
(C) If thinning of a coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.
(3) VOC content, as follows:
(A) Each container of any coating subject to this rule shall display either the maximum or the actual VOC content of the coating, as supplied, including the maximum thinning recommended by the manufacturer.
(B) VOC content shall be displayed in grams of VOC per liter of coating.
(C) VOC content displayed shall be:
(i) calculated using product formulation data; or
(ii) determined using the test methods in section 6(b) of this rule.
The equations in section 6(a) of this rule shall be used to calculate VOC content.

(4) The label or the lid of the container in which an industrial maintenance coating is sold or distributed shall display one (1) or more of the following industrial maintenance coatings descriptions:

(A) "For industrial use only".

(B) "For professional use only".

(C) "Not for residential use".

(D) "Not intended for residential use".

(5) The labels of all clear brushing lacquers shall prominently display the following statements:

(A) "For brush application only".

(B) "This product must not be thinned or sprayed".

(6) The labels of all rust preventive coatings shall prominently display the statement "For metal substrates only".

(7) The labels of all specialty primers, sealers, and undercoaters shall prominently display one (1) or more of the following descriptions:

(A) "For blocking stains".

(B) "For fire-damaged substrates".

(C) "For smoke-damaged substrates".

(D) "For water-damaged substrates".

(E) "For excessively chalky substrates".

(F) "To seal in efflorescence".

(8) The labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time.

(9) The labels of all nonflat-high-gloss coatings shall prominently display the words "High Gloss".

(10) The labels of all stone consolidants shall prominently display the statement "Stone Consolidant-For Professional Use Only".

(Air Pollution Control Division; 326 IAC 8-14-4; filed Nov 1, 2010, 11:58 a.m.: 20101201-IR-326060604FRA)

326 IAC 8-14-5 Recordkeeping and reporting requirements

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

Affected: IC 13-17

Sec. 5. (a) Each manufacturer of a product subject to a VOC content limit in section 3(b) of this rule shall keep records demonstrating compliance with the VOC content limits. The records shall clearly list each product by all of the following:

(1) Name.

(2) Identifying number if applicable.

(3) VOC content as determined by section 6 of this rule.

(4) Name or names and chemical abstract service (CAS) number of the VOC constituents in the product.

(5) Dates of the VOC content determinations.

(6) Coating category and applicable VOC content limit.

(b) The records required by subsection (a) shall be:

(1) kept for a period not less than five (5) years; and

(2) made available to the department for inspection within ninety (90) days of request.

(c) Each manufacturer shall, upon request of the department, provide data concerning the distribution and sales of coatings subject to a VOC content limit in section 3(b) of this rule. The manufacturer shall within ninety (90) days provide the following information:

(1) The name and mailing address of the manufacturer.

(2) The name, address, and telephone number of a contact person.

(3) The name of the product as it appears on the label and the coating category under which it is regulated, as listed in section 3(b) of this rule.

(4) Whether the coating is marketed for interior use or exterior use, or both.

(5) The number of gallons sold in the state of Indiana in containers greater than one (1) liter.

(6) The actual VOC content and VOC content in grams per liter. If thinning is recommended, list the actual VOC content and VOC content limit after recommended thinning.

(7) The names and CAS number of the VOC constituents in the product.

(d) Manufacturers of an AIM coating that contains perchloroethylene or methylene chloride shall, within thirty (30) days upon request of the department, submit a report to the department that includes the following information for the product sold in the state during the previous twelve (12) months from the date of the department's request:

(1) The product's brand name and a copy of the product label with the legible usage instructions.

(2) The coating category, listed in section 3(b) of this rule, to which the coating belongs.

(3) The total sales during the twelve (12) month period to the nearest gallon.

(4) The volume percent, to the nearest one-tenth of one percent (0.10%), of perchloroethylene and methylene chloride in the coating.

(e) Manufacturers of recycled coatings shall, within thirty (30) days upon request of the department, submit a letter to the department certifying their status as a recycled paint manufacturer. The report shall include the following information for all recycled coatings for the previous twelve (12) months from the date of the department's request:

(1) The total number of gallons distributed in Indiana during the twelve (12) month period.

(2) A description of the method used by the manufacturer to calculate state distribution.

(f) Manufacturers of bituminous roof coatings or bituminous roof primers shall, within thirty (30) days upon request of the department, submit a report that includes the following information for the previous twelve (12) months from the date of the department's request:

(1) The total number of gallons of bituminous roof coatings or bituminous roof primers sold in Indiana during the twelve (12) month period.

(2) A description of the method used by the manufacturer to calculate state sales.

(Air Pollution Control Division; 326 IAC 8-14-5; filed Nov 1, 2010, 11:58 a.m.: 20101201-IR-326060604FRA)

326 IAC 8-14-6 Compliance provisions and test methods

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

Sec. 6. (a) For the purpose of determining compliance with the VOC content limits in section 3(b) of this rule, the VOC content of a coating shall be determined using the procedures described in subdivision (1) or (2), as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured. VOC content shall be determined as follows:

(1) With the exception of low-solids coatings, determine the VOC content in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds, using the following equation:

$$\text{VOC Content} = \frac{(W_s - W_w - W_{ec})}{(V_m - V_w - V_{ec})}$$

Where:	VOC Content	=	grams of VOC per liter of coating
	W_s	=	weight of volatiles, in grams
	W_w	=	weight of water, in grams
	W_{ec}	=	weight of exempt compounds, in grams
	V_m	=	volume of coating, in liters
	V_w	=	volume of water, in liters
	V_{ec}	=	volume of exempt compounds, in liters

(2) For low solid coatings, determine the VOC content in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds, using the following equation:

$$\text{VOC Content}_{ls} = \frac{(W_s - W_w - W_{ec})}{(V_m)}$$

Where:	VOC Content_{ls}	=	the VOC content of a low-solids coating in grams per liter of coating
	W_s	=	weight of volatiles, in grams
	W_w	=	weight of water, in grams
	W_{ec}	=	weight of exempt compounds, in grams
	V_m	=	volume of coating, in liters

(b) To determine the physical properties of a coating in order to perform the calculations in subsection (a), the reference method for VOC content is Method 24 of 40 CFR Part 60, Appendix A*, except as provided in subsections (c) and (d). An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91* "Determination of Volatile Organic Compounds in Various Materials", February 1996. The exempt compounds content shall be determined by SCAQMD Method 303-91* "Determination of Exempt Compounds", February 1993. To determine the VOC content of a coating, the manufacturer may use Method 24 of 40 CFR Part 60, Appendix A*, or an alternative method, as provided in subsection (c), formulation data, or any other reasonable means for predicting that the coating has been formulated as intended, for example, quality assurance checks, recordkeeping. However, if there are any inconsistencies between the results of a test conducted utilizing Method 24 of 40 CFR Part 60, Appendix A* and any other means for determining VOC content, the results of the test utilizing Method 24 of 40 CFR Part 60, Appendix A* will govern, except when an alternative method is approved as specified in subsection (c). The department may require the manufacturer to conduct an analysis using Method 24 of 40 CFR Part 60, Appendix A*.

(c) The use of alternative test methods demonstrated to provide results that are acceptable for purposes of determining compliance with subsection (b) after review and approval in writing by the department and the U.S. EPA may be used.

(d) Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of Method 24 of 40 CFR Part 60, Appendix A*. This method has not been approved for methacrylate multicomponent coatings used for purposes other than as traffic marking coatings or for other classes of multicomponent coatings.

*These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-14-6; filed Nov 1, 2010, 11:58 a.m.: 20101201-IR-326060604FRA)*

326 IAC 8-14-7 Application of traffic marking materials

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

Sec. 7. (a) Except as provided in section 3(d) of this rule, after October 1, 2011, during the ozone season (May 1 through September 30), no person may cause, allow, or permit the application of traffic marking material that exceeds the following limits:

(1) For traffic marking material that is a liquid at the time of application, the VOC content limits listed in section 3(b) of this rule.

(2) For field-reacted traffic marking material, or for traffic marking material that is not measurable as a liquid at the time of application, a VOC emission rate of three and six-tenths (3.6) kilograms per stripe-kilometer or twelve and two-tenths (12.2) pounds per stripe-mile.

(b) Any person subject to this section who applies traffic marking material shall maintain the following records:

(1) Types and amounts of traffic marking materials purchased annually.

(2) The VOC content or emission rate of each type of traffic marking material applied in any of the following:

(A) Grams per liter.
(B) Pounds per gallon.
(C) Kilograms per stripe-kilometer.
(D) Pounds per stripe-mile.

(3) Monthly quantities of each type of traffic marking material applied.
(c) The records required in subsection (b) shall be:
(1) kept for a period of three (3) years after the traffic marking material is applied; and
(2) made available to the department for inspection within ninety (90) days of the request.
(Air Pollution Control Division; 326 IAC 8-14-7; filed Nov 1, 2010, 11:58 a.m.: 20101201-IR-326060604FRA)

Rule 15. Standards for Consumer and Commercial Products

326 IAC 8-15-1 Applicability
Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-17

Sec. 1. This rule applies to any person who:
(1) sells;
(2) supplies;
(3) offers for sale; or
(4) manufactures;
consumer products, on or after June 1, 2011, for use in Indiana. *(Air Pollution Control Division; 326 IAC 8-15-1; filed Nov 1, 2010, 12:38 p.m.: 20101201-IR-326070351FRA)*

326 IAC 8-15-2 Definitions
Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-11-2-158; IC 13-12; IC 15-16-4

Sec. 2. The following definitions apply throughout this rule:
(1) "ACP" means alternative control plan.
(2) "ACP agreement" means the document that:
(A) includes the conditions and requirements of the ACP; and
(B) allows manufacturers to sell ACP products in Indiana in accordance with section 6 of this rule.
(3) "ACP product" means any consumer product subject to the VOC content limits specified in section 3(a) of this rule, except those products that have been exempted under section 4 or 5 of this rule.
(4) "Adhesive" means any product that is used to bond one (1) surface to another by attachment. The term does not include the following:
(A) Products used on humans and animals.
(B) Adhesive tape.
(C) Contact paper.
(D) Wallpaper.
(E) Shelf liners.
(F) Any other product with an adhesive incorporated onto or in an inert substrate.
(G) Units of product, less packaging, that consist of more than one (1) gallon that meet the definition for contact adhesive.
(H) Units of product, less packaging, that:
(i) weigh more than one (1) pound and consist of more than sixteen (16) fluid ounces; and
(ii) meet the definition of either construction, panel, and floor covering adhesive or general purpose adhesive.
This limitation does not apply to aerosol adhesives.
(5) "Adhesive remover" means the following:
(A) A product designed to remove adhesive from either a specific substrate or a variety of substrates.
(B) The term includes the following:
(i) Floor or wall covering adhesive remover.
(ii) Gasket or thread locking adhesive remover.

(iii) General purpose adhesive remover.
(iv) Specialty adhesive remover.
(C) The term does not include products that remove adhesive intended exclusively for use on humans or animals.
(D) For the purpose of this definition, "adhesive" means a substance used to bond one (1) or more materials and includes, but is not limited to, the following:
(i) Caulks.
(ii) Sealants.
(iii) Glues.
(iv) Similar substances used for the purpose of forming a bond.

(6) "Aerosol adhesive" means an aerosol product in which the spray mechanism is permanently housed in a nonrefillable can designed for hand-held application without the need for ancillary hoses or spray equipment. The term includes the following:
(A) Special purpose spray adhesives.
(B) Mist spray adhesives.
(C) Web spray adhesives.

(7) "Aerosol cooking spray" means any aerosol product designed either to reduce sticking on cooking and baking surfaces or to be applied on food, or both.

(8) "Aerosol product" means a pressurized spray system that dispenses product ingredients by means of a:
(A) propellant contained in a product or a product's container; or
(B) mechanically induced force.
The term does not include pump spray.

(9) "Agricultural use" means the following:
(A) The use of any pesticide or method or device for the control of pests in connection with the commercial production, storage, or processing of any animal or plant crop.
(B) The term does not include the sale or use of pesticides in properly labeled packages or containers that are intended for:
(i) home use;
(ii) use in structural pest control;
(iii) industrial use; or
(iv) institutional use.
(C) For the purposes of this definition only, the following apply:
(i) "Home use" means use in a household or its immediate environment.
(ii) "Industrial use" means use:
(AA) for or in a manufacturing, mining, or chemical process; or
(BB) in the operation of factories, processing plants, and similar sites.
(iii) "Institutional use" means use within the lines of, or on the property necessary for the operation of, buildings, such as the following:
(AA) Hospitals.
(BB) Schools.
(CC) Libraries.
(DD) Auditoriums.
(EE) Office complexes.
(iv) "Structural pest control" means a use requiring a license under IC 15-16-4.

(10) "Air freshener" means the following:
(A) Any consumer product designed for the purpose of masking odors or freshening, cleaning, scenting, or deodorizing the air, including, but not limited to, the following:
(i) Sprays.
(ii) Wicks.
(iii) Powders.
(iv) Crystals.
(B) To determine whether a product is an air freshener, all verbal and visual representation regarding product use on

the label or packaging and in the product's literature and advertising may be considered. The presence of, and representations about, a product's fragrance and ability to deodorize (resulting from surface application) shall not constitute a claim of air freshening.

(C) The term includes spray disinfectants and other products that are expressly represented for use as air fresheners, except institutional and industrial disinfectants when offered for sale through institutional and industrial channels of distribution.

(D) The term does not include the following:

(i) Products that are used on the human body.

(ii) Products that function primarily as cleaning products as indicated on a product label.

(iii) Toilet or urinal care products.

(iv) Disinfectant products claiming to deodorize by killing germs on surfaces.

(v) Institutional or industrial disinfectants when offered for sale solely through institutional or industrial channels of distribution.

(11) "All other carbon-containing compounds" means all other compounds that:

(A) contain at least one (1) carbon atom; and

(B) are not a Table B compound or an LVP-VOC.

(12) "All other forms" means all consumer product forms for which no form-specific VOC standard is specified. Unless otherwise specified by the applicable VOC standard in section 3(a) of this rule, the term includes, but is not limited to, the following:

(A) Solids.

(B) Liquids.

(C) Wicks.

(D) Powders.

(E) Crystals.

(F) Cloth or paper wipes (towelettes).

(13) "Alternative control plan" or "ACP" means any emissions averaging program approved by the department under section 6 of this rule.

(14) "Antimicrobial hand or body cleaner or soap" means a cleaner or soap that is designed to reduce the level of microorganisms on the skin through germicidal activity. The term:

(A) includes, but is not limited to:

(i) antimicrobial hand or body washes or cleaners, or both;

(ii) food handler hand washes;

(iii) health care personnel hand washes;

(iv) preoperative skin preparations; and

(v) surgical scrubs; and

(B) does not include:

(i) prescription drug products;

(ii) antiperspirants;

(iii) astringents or toner;

(iv) deodorant;

(v) facial cleaner or soap;

(vi) general use hand or body cleaner or soap;

(vii) hand dishwashing detergent (including antimicrobial);

(viii) heavy-duty hand cleaner or soap;

(ix) medicated astringent or medicated toner; and

(x) rubbing alcohol.

(15) "Antiperspirant" means any product that is intended by the manufacturer to be used to reduce perspiration in the human axilla by at least twenty percent (20%) in at least fifty percent (50%) of a target population. The term includes, but is not limited to, the following:

(A) Aerosols.

(B) Roll-ons.
(C) Sticks.
(D) Pumps.
(E) Pads.
(F) Creams.
(G) Squeeze bottles.

(16) "Antistatic product" means a product that is labeled to eliminate, prevent, or inhibit the accumulation of static electricity. The term does not include the following products:
(A) Electronic cleaner.
(B) Floor polish or wax.
(C) Floor coating.
(D) Aerosol coating product.
(E) Architectural coating.

(17) "Architectural coating" means a coating applied to the following:
(A) Stationary structures and their appurtenances.
(B) Mobile homes.
(C) Pavements.
(D) Curbs.

(18) "ASTM" means the American Society for Testing and Materials.

(19) "Astringent or toner" means any product not regulated as a drug by the United States Food and Drug Administration (FDA) that is applied to the skin for the purpose of cleaning or tightening pores. The term:
(A) includes:
(i) clarifiers; and
(ii) substrate-impregnated products; and
(B) does not include:
(i) hand, face, or body cleaner or soap product;
(ii) medicated astringent;
(iii) medicated toner;
(iv) cold cream;
(v) lotion; and
(vi) antiperspirant.

(20) "Automobile headliner adhesive" means an aerosol adhesive designed to bond together layers in motor vehicle headliners.

(21) "Automotive brake cleaner" means a cleaning product designed to remove the following from motor vehicle brake mechanisms:
(A) Oil.
(B) Grease.
(C) Brake fluid.
(D) Brake pad material.
(E) Dirt.

(22) "Automotive engine compartment adhesive" means an aerosol adhesive designed for use in motor vehicle under-the-hood applications that require oil and plasticizer resistance and high shear strength at temperatures of two hundred (200) degrees Fahrenheit through two hundred seventy-five (275) degrees Fahrenheit.

(23) "Automotive hard paste wax" means an automotive wax or polish that:
(A) is designed to protect and improve the appearance of automotive paint surfaces;
(B) is a solid at room temperature; and
(C) contains zero percent (0%) water by formulation.

(24) "Automotive instant detailer" means a product designed for use in a pump spray that is:
(A) applied to the painted surface of automobiles; and
(B) wiped off prior to the product being allowed to dry.

(25) "Automotive rubbing or polishing compound" means a product designed primarily to remove, from the painted surfaces

of motor vehicles without leaving a protective barrier, the following:

(A) Oxidation.

(B) Old paint.

(C) Scratches or swirl marks.

(D) Other defects.

(26) "Automotive wax, polish, sealant, or glaze" means a product designed to seal out moisture, increase gloss, or otherwise enhance a motor vehicle's painted surfaces. The term:

(A) includes, but is not limited to, products designed for:

(i) use in auto body repair shops;

(ii) use in "drive-through" car washes; and

(iii) the general public; and

(B) does not include:

(i) automotive rubbing or polishing compounds;

(ii) automotive wash and wax products;

(iii) surfactant-containing car wash products; and

(iv) products designed for use on unpainted surfaces, including, but not limited to:

(AA) bare metal;

(BB) chrome;

(CC) glass; and

(DD) plastic.

(27) "Automotive windshield washer fluid" means any liquid designed for use in a motor vehicle windshield washer system either:

(A) as an antifreeze; or

(B) for the purpose of:

(i) cleaning;

(ii) washing; or

(iii) wetting;

the windshield.

The term does not include fluids placed by the manufacturer in a new vehicle.

(28) "Bathroom and tile cleaner" means a product designed to clean tile or surfaces in bathrooms. The term does not include products designed primarily to clean the following:

(A) Toilet bowls.

(B) Toilet tanks.

(C) Urinals.

(29) "Bug and tar remover" means a product labeled to remove either or both of the following from painted motor vehicle surfaces without causing damage to the finish:

(A) Biological-type residues, such as the following:

(i) Insect carcasses.

(ii) Tree sap.

(B) Road grime, such as the following:

(i) Road tar.

(ii) Roadway paint markings.

(iii) Asphalt.

(30) "CARB" means the California Air Resources Board.

(31) "Carburetor or fuel-injection air intake cleaners" means a product designed to remove fuel deposits, dirt, or other contaminants from the following:

(A) A carburetor.

(B) A choke.

(C) The throttle body of a fuel-injection system.

(D) Associated linkages.

The term does not include products designed exclusively to be introduced directly into the fuel lines or fuel storage tank prior to introduction into the carburetor or fuel injectors.

(32) "Carpet and upholstery cleaner" means the following:

(A) A cleaning product designed for the purpose of eliminating dirt and stains on the following:

(i) Rugs.

(ii) Carpeting.

(iii) The interior of motor vehicles.

(iv) Household furniture.

(v) Objects upholstered or covered with fabrics, such as the following:

(AA) Wool.

(BB) Cotton.

(CC) Nylon.

(DD) Other synthetic fabrics.

(B) The term includes, but is not limited to, products that make fabric protectant claims.

(C) The term does not include the following:

(i) General purpose cleaners.

(ii) Spot removers.

(iii) Vinyl or leather cleaners.

(iv) Dry cleaning fluids.

(v) Products designed exclusively for use at industrial facilities engaged in furniture or carpet manufacturing.

(33) "Charcoal lighter material" means any combustible material designed to be applied on, incorporated in, added to, or used with charcoal to enhance ignition. The term does not include any of the following:

(A) Electrical starters and probes.

(B) Metallic cylinders using paper tinder.

(C) Natural gas.

(D) Propane.

(E) Fat wood.

(34) "Colorant" means any pigment or coloring material used in a consumer product:

(A) for an aesthetic effect; or

(B) to dramatize an ingredient.

(35) "Construction, panel, and floor covering adhesive" means any one-component adhesive that is designed exclusively for the installation, remodeling, maintenance, or repair of the following:

(A) Structural and building components, including the following:

(i) Beams.

(ii) Trusses.

(iii) Studs.

(iv) Paneling, including, but not limited to, the following:

(AA) Dry wall or dry wall laminates.

(BB) Fiberglass reinforced plastic (FRP).

(CC) Plywood.

(DD) Particle board.

(EE) Insulation board.

(FF) Predecorated hardboard or tile board.

(v) Ceiling and acoustical tile.

(vi) Molding.

(vii) Fixtures.

(viii) Countertops.

(ix) Countertop laminates.

(x) Cove bases.

(xi) Wall bases.

(xii) Flooring or subflooring.

(B) Floor or wall coverings, including the following:

(i) Wood or simulated wood covering.

(ii) Carpet.

(iii) Carpet pad or cushion.

(iv) Vinyl-backed carpet.

(v) Flexible flooring material.

(vi) Nonresilient flooring material.

(vii) Mirror tiles and other types of tiles.

(viii) Artificial grass.

The term does not include floor seam sealer.

(36) "Consumer" means any person who purchases or acquires any consumer product for the following uses:

(A) Personal.

(B) Family.

(C) Household.

(D) Institutional.

The term does not include persons acquiring a consumer product for resale.

(37) "Consumer product" means the following:

(A) A chemically formulated product used by household and institutional consumers, including, but not limited to, the following:

(i) Detergents.

(ii) Cleaning compounds.

(iii) Polishes.

(iv) Floor finishes.

(v) Cosmetics.

(vi) Personal care products.

(vii) Home, lawn, and garden products.

(viii) Disinfectants.

(ix) Sanitizers.

(x) Aerosol paints.

(xi) Automotive specialty products.

(xii) Aerosol adhesives, including aerosol adhesives for the following uses:

(AA) Consumer.

(BB) Industrial.

(CC) Commercial.

(B) The term does not include the following:

(i) Paint products.

(ii) Furniture coating.

(iii) Architectural coatings.

(38) "Contact adhesive" means the following:

(A) An adhesive that:

(i) is designed for application to both surfaces to be bonded together;

(ii) is allowed to dry before the two (2) surfaces are placed in contact with each other;

(iii) forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other; and

(iv) does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces.

(B) The term does not include the following:

(i) Rubber cements that are primarily intended for use on paper substrates.

(ii) Vulcanizing fluids that are designed and labeled for tire repair only.

(39) "Contact adhesive-general purpose" means any contact adhesive that is not a contact adhesive-special purpose.
(40) "Contact adhesive-special purpose" means a contact adhesive that is used:
(A) to bond:
(i) melamine-covered board;
(ii) unprimed metal;
(iii) unsupported vinyl;
(iv) Teflon;
(v) ultrahigh molecular weight polyethylene;
(vi) rubber; and
(vii) high pressure laminate or wood veneer, one-sixteenth (1/16) inch or less in thickness;
to any porous or nonporous surface, and is sold in units of product, less packaging, that contain more than eight (8) fluid ounces; or
(B) in automotive applications that are:
(i) automotive under the hood applications requiring heat, oil, or gasoline resistance; or
(ii) body side molding, automotive weather strip, or decorative trim.
(41) "Container or packaging" means the part or parts of the consumer or institutional product that serve only to:
(A) contain;
(B) enclose;
(C) incorporate;
(D) deliver;
(E) dispense;
(F) wrap; or
(G) store;
the chemically formulated substance or mixture of substances that is solely responsible for accomplishing the purposes that the product was designed or intended. The term includes any article onto or into which the principal display panel and other accompanying literature or graphics are incorporated, etched, printed, or attached.
(42) "Crawling bug insecticide" means the following:
(A) Any insecticide product that is designed for use against ants, cockroaches, or other household crawling arthropods, including, but not limited to:
(i) mites;
(ii) silverfish; or
(iii) spiders.
(B) The term does not include products designed to be used exclusively on humans or animals, or any house dust mite product.
(C) For purposes of this definition only, the following apply:
(i) "House dust mite product" means a product whose label, packaging, or accompanying literature states that the product is suitable for use against house dust mites, but does not indicate that the product is suitable for use against ants, cockroaches, or other household crawling arthropods.
(ii) "House dust mite" means mites that:
(AA) feed primarily on skin cells shed in the home by humans and pets; and
(BB) belong to the:
(aa) phylum Arthropoda;
(bb) subphylum Chelicerata;
(cc) class Arachnida;
(dd) subclass Acari;
(ee) order Astigmata; and
(ff) family Pyroglyphidae.
(43) "Date code" means the day, month, and year on which the consumer product was manufactured, filled, or packaged, or a code indicating such a date.
(44) "Deodorant" means the following:

(A) For products manufactured before June 1, 2011, any product including, but not limited to:
(i) aerosols;
(ii) roll-ons;
(iii) sticks;
(iv) pumps;
(v) pads;
(vi) creams; and
(vii) squeeze bottles;
that is intended by the manufacturer to be used to minimize odor in the human axilla by retarding the growth of bacteria that cause the decomposition of perspiration.
(B) For products manufactured on or after June 1, 2011, any product including, but not limited to:
(i) aerosol;
(ii) roll-ons;
(iii) sticks;
(iv) pumps;
(v) pads;
(vi) creams; and
(vii) squeeze bottles;
that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that the product can be used on or applied to the human axilla to provide a scent or minimize odor, or both.
(C) A deodorant body spray product that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that it can be used on or applied to the human axilla is a deodorant.

(45) "Deodorant body spray" means the following:
(A) For products manufactured before June 1, 2011, a personal fragrance product with twenty percent (20%) or less fragrance.
(B) For products manufactured on or after June 1, 2011, a personal fragrance product with twenty percent (20%) or less fragrance that is designed for application all over the human body to provide a scent.
(C) A deodorant body spray product that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that it can be used on or applied to the human axilla is a deodorant.

(46) "Device" means any instrument or contrivance (other than a firearm) that is designed for:
(A) trapping;
(B) destroying;
(C) repelling; or
(D) mitigating;
any pest or any other form of plant or animal life (other than man and other than a bacterium, a virus, or another microorganism on or in a living man or other living animals). The term does not include equipment used for the application of pesticides when sold separately therefrom.

(47) "Disinfectant" means the following:
(A) Any product:
(i) intended to destroy or irreversibly inactivate infectious or other undesirable bacteria, pathogenic fungi, or viruses on surfaces or inanimate objects; and
(ii) whose label is registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136, et seq.).
(B) The term does not include any of the following:
(i) Products designed solely for use on human or animals.
(ii) Products designed for agricultural use.
(iii) Products designed solely for use in:
(AA) swimming pools;
(BB) therapeutic tubs; or
(CC) hot tubs.

(iv) Products that, as indicated on the principal display panel or label, are designed primarily for use as:
(AA) bathroom and tile cleaners;
(BB) glass cleaners;
(CC) general purpose cleaners;
(DD) toilet bowl cleaners; or
(EE) metal polishes.

(48) "Distributor" means any person to whom a consumer product is sold or supplied for the purposes of resale or distribution in commerce. The term does not include the following:
(A) Manufacturers.
(B) Retailers.
(C) Consumers.

(49) "Double phase aerosol air freshener" means an aerosol air freshener with the liquid contents in two (2) or more distinct phases that requires the product container be shaken before use to mix the phases, producing an emulsion.

(50) "Dry cleaning fluid" means the following:
(A) Any nonaqueous liquid product designed and labeled exclusively for use on:
(i) fabrics that are labeled "for dry clean only", such as clothing or drapery; or
(ii) "S-coded" fabrics, that for the purpose of this definition, means an upholstery fabric designed to be cleaned only with water-free spot cleaning products as specified by the Joint Industry Fabric Standards Committee.
(B) The term includes, but is not limited to, those products used by commercial dry cleaners and commercial businesses that clean fabrics, such as draperies, at the customer's residence or workplace.
(C) The term does not include:
(i) spot remover; or
(ii) carpet and upholstery cleaner.

(51) "Dusting aid" means a product designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone based coating. The term does not include a pressurized gas duster.

(52) "Electrical cleaner" means the following:
(A) A product labeled to remove heavy soils, such as grease, grime, or oil, from electrical equipment, including, but not limited to, the following:
(i) Electric motors.
(ii) Armatures.
(iii) Relays.
(iv) Electric panels.
(v) Generators.
(B) The term does not include the following:
(i) General purpose cleaners.
(ii) General purpose degreasers.
(iii) Dusting aids.
(iv) Electronic cleaners.
(v) Energized electrical cleaners.
(vi) Pressurized gas dusters.
(vii) Engine degreasers.
(viii) Antistatic products.
(ix) Products designed to clean the casings or housings of electrical equipment.

(53) "Electronic cleaner" means the following:
(A) A product labeled for the removal of dirt, moisture, dust, flux, or oxides from the internal components of electronic or precision equipment, such as circuit boards, and the internal components of electronic devices, including, but not limited to, the following:
(i) Radios.
(ii) Compact disc (CD) players.
(iii) Digital video disc (DVD) players.

(iv) Computers.

(B) The term does not include the following products:

(i) General purpose cleaners.

(ii) General purpose degreasers.

(iii) Dusting aids.

(iv) Pressurized gas dusters.

(v) Engine degreasers.

(vi) Electrical cleaners.

(vii) Energized electrical cleaners.

(viii) Antistatic products.

(ix) Products designed to clean the casings or housings of electronic equipment.

(54) "Energized electrical cleaner" means a product that meets the following criteria:

(A) The product is labeled to clean or degrease, or both, electrical equipment where cleaning or degreasing, or both, is accomplished when:

(i) electrical current exists; or

(ii) there is a residual electrical potential from a component, such as a capacitor.

(B) The product label clearly displays the statements: "Energized Equipment use only. Not to be used for motorized vehicle maintenance, or their parts.".

The term does not include electronic cleaners.

(55) "Engine degreaser" means a cleaning product designed to remove:

(A) grease;

(B) grime;

(C) oil; and

(D) other contaminants;

from the external surfaces of engines and other mechanical parts.

(56) "Existing product" means any:

(A) formulation of the same product category and form:

(i) sold;

(ii) supplied;

(iii) manufactured; or

(iv) offered for sale;

in Indiana prior to June 1, 2011; or

(B) subsequently introduced identical formulation.

(57) "Fabric protectant" means a product designed to be applied to fabric substrates to protect the surface from soiling from dirt and other impurities or to reduce absorption of liquid into the fabric's fibers. The term does not include the following:

(A) Waterproofers.

(B) Products designed for use solely on:

(i) leather; or

(ii) fabrics that are labeled "for dry clean only" and sold in containers of ten (10) fluid ounces or less.

(58) "Fabric refresher" means the following:

(A) A product labeled to neutralize or eliminate odors on the following:

(i) Nonlaundered fabric, including, but not limited to, the following:

(AA) Soft household surfaces.

(BB) Rugs.

(CC) Carpeting.

(DD) Draperies.

(EE) Bedding.

(FF) Automotive interiors.

(GG) Footwear.

(HH) Athletic equipment.

(II) Clothing.

(ii) Household furniture or objects upholstered or covered with fabrics, including, but not limited to, the following:

(AA) Wool.

(BB) Cotton.

(CC) Nylon.

(B) The term does not include the following:

(i) Antistatic products.

(ii) Carpet and upholstery cleaners.

(iii) Footwear or leather care products.

(iv) Spot removers.

(v) Disinfectants.

(vi) Products labeled for application to both fabric and human skin.

(vii) Soft household surface sanitizers. For the purposes of this definition only, "soft household surface sanitizer" means a product labeled to neutralize or eliminate odors on surfaces listed in clause (A) whose label is registered as a sanitizer under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136 et seq.).

(59) "Facial cleaner or soap" means a cleaner or soap designed primarily to clean the face. The term:

(A) includes, but is not limited to:

(i) facial cleansing creams;

(ii) semisolids;

(iii) liquids;

(iv) lotions; and

(v) substrate-impregnated forms; and

(B) does not include:

(i) prescription drug products;

(ii) antimicrobial hand or body cleaner or soap;

(iii) astringent or toner;

(iv) general use hand or body cleaner or soap;

(v) medicated astringent or medicated toner; and

(vi) rubbing alcohol.

(60) "Fat wood" means pieces of wood kindling with high naturally occurring levels of sap or resin that enhance ignition of the kindling. The term does not include any kindling with substances added to enhance flammability, such as wax-covered or wax-impregnated wood based products.

(61) "Flea and tick insecticide" means any insecticide product that is designed for use against:

(A) fleas;

(B) ticks;

(C) their larvae; or

(D) their eggs.

The term does not include products that are designed to be used exclusively on humans or animals and their bedding.

(62) "Flexible flooring material" means the following:

(A) Asphalt.

(B) Cork.

(C) Linoleum.

(D) No-wax.

(E) Rubber.

(F) Seamless vinyl flooring.

(G) Vinyl composite flooring.

(63) "Flexible vinyl" means a nonrigid polyvinyl chloride plastic with at least five percent (5%), by weight, of plasticizer content, which may be determined using ASTM Method E260-96(2006) "Standard Practice for Packed Column Gas Chromatography"*, or from product formulation data. A plasticizer is a material, such as a high boiling point organic solvent,

that is incorporated into a plastic to increase its flexibility, workability, or distensibility.
(64) "Flexible vinyl adhesive" means an aerosol adhesive designed to bond flexible vinyl to substrates.
(65) "Floor coating" means an opaque coating that is labeled and designed for application to flooring that may be subject to foot traffic, including, but not limited to, the following:
(A) Decks.
(B) Porches.
(C) Steps.
(D) Other horizontal surfaces.
(66) "Floor or wall covering adhesive remover" means a product designed or labeled to remove floor or wall coverings and associated adhesive from the underlying substrate.
(67) "Floor polish or wax" means a wax, polish, or any other product designed to polish, protect, or enhance floor surfaces by leaving a protective coating that is designed to be periodically replenished. The term does not include the following:
(A) Spray buff products.
(B) Products designed solely for the purpose of cleaning floors.
(C) Floor finish strippers.
(D) Products designed for unfinished wood floors.
(E) Coatings subject to architectural coatings regulations.
(68) "Floor seam sealer" means any product designed and labeled exclusively for bonding, fusing, or sealing (coating) seams between adjoining rolls of installed flexible sheet flooring.
(69) "Floor wax stripper" means a product designed to remove natural or synthetic floor polishes or waxes:
(A) through breakdown of the polish or wax polymers; or
(B) by dissolving or emulsifying the polish or wax.
The term does not include aerosol floor wax strippers or products designed to remove floor wax solely through abrasion.
(70) "Flying bug insecticide" means the following:
(A) Any insecticide product that is designed for use against flying insects or other flying arthropods, including, but not limited to, the following:
(i) Flies.
(ii) Mosquitoes.
(iii) Moths.
(iv) Gnats.
(B) The term does not include the following:
(i) Wasp and hornet insecticide.
(ii) Products that are designed to be used exclusively on humans or animals.
(iii) Any moth-proofing product. For purposes of this definition only, "moth-proofing product" means a product whose label, packaging, or accompanying literature indicates that the product is designed to protect fabrics from damage by moths but does not indicate that the product is suitable for use against flying insects or other flying arthropods.
(71) "Footwear or leather care product" means the following:
(A) Any product designed or labeled to be applied to footwear or to other leather articles or components, to:
(i) maintain;
(ii) enhance;
(iii) clean;
(iv) protect; or
(v) modify;
the appearance, durability, fit, or flexibility of the footwear or leather article or component. Footwear includes both leather and nonleather foot apparel.
(B) The term does not include the following:
(i) Fabric protectants.
(ii) General purpose adhesives.
(iii) Contact adhesives.

(iv) Vinyl, fabric, leather, or polycarbonate coatings.
(v) Rubber and vinyl protectants.
(vi) Fabric refreshers.
(vii) Products solely for deodorizing.
(viii) Sealant products with adhesive properties used to create external protective layers greater than two (2) millimeters thick.

(72) "Fragrance" means a substance or complex mixture of:
(A) aroma chemicals;
(B) natural essential oils; and
(C) other functional components;
with a combined vapor pressure not in excess of two (2) millimeters of mercury (mm Hg) at twenty (20) degrees Celsius, the sole purpose of which is to impart an odor or scent or to counteract a malodor.

(73) "Furniture coating" means any paint designed for application to room furnishings, including, but not limited to, the following:
(A) Cabinets (kitchen, bath, and vanity).
(B) Tables.
(C) Chairs.
(D) Beds.
(E) Sofas.

(74) "Furniture maintenance product" means a wax, polish, conditioner, or any other product designed for the purpose of polishing, protecting, or enhancing finished wood surfaces other than floors. The term does not include the following:
(A) Dusting aids.
(B) Wood cleaners.
(C) Products designed solely for the purpose of cleaning.
(D) Products designed to leave a permanent finish, such as the following:
(i) Stains.
(ii) Sanding sealers.
(iii) Lacquers.

(75) "Gasket or thread locking adhesive remover" means a product designed or labeled to remove gaskets or thread locking adhesives. The term includes products labeled for dual use as a paint stripper and gasket remover or thread locking adhesive remover.

(76) "Gel" means a colloid in which the disperse phase has combined with the continuous phase to produce a semisolid material, such as jelly.

(77) "General purpose adhesive" means any nonaerosol adhesive designed for use on a variety of substrates. The term does not include the following:
(A) Contact adhesives.
(B) Construction, panel, and floor covering adhesives.
(C) Adhesives designed exclusively for application on one (1) specific category of substrates that are composed of similar materials, including, but not limited to, different types of the following:
(i) Metals.
(ii) Paper products.
(iii) Ceramics.
(iv) Plastics.
(v) Rubbers.
(vi) Vinyls.
(D) Adhesives designed exclusively for use on one (1) specific category of articles, such as articles that may be composed of different materials but perform a specific function, including, but not limited to, the following:
(i) Gaskets.
(ii) Automotive trim.
(iii) Weather stripping.

(iv) Carpets.

(78) "General purpose adhesive remover" means a product designed or labeled to remove cyanoacrylate adhesives and nonreactive adhesives or residue from a variety of substrates. The term includes, but is not limited to, products that remove the following:

(A) Thermoplastic adhesives.
(B) Pressure sensitive adhesives.
(C) Dextrine or starch based adhesives.
(D) Casein glues.
(E) Rubber or latex based adhesives.
(F) Stickers.
(G) Decals.
(H) Stencils.

The term does not include floor or wall covering adhesive remover.

(79) "General purpose cleaner" means a product designed for general all-purpose cleaning, in contrast to cleaning products designed to clean specific substrates in certain situations. The term includes products designed for general floor cleaning, kitchen or countertop cleaning, and cleaners designed to be used on a variety of hard surfaces. The term does not include general purpose degreasers and electronic cleaners.

(80) "General purpose degreaser" means the following:

(A) Any product labeled to remove or dissolve grease, grime, oil, and other oil based contaminants from a variety of substrates, including automotive or miscellaneous metallic parts.
(B) The term does not include the following:
(i) Engine degreasers.
(ii) General purpose cleaners.
(iii) Adhesive removers.
(iv) Electronic cleaners.
(v) Electrical cleaners.
(vi) Energized electrical cleaners.
(vii) Metal polish or cleansers.
(viii) Products used exclusively in solvent cleaning tanks or related equipment, including, but not limited to, the following:
(AA) Cold cleaners.
(BB) Vapor degreasers.
(CC) Conveyorized degreasers.
(DD) Film cleaning machines.
(EE) Products designed to clean miscellaneous metallic parts by immersion in a container.
(ix) Products that are:
(AA) sold exclusively to establishments that manufacture or construct goods or commodities; and
(BB) labeled "not for retail sale".

(81) "General use hand or body cleaner or soap" means a cleaner or soap designed to be used routinely on the skin to clean or remove typical or common dirt and soils. The term:

(A) includes, but is not limited to:
(i) hand or body washes;
(ii) dual-purpose shampoo and body cleaners;
(iii) shower or bath gels; and
(iv) moisturizing cleaners or soaps; and
(B) does not include:
(i) prescription drug products;
(ii) antimicrobial hand or body cleaner or soap;
(iii) astringent or toner;
(iv) facial cleaner or soap;

(v) hand dishwashing detergent (including antimicrobial);
(vi) heavy-duty hand cleaner or soap;
(vii) medicated astringent or medicated toner; and
(viii) rubbing alcohol.

(82) "Glass cleaner" means a cleaning product designed primarily for cleaning surfaces made of glass. The term does not include products designed solely for the purpose of cleaning optical materials used in the following:
(A) Eyeglasses.
(B) Photographic equipment.
(C) Scientific equipment.
(D) Photocopying machines.

(83) "Graffiti remover" means the following:
(A) A product labeled to remove, from a variety of noncloth or nonfabric substrates, the following:
(i) Spray paint.
(ii) Ink.
(iii) Marker.
(iv) Crayon.
(v) Lipstick.
(vi) Nail polish.
(vii) Shoe polish.
(B) The term does not include the following:
(i) Paint remover or stripper.
(ii) Nail polish remover.
(iii) Spot remover.
(C) Products labeled for dual use as both a paint stripper and graffiti remover are considered graffiti removers.

(84) "Hair mousse" means a hairstyling foam designed to:
(A) facilitate styling of a coiffure; and
(B) provide limited holding power.

(85) "Hair shine" means any product designed for the primary purpose of creating a shine when applied to the hair. The term includes, but is not limited to, dual-use products designed primarily to impart a sheen to the hair. The term does not include the following:
(A) Hair sprays.
(B) Hair mousses.
(C) Hairstyling products.
(D) Hairstyling gels.
(E) Products whose primary purpose is to condition or hold the hair.

(86) "Hair spray" means the following:
(A) For products manufactured before June 1, 2011, a consumer product designed primarily for the purpose of dispensing droplets of a resin on and into a hair coiffure that will impart sufficient rigidity to the coiffure to establish or retain the style for a period of time.
(B) For products manufactured on or after June 1, 2011, a consumer product that is:
(i) applied to styled hair; and
(ii) designed or labeled to provide sufficient rigidity to hold, retain, or finish, or both, the style of the hair for a period of time.
(C) The term includes the following:
(i) Aerosol hair sprays.
(ii) Pump hair sprays.
(iii) Spray waxes.
(iv) Products that are both a styling and a finishing product.
(v) Color, glitter, or sparkle hair sprays that make finishing claims.
(D) The term does not include spray products that are intended to aid in styling but do not provide finishing of a

hairstyle.

(E) For purposes of this definition, the following apply:

(i) "Finish" or "finishing" means the maintaining or holding, or both, of previously styled hair for a period of time.

(ii) "Styling" means forming, sculpting, or manipulating the hair to temporarily alter the hair's shape.

(87) "Hairstyling gel" means a consumer product manufactured before June 1, 2011, that is:

(A) a high viscosity, often gelatinous, product that contains a resin; and

(B) designed for the application to hair to aid in styling and sculpting of the hair coiffure.

(88) "Hairstyling product" means the following:

(A) A consumer product manufactured on or after June 1, 2011, that is designed or labeled for application to wet, damp, or dry hair to aid in:

(i) defining;

(ii) shaping;

(iii) lifting;

(iv) styling; or

(v) sculpting;

the hair.

(B) The term includes, but is not limited to, the following:

(i) Products that aid in styling but do not provide finishing of a hairstyle, including, but not limited to, the following:

(AA) Hair balm.

(BB) Clay.

(CC) Cream.

(DD) Creme.

(EE) Curl straightener.

(FF) Gel.

(GG) Liquid.

(HH) Lotion.

(II) Paste.

(JJ) Pomade.

(KK) Putty.

(LL) Root lifter.

(MM) Serum.

(NN) Spray gel.

(OO) Stick.

(PP) Temporary hair straightener.

(QQ) Wax.

(RR) Spray products.

(ii) Leave-in detanglers, conditioners, or volumizers that make styling claims.

(C) The term does not include the following:

(i) Hair mousses.

(ii) Hair shines.

(iii) Hair sprays.

(iv) Shampoos or conditioners, or both, that are rinsed from the hair prior to styling.

(D) For purposes of this definition, the following apply:

(i) "Finish" or "finishing" means the maintaining or holding, or both, of previously styled hair for a period of time.

(ii) "Styling" means forming, sculpting, or manipulating the hair to temporarily alter the hair's shape.

(89) "Heavy-duty hand cleaner or soap" means the following:

(A) A product designed to clean or remove from the hand with or without the use of water difficult dirt and soils,

including, but not limited to, the following:

(i) Oil.
(ii) Grease.
(iii) Grime.
(iv) Tar.
(v) Shellac.
(vi) Putty.
(vii) Printer's ink.
(viii) Paint.
(ix) Graphite.
(x) Cement.
(xi) Carbon.
(xii) Asphalt.
(xiii) Adhesives.

(B) The term does not include the following:

(i) Prescription drug products.
(ii) Antimicrobial hand or body cleaner or soap.
(iii) Astringent or toner.
(iv) Facial cleaner or soap.
(v) General use hand or body cleaner or soap.
(vi) Medicated astringent or medicated toner.
(vii) Rubbing alcohol.

(90) "Herbicide" means a pesticide product designed to kill or retard a plant's growth. The term does not include products that are:

(A) for agricultural use; or
(B) restricted materials that require a permit for use and possession.

(91) "High volatility organic compound" or "HVOC" means any volatile organic compound that exerts a vapor pressure greater than eighty (80) millimeters of mercury (mm Hg) when measured at twenty (20) degrees Celsius.

(92) "Household product" means any consumer product that is primarily designed to be used inside or outside of living quarters or residences that are occupied or intended for occupation by individuals, including the immediate surroundings.

(93) "Indiana sales" means the sales (net pounds of product, less packaging and container, per year) in Indiana for either:

(A) the calendar year immediately prior to the year that the registration is due; or
(B) if that data is not available, any consecutive twelve (12) month period commencing not earlier than two (2) years prior to the due date of the registration.

If direct sales data for Indiana is not available, sales may be estimated by prorating national or regional sales data by population.

(94) "Insecticide" means a pesticide product that is designed for use against insects or other arthropods. The term does not include products that are:

(A) for agricultural use;
(B) for a use that requires a structural pest control license under IC 15-16-4; or
(C) restricted materials that require a permit for use and possession.

(95) "Insecticide fogger" means any insecticide product designed to release all or most of its content, as a fog or mist, into indoor areas during a single application.

(96) "Institutional product", "industrial and institutional product", or "I & I product" means the following:

(A) A consumer product that is designed for use in the maintenance or operation of an establishment that:

(i) manufactures, transports, or sells goods or commodities or provides services for profit; or
(ii) is engaged in the nonprofit promotion of a particular public, educational, or charitable cause.

(B) The term does not include household products and products that are incorporated into or used exclusively in the manufacture or construction of the goods or commodities at the site of the establishment.

(C) For purposes of this definition, "establishments" includes, but is not limited to, the following:

(i) Government agencies.
(ii) Factories.
(iii) Schools.
(iv) Hospitals.
(v) Sanitariums.
(vi) Prisons.
(vii) Restaurants.
(viii) Hotels.
(ix) Stores.
(x) Automobile service and parts centers.
(xi) Health clubs.
(xii) Theaters.
(xiii) Transportation companies.

(97) "Label" means any written, printed, or graphic matter:
(A) affixed to;
(B) applied to;
(C) attached to;
(D) blown into;
(E) formed into;
(F) molded into;
(G) embossed on; or
(H) appearing upon;
any consumer product or consumer product package for purposes of branding, identifying, or giving information with respect to the product or to the contents of the package.

(98) "Laminate repair or edgebanding adhesive" means an aerosol adhesive designed for the following:
(A) The touchup or repair of items laminated with high pressure laminates, for example, lifted edges, delaminates, etc. For purposes of this definition, "high pressure laminate" means sheet materials that consist of paper, fabric, or other core material that have been laminated at:
(i) temperatures exceeding two hundred sixty-five (265) degrees Fahrenheit; and
(ii) pressures between one thousand (1,000) and one thousand four hundred (1,400) psi.
(B) The touchup, repair, or attachment of edgebanding materials, including, but not limited to, the following:
(i) Other laminates.
(ii) Synthetic marble.
(iii) Veneers.
(iv) Wood molding.
(v) Decorative metals.

(99) "Laundry prewash" means a product that:
(A) is designed for application to a fabric prior to laundering; and
(B) supplements and contributes to the effectiveness of laundry detergents or provides specialized performance, or both.

(100) "Laundry starch product" means a product that is designed for application to a fabric, either during or after laundering, to impart and prolong a crisp, fresh look and may also act to help ease ironing of the fabric. The term includes, but is not limited to, fabric finish, sizing, and starch.

(101) "Lawn and garden insecticide" means an insecticide product labeled primarily to be used in household lawn and garden areas to protect plants from insects or other arthropods. Notwithstanding the requirements of section 7(d) of this rule, aerosol lawn and garden insecticides may claim to kill insects or other arthropods.

(102) "Liquid" means a substance or mixture of substances that is capable of a visually detectable flow as determined under ASTM D4359-90(2000)e1 "Standard Test Method for Determining Whether a Material Is a Liquid or a Solid"*. The term does not include powders or other materials that are composed entirely of solid particles.

(103) "Lubricant" means the following:
(A) A product designed to:

(i) reduce friction, heat, noise, or wear between moving parts; or
(ii) loosen rusted or immovable parts or mechanisms.
(B) The term does not include the following:
(i) Automotive power steering fluids.
(ii) Products for use inside power generating motors, engines, and turbines and their associated power-transfer gearboxes.
(iii) Two (2) cycle oils or other products designed to be added to fuels.
(iv) Products for use on the human body or animals.
(v) Products that are:
(AA) sold exclusively to establishments that manufacture or construct goods or commodities; and
(BB) labeled "not for retail sale".

(104) "LVP-VOC" means a chemical compound or mixture that contains at least one (1) carbon atom and meets one (1) of the following:
(A) Has a vapor pressure less than one-tenth (0.1) millimeter of mercury (mm Hg) at twenty (20) degrees Celsius, as determined by CARB Method 310*.
(B) Is a chemical compound with more than twelve (12) carbon atoms, or a chemical mixture comprised solely of compounds with more than twelve (12) carbon atoms as verified by formulation data, and the vapor pressure and boiling point are unknown.
(C) Is a chemical compound with a boiling point greater than two hundred sixteen (216) degrees Celsius, as determined by CARB Method 310*.
(D) Is the weight percent of a chemical mixture that boils above two hundred sixteen (216) degrees Celsius, as determined by CARB Method 310*.
For purposes of this definition, "chemical compound" means a molecule of definite chemical formula and isomeric structure, and "chemical mixture" means a substrate comprised of two (2) or more chemical compounds.

(105) "Manufacturer" means any person who:
(A) imports;
(B) manufactures;
(C) assembles;
(D) produces;
(E) packages;
(F) repackages; or
(G) relabels;
a consumer product.

(106) "Medicated astringent or medicated toner" means any product regulated as a drug by the FDA that is applied to the skin for the purpose of cleaning or tightening pores. The term:
(A) includes, but is not limited to:
(i) clarifiers; and
(ii) substrate-impregnated products; and
(B) does not include:
(i) hand, face, or body cleaners or soap products;
(ii) astringents or toners;
(iii) cold creams;
(iv) lotions;
(v) antiperspirants; and
(vi) products that must be purchased with a doctor's prescription.

(107) "Medium volatility organic compound" or "MVOC" means any volatile organic compound that exerts a vapor pressure greater than two (2) millimeters of mercury (mm Hg) and less than or equal to eighty (80) mm Hg when measured at twenty (20) degrees Celsius.

(108) "Metal polish or cleanser" means any product designed primarily to improve the appearance of finished metal, metallic, or metallized surfaces by physical or chemical action. For purposes of this definition, "improve the appearance" means to

remove or reduce stains, impurities, or oxidation from surfaces or to make surfaces smooth and shiny. The term:

(A) includes, but is not limited to, metal polishes used on:

(i) brass;

(ii) silver;

(iii) chrome;

(iv) copper;

(v) stainless steel; and

(vi) other ornamental metals; and

(B) does not include:

(i) automotive waxes, polishes, sealants, or glazes;

(ii) wheel cleaners;

(iii) paint removers or strippers;

(iv) products designed and labeled exclusively for automotive and marine detailing; or

(v) products designed for use in degreasing tanks.

(109) "Mist spray adhesive" means any aerosol that:

(A) is not a special purpose spray adhesive; and

(B) delivers a particle or mist spray, resulting in the formation of fine, discrete particles that yield a generally uniform and smooth application of adhesive to the substrate.

(110) "Mounting adhesive" means an aerosol adhesive designed to permanently mount:

(A) photographs;

(B) artwork; and

(C) any other drawn or printed media;

to a backing (paper, board, cloth, etc.) without causing discoloration to the artwork.

(111) "Multipurpose dry lubricant" means any lubricant that is:

(A) designed and labeled to provide lubricity by depositing a thin film of:

(i) graphite;

(ii) molybdenum disulfide (moly);

(iii) polytetrafluoroethylene; or

(iv) closely related fluoropolymer (Teflon) on surfaces; and

(B) designed for general purpose lubrication or for use in a wide variety of applications.

(112) "Multipurpose lubricant" means any lubricant designed for general purpose lubrication or for use in a wide variety of applications. The term does not include the following:

(A) Multipurpose dry lubricants.

(B) Penetrants.

(C) Silicone based multipurpose lubricants.

(113) "Multipurpose solvent" means the following:

(A) Any organic liquid designed to be used for a variety of purposes, including cleaning or degreasing of a variety of substrates, or thinning, dispersing, or dissolving other organic materials.

(B) The term includes solvents used in institutional facilities, except for laboratory reagents used in analytical, educational, research, scientific, or other laboratories.

(C) The term does not include the following:

(i) Solvents used in the following:

(AA) Cold cleaners.

(BB) Vapor degreasers.

(CC) Conveyorized degreasers.

(DD) Film cleaning machines.

(ii) Solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment.

(114) "Nail polish" means any clear or colored coating designed for application to the fingernails or toenails, including, but not limited to, the following:

(A) Lacquers.
(B) Enamels.
(C) Acrylics.
(D) Base coats.
(E) Top coats.

(115) "Nail polish remover" means a product designed to remove nail polish and coatings from fingernails or toenails.

(116) "Nonaerosol product" means any consumer product that is not dispensed by a pressurized spray system.

(117) "Noncarbon containing compound" means any compound that does not contain any carbon atoms.

(118) "Nonresilient flooring" means flooring of a mineral content that is not flexible, including, but not limited to, the following:

(A) Terrazzo.
(B) Marble.
(C) Slate.
(D) Granite.
(E) Brick.
(F) Stone.
(G) Ceramic tile.
(H) Concrete.

(119) "Nonselective terrestrial herbicide" means a terrestrial herbicide product that is toxic to plants without regard to species.

(120) "Oven cleaner" means any cleaning product designed to clean and remove dried food deposits from oven walls.

(121) "Paint" means any pigmented liquid, liquefiable, or mastic composition designed for application to a substrate in a thin layer that is:

(A) converted to an opaque solid film after application; and
(B) used for protection, decoration, or identification or to serve some functional purpose, such as the:
(i) filling or concealing of surface irregularities; or
(ii) modification of light and heat radiation characteristics.

(122) "Paint remover or stripper" means any product designed to strip or remove paints or other related coatings, by chemical action, from a substrate without markedly affecting the substrate. The term does not include the following:

(A) Multipurpose solvents.
(B) Paint brush cleaners.
(C) Products designed and labeled exclusively graffiti removers.
(D) Hand cleaner products that claim to remove paints and other related coatings from skin.

(123) "Penetrant" means a lubricant designed and labeled primarily to loosen metal parts that have bonded together due to rusting, oxidation, or other causes. The term does not include multipurpose lubricants that claim to have penetrating qualities but are not labeled primarily to loosen bonded parts.

(124) "Person" has the meaning set forth in IC 13-11-2-158.

(125) "Personal fragrance product" means any product that is applied to the human body or clothing for the primary purpose of adding a scent or masking a malodor, including cologne, perfume, after-shave, and toilet water. The term does not include the following:

(A) Deodorant.
(B) Medicated products designed primarily to alleviate fungal or bacterial growth on feet or other areas of the body.
(C) Mouthwashes, breath fresheners, and deodorizers.
(D) Lotions, moisturizers, powders, or other skin care products used primarily to alleviate skin conditions, such as dryness and irritations.
(E) Products designed exclusively for use on human genitalia.
(F) Soaps, shampoos, and products primarily used to clean the human body.
(G) Fragrance products designed to be used exclusively on nonhuman animals.

(126) "Pesticide" means any substance or mixture of substances labeled, designed, or intended for use:

(A) in preventing, destroying, repelling, or mitigating any pest; or
(B) as a defoliant, desiccant, or plant regulator.

The term does not include any substance, mixture of substances, or device that the U.S. EPA does not consider to be a pesticide.
(127) "Polyolefin adhesive" means an aerosol adhesive designed to bond polyolefins to substrates.
(128) "Polystyrene foam adhesive" means an aerosol adhesive designed to bond polystyrene foam to substrates.
(129) "Pressurized gas duster" means a pressurized product labeled to remove dust from a surface solely by means of mass air or gas flow, including the following surfaces:
(A) Photographs.
(B) Photographic film negatives.
(C) Computer keyboards.
(D) Other types of surfaces that cannot be cleaned with solvents.
The term does not include dusting aids.
(130) "Principal display panel or panels" means the part or parts of a label that are so designed as to most likely be displayed, presented, shown, or examined under normal and customary conditions of display or purchase. Whenever a principal display panel appears more than once, all requirements pertaining to the principal display panel shall pertain to all the principal display panels.
(131) "Product brand name" means the name of the product exactly as it appears on the principal display panel of the product.
(132) "Product category" means the applicable category that best describes the product as listed in this section and section 3(a) of this rule.
(133) "Product form" means, for the purpose of complying with section 7 of this rule only, the applicable form that most accurately describes the product's dispensing form as follows:
A = Aerosol Product
S = Solid
P = Pump Spray
L = Liquid
SS = Semisolid
O = Other
(134) "Product line" means a group of products of identical form and function belonging to the same product category or categories.
(135) "Propellant" means a liquefied or compressed gas that is used in whole or in part, such as a cosolvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container.
(136) "Pump spray" means a packaging system in which the product ingredients within the container are:
(A) not under pressure; and
(B) expelled only while a pumping action is applied to:
(i) a button;
(ii) a trigger; or
(iii) another actuator.
(137) "Responsible ACP party" means the company, firm, or establishment that is listed on the ACP product's label. If the label lists two (2) or more companies, firms, or establishments, the responsible ACP party is the party that the ACP product was "manufactured for" or "distributed by", as noted on the label.
(138) "Responsible party" means the company, firm, or establishment that is listed on the product's label. If the label lists two (2) companies, firms, or establishments, the responsible party is the party that the product was "manufactured for" or "distributed by", as noted on the label.
(139) "Restricted materials" means pesticides established as restricted materials under applicable IC 15-16-4.
(140) "Retailer" means any person who sells, supplies, or offers consumer products for sale directly to consumers.
(141) "Retail outlet" means any establishment where consumer products are sold, supplied, or offered for sale directly to consumers.
(142) "Roll-on product" means any antiperspirant or deodorant that dispenses active ingredients by rolling a wetted ball or wetted cylinder on the affected area.
(143) "Rubber and vinyl protectant" means the following:
(A) Any product designed to protect, preserve, or renew vinyl, rubber, and plastic on the following:

(i) Vehicles.
(ii) Tires.
(iii) Luggage.
(iv) Furniture.
(v) Household products, such as the following:
(AA) Vinyl covers.
(BB) Clothing.
(CC) Accessories.
(B) The term does not include the following:
(i) Products designed primarily to clean the wheel rim, such as aluminum or magnesium wheel cleaners.
(ii) Tire cleaners that do not leave an appearance enhancing or protective substance on the tire.
(144) "Rubbing alcohol" means any product:
(A) containing isopropyl alcohol (also called isopropanol) or denatured ethanol; and
(B) labeled for topical use, usually to:
(i) decrease germs in minor cuts and scrapes; and
(ii) relieve minor muscle aches, as a rubefacient, and for massage.
(145) "Sealant and caulking compound" means the following:
(A) Any product with adhesive properties that is designed to fill, seal, waterproof, or weatherproof gaps or joints between two (2) surfaces.
(B) The term does not include the following:
(i) Roof cements and roof sealants.
(ii) Insulating foams.
(iii) Removable caulking compounds. For purposes of this definition only, "removable caulking compounds" means a compound that temporarily seals windows or doors for three (3) to six (6) month time intervals.
(iv) Clear, paintable, or water resistant caulking compounds. For purposes of this definition, "clear, paintable, or water resistant caulking compounds" means a compound:
(AA) that contains no appreciable level of opaque fillers or pigments;
(BB) transmits most or all visible light through the caulk when cured;
(CC) is paintable; and
(DD) is immediately resistant to precipitation upon application.
(v) Floor seam sealers.
(vi) Products designed exclusively for automotive uses.
(vii) Sealers that are applied as continuous coatings.
(viii) Units of product, less packaging, that weigh more than one (1) pound and consist of more than sixteen (16) fluid ounces.
(146) "Semisolid" means a product that, at room temperature, will not pour but will spread or deform easily including, but not limited to, the following:
(A) Gels.
(B) Pastes.
(C) Greases.
(147) "Shaving cream" means an aerosol product that dispenses a foam lather intended to be used with a blade or cartridge razor, or other wet-shaving system, in the removal of facial or other bodily hair. The term does not include shaving gel.
(148) "Shaving gel" means an aerosol product that dispenses a post-foaming semisolid designed to be used with a blade, cartridge razor, or other shaving system in the removal of facial or other bodily hair. The term does not include shaving cream.
(149) "Silicone based multipurpose lubricant" means any lubricant that is designed and labeled:
(A) to provide lubricity primarily through the use of silicone compounds, including, but not limited to, polydimethylsiloxane; and
(B) for general purpose lubrication or for use in a wide variety of applications.
The term does not include products designed and labeled exclusively to release manufactured products from molds.
(150) "Single phase aerosol air freshener" means an aerosol air freshener:

(A) with the liquid contents in a single homogeneous phase; and
(B) that does not require that the product container be shaken before use.

(151) "Solid" means a substance or mixture of substances that, either whole or subdivided, such as the particles comprising a powder, is not capable of visually detectable flow as determined under ASTM D4359-90(2000)e1 "Standard Test Method for Determining Whether a Material Is a Liquid or a Solid"*.

(152) "Special purpose spray adhesive" means an aerosol adhesive that meets any of the following definitions:
(A) Mounting adhesive.
(B) Flexible vinyl adhesive.
(C) Polystyrene foam adhesive.
(D) Automobile headliner adhesive.
(E) Polyolefin adhesive.
(F) Laminate repair or edgebanding adhesive.
(G) Automotive engine compartment adhesive.

(153) "Specialty adhesive remover" means a product designed to remove reactive adhesives from a variety of substrates. Reactive adhesives include adhesives that require a hardener or catalyst in order for the bond to occur including, but not limited to, the following:
(A) Epoxies.
(B) Urethanes.
(C) Silicones.

The term does not include gasket or thread locking adhesive remover.

(154) "Spot remover" means the following:
(A) Any product labeled to clean localized areas or remove localized spots or stains on cloth or fabric, such as:
(i) drapes;
(ii) carpets;
(iii) upholstery; and
(iv) clothing;
that does not require subsequent laundering to achieve stain removal.
(B) The term does not include the following:
(i) Dry cleaning fluid.
(ii) Laundry prewash.
(iii) Multipurpose solvent.

(155) "Spray buff product" means a product designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad.

(156) "Stick product" means any antiperspirant or deodorant that:
(A) contains active ingredients in a solid matrix form; and
(B) dispenses the active ingredients by frictional action on the affected area.

(157) "Structural waterproof adhesive" means an adhesive:
(A) whose bond lines are resistant to conditions of continuous immersion in fresh or salt water; and
(B) that conforms with Federal Specification MMM-A-181D (Type 1, Grade A)*.

(158) "Table B compound" means any carbon-containing compound listed as an exception to the definition of VOC identified by the CARB in Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Section 94508*.

(159) "Terrestrial" means to live on or grow from land.

(160) "Tire sealant and inflation" means any pressurized product that is designed to temporarily inflate and seal a leaking tire.

(161) "Toilet or urinal care product" means the following:
(A) Any product designed or labeled to clean, deodorize, or clean and deodorize toilet bowls, toilet tanks, or urinals. Toilet bowls, toilet tanks, or urinals include, but are not limited to, the following:
(i) Toilets or urinals connected to permanent plumbing in buildings and other structures.
(ii) Portable toilets or urinals placed at temporary or remote locations.
(iii) Toilets or urinals in vehicles, such as the following:
(AA) Buses.

(BB) Recreational motor homes.
(CC) Boats.
(DD) Ships.
(EE) Aircraft.

(B) The term does not include the following:
(i) Bathroom and tile cleaner.
(ii) General purpose cleaner.

(162) "Type A propellant" means a compressed gas, such as carbon dioxide (CO_2), nitrogen (N_2), or nitrous oxide (N_2O), or compressed air that is used as a propellant and is either incorporated with the product or contained in a separate chamber within the product's packaging.

(163) "Type B propellant" means any halocarbon that is used as a propellant including the following:
(A) Chlorofluorocarbons (CFCs).
(B) Hydrochlorofluorocarbons (HCFCs).
(C) Hydrofluorocarbons (HFCs).

(164) "Type C propellant" means any propellant that is not a Type A or Type B propellant, including the following:
(A) Propane.
(B) Isobutane.
(C) n-butane.
(D) Dimethyl ether (also known as dimethyl oxide).

(165) "Undercoating" means any aerosol product designed to impart a protective, nonpaint layer to the undercarriage, trunk interior, or firewall of motor vehicles to prevent the formation of rust or to deaden sound. The term includes, but is not limited to, rubberized, mastic, or asphaltic products.

(166) "Usage directions" means the text or graphics on the product's principal display panel, label, or accompanying literature that describes to the end user how and in what quantity the product is to be used.

(167) "Vinyl, fabric, leather, or polycarbonate coating" means a coating designed and labeled exclusively to coat vinyl, fabric, leather, or polycarbonate substrates.

(168) "VOC content" means, except for charcoal lighter products, the total weight of VOC in a product expressed as a percentage of the product weight (exclusive of the container or packaging), as determined under section 9 of this rule.

(169) "Volatile organic compound" or "VOC" has the meaning set forth in 326 IAC 1-2-90.

(170) "Wasp and hornet insecticide" means any insecticide product that is designed for use against:
(A) wasps;
(B) hornets;
(C) yellow jackets; or
(D) bees;

by allowing the user to spray from a distance a directed stream or burst at the intended insects or their hiding place.

(171) "Waterproofer" means a product designed and labeled exclusively to repel water from fabric or leather substrates. The term does not include fabric protectants.

(172) "Wax" means a material or synthetic thermoplastic substance generally of high molecular weight hydrocarbons or high molecular weight esters of fatty acids or alcohols, except glycerol and high polymers (plastics). The term includes, but is not limited to, the following:
(A) Substances derived from the secretions of plants and animals, such as carnauba wax and beeswax.
(B) Substances of a mineral origin, such as ozocerite and paraffin.
(C) Synthetic polymers, such as polyethylene.

(173) "Web spray adhesive" means any aerosol adhesive that is not a mist spray or special purpose spray adhesive.

(174) "Wood cleaner" means the following:
(A) A product labeled to clean wooden materials, including, but not limited to, the following:
(i) Decking.
(ii) Fences.
(iii) Flooring.
(iv) Logs.

(v) Cabinetry.
(vi) Furniture.
(B) The term does not include the following:
(i) Dusting aids.
(ii) General purpose cleaners.
(iii) Furniture maintenance products.
(iv) Floor wax strippers.
(v) Floor polishes or waxes.
(vi) Products designed and labeled exclusively to preserve or color wood.
(175) "Wood floor wax" means wax based products for use solely on wood floors.
*These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-15-2; filed Nov 1, 2010, 12:38 p.m.: 20101201-IR-326070351FRA)*

326 IAC 8-15-3 Standards
Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-17

Sec. 3. (a) Except as provided in sections 4 through 6 of this rule, no person shall sell, supply, offer for sale, or manufacture for sale in Indiana any consumer product manufactured on or after June 1, 2011, that contains VOCs in excess of the VOC content limits specified in the following table of standards:

Product Category	VOC Standard (percent VOC by weight)
Adhesives:	
Aerosol mist spray	65
Aerosol web spray	55
Special purpose spray adhesives:	
Mounting, automotive engine compartment, and flexible vinyl	70
Polystyrene foam and automotive headliner	65
Polyolefin and laminate repair or edgebanding	60
Construction, panel, and floor	15
Contact	80
Contact general purpose	55
Contact special purpose	80
General purpose	10
Structural waterproof	15
Adhesive removers:	
Floor or wall covering	5
Gasket or thread locking	50
General purpose	20
Specialty	70
Air fresheners:	
Single phase aerosol	30
Double phase aerosol	25
Liquids or pump sprays	18
Solids or semisolids	3

Antiperspirants:	
Aerosol	40 HVOC 10 MVOC
Nonaerosol	0 HVOC 0 MVOC
Antistatic product, nonaerosol	11
Automotive brake cleaners	45
Automotive rubbing or polishing compound	17
Automotive wax, polish, sealant, or glaze:	
Hard paste waxes	45
Instant detailers	3
All other forms	15
Automotive windshield washer fluids	35
Bathroom and tile cleaners:	
Aerosol	7
All other forms	5
Bug and tar remover	40
Carburetor or fuel injection air intake cleaners	45
Carpet and upholstery cleaners:	
Aerosols	7
Nonaerosol (dilutables)	0.1
Nonaerosol (ready-to-use)	3.0
Charcoal lighter material [1]	
Cooking spray, aerosols	18
Deodorants:	
Aerosol	0 HVOC 10 MVOC
Nonaerosol	0 HVOC 0 MVOC
Dusting aids:	
Aerosols	25
All other forms	7
Electrical cleaner	45
Electronic cleaner	75
Engine degreasers:	
Aerosol	35
Nonaerosol	5
Fabric protectants	60
Fabric refresher:	
Aerosol	15
Nonaerosol	6
Floor polishes or waxes:	
Products for flexible flooring materials	7
Products for nonresilient flooring	10

Wood floor wax	90
Floor wax strippers, nonaerosol [2]	
Footwear or leather care products:	
Aerosol	75
Solid	55
Other forms	15
Furniture maintenance products:	
Aerosol	17
All other forms except solid or paste	7
General purpose cleaners:	
Aerosol	10
Nonaerosol	4
General purpose degreasers:	
Aerosol	50
Nonaerosol	4
Glass cleaners:	
Aerosols	12
Nonaerosol	4
Graffiti remover:	
Aerosol	50
Nonaerosol	30
Hair mousses	6
Hair shines	55
Hair sprays	55
Hairstyling gels	6
Hairstyling products:	
Aerosol and pump sprays	6
All other forms	2
Heavy-duty hand cleaner or soap	8
Insecticides:	
Crawling bug (aerosol)	15
Crawling bug (all other forms)	20
Flea and tick	25
Flying bug (aerosol)	25
Flying bug (all other forms)	35
Foggers	45
Lawn and garden (nonaerosol)	3
Lawn and garden (all other forms)	20
Wasp and hornet	40
Laundry prewash:	
Aerosol or solids	22
All other forms	5
Laundry starch products	5
Metal polish or cleaners	30

Multipurpose lubricant (excluding solid or semisolid products)	50
Nail polish remover	75
Nonselective terrestrial herbicide, nonaerosol	3
Oven cleaners:	
Aerosol or pump sprays	8
Liquids	5
Paint removers or strippers	50
Penetrants	50
Rubber and vinyl protectants:	
Aerosol	10
Nonaerosol	3
Sealants and caulking compounds	4
Shaving creams	5
Shaving gels	7
Silicone based multipurpose lubricants (excluding solid or semisolid products)	60
Spot removers:	
Aerosol	25
Nonaerosol	8
Tire sealants and inflators	20
Undercoatings, aerosol	40
Wood cleaner:	
Aerosol	17
Nonaerosol	4
[1] See subsection (f) regarding charcoal lighter material standards.	
[2] See subsection (h) regarding floor wax strippers.	

(b) No person shall:
(1) sell;
(2) supply;
(3) offer for sale; or
(4) manufacture for sale;
in Indiana any antiperspirant or deodorant that contains any compound that has been identified by the CARB in Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 7, Section 93000* as a toxic air contaminant.

(c) Products that are diluted prior to use shall satisfy the following requirements:

(1) For consumer products for which the label, packaging, or accompanying literature specifically states that the product should be diluted with water or non-VOC solvent prior to use, the VOC content limits specified in subsection (a) shall apply to the product only after the minimum recommended dilution has taken place. For purposes of this rule, minimum recommended dilution shall not include recommendations for incidental use of a concentrated product to deal with limited special applications such as hard-to-remove soils or stains.

(2) For consumer products for which the label, packaging, or accompanying literature states that the product should be diluted with any VOC solvent prior to use, the limits specified in subsection (a) shall apply to the product only after the maximum recommended dilution has taken place.

(d) The following provisions apply to the sell-through of products:

(1) Notwithstanding the provisions of subsections (a) and (g), a consumer product manufactured prior to the effective date of this rule, June 1, 2011, may be sold, supplied, or offered for sale after the effective date of this rule, June 1, 2011.

(2) Subdivision (1) does not apply to any consumer product that does not display on the product container or package the date on which the product was manufactured, or a code indicating the date, in accordance with section 6(a) of this rule.

(e) For consumer products subject to this rule that are registered under the Federal Insecticide, Fungicide, and Rodenticide

Act (FIFRA, 7 U.S.C. Section 136, et seq.), the effective date of the VOC standards specified in subsection (a) is June 1, 2012.

(f) The following requirements apply to all charcoal lighter materials:

(1) No person shall sell, supply, or offer for sale after June 1, 2011, any charcoal lighter material product unless at the time of the transaction the manufacturer can demonstrate that the product has been issued a currently effective certification by one (1) of the following:

(A) The CARB under the Consumer Products provisions under Subchapter 8.5, Article 2, Section 94509(h), of Title 17 of the California Code of Regulations. The certification remains in effect for Indiana for as long as the CARB certification remains in effect.

(B) A certification by an air pollution control agency of another state and the U.S. EPA. The certification must be current at the time of the transaction.

(2) Upon request by the department, a manufacturer claiming certification in accordance with subdivision (1) shall submit to the department a copy of the certification decision, that is, the Executive Order, including all conditions established by CARB applicable to the certification.

(g) The following requirements apply to aerosol adhesives:

(1) The VOC standards for aerosol adhesives apply to all uses of aerosol adhesives including consumer, industrial, and commercial uses. Except as otherwise provided in sections 4 and 5 of this rule, no person shall sell, supply, offer for sale, use, or manufacture for sale in Indiana any aerosol adhesive that, at the time of sale, use, or manufacture, contains VOCs in excess of the VOC limits specified in subsection (a).

(2) In order to qualify as a special purpose spray adhesive, the product must meet one (1) or more of the definitions in section 2 of this rule, but if the product label indicates that the product is suitable for use on any substrate or application not listed in one (1) of the definitions for special purpose spray adhesive, then the product shall be classified as either a web spray adhesive or a mist spray adhesive. If a product:

(A) meets more than one (1) of the definitions in section 2 of this rule for a special purpose spray adhesive; and

(B) is not classified as a web spray adhesive or mist spray adhesive;

then the VOC content limit for the product shall be the lowest applicable VOC content limit specified in subsection (a).

(3) Effective, June 1, 2011, no person shall sell, supply, offer for sale, or manufacture for use in Indiana any aerosol adhesive that contains any of the following compounds:

(A) Methylene chloride.

(B) Perchloroethylene.

(C) Trichloroethylene.

(4) All aerosol adhesives must comply with the labeling requirements specified in section 7 of this rule.

(h) The following requirements apply to floor wax strippers:

(1) The label of each nonaerosol floor wax stripper must specify a dilution ratio for light or medium buildup of polish that results in an as-used VOC concentration of three percent (3%) by weight or less.

(2) If a nonaerosol floor wax stripper is also intended to be used for removal of heavy buildup of polish, the label of that floor wax stripper must specify a dilution ratio for heavy buildup of polish that results in an as-used VOC concentration of twelve percent (12%) by weight or less.

(3) The terms "light buildup", "medium buildup", or "heavy buildup" are not specifically required as long as comparable terminology is used.

(i) The following requirements apply to products containing ozone depleting compounds:

(1) For any consumer product subject to subsection (a), no person shall sell, supply, offer for sale, or manufacture for sale in Indiana any consumer product that contains any of the following ozone depleting compounds:

(A) Trichlorofluoromethane (CFC-11).

(B) Dichlorodifluoromethane (CFC-12).

(C) 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113).

(D) 1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114).

(E) Chloropentafluoroethane (CFC-115).

(F) Bromochlorodifluoromethane (Halon 1211).

(G) Bromotrifluoromethane (Halon 1301).

(H) Dibromotetrafluoroethane (Halon 2402).

(I) Chlorodifluoromethane (HCFC-22).
(J) 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123).
(K) 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124).
(L) 1,1-dichloro-1-fluoroethane (HCFC-141b).
(M) 1-chloro-1,1-difluoroethane (HCFC-142b).
(N) 1,1,1-trichloroethane.
(O) Carbon tetrachloride.

(2) The requirements in subdivision (1) shall not apply to any existing product formulation that:
(A) complies with the VOC content limits listed in subsection (a); or
(B) is reformulated to meet the VOC content limits in subsection (a) provided the ozone depleting compound content of the reformulated product does not increase.

(3) The requirements of subdivision (1) shall not apply to any ozone depleting compounds that may be present as impurities in a consumer product in an amount equal to or less than one-hundredth of one percent (0.01%) by weight of the product.

(j) The following requirements apply to adhesive removers, contact adhesives, electrical cleaners, electronic cleaners, footwear or leather care products, general purpose degreasers, and graffiti removers:

(1) Except as provided in subdivisions (2) and (4), effective June 1, 2011, no person shall sell, supply, offer for sale, or manufacture for use in Indiana any adhesive remover, contact adhesive, electrical cleaner, electronic cleaner, footwear or leather care product, general purpose degreaser, or graffiti remover that contains any of the following compounds:
(A) Methylene chloride.
(B) Perchloroethylene.
(C) Trichloroethylene.

(2) Products manufactured before June 1, 2011, may be sold, supplied, or offered for sale until June 1, 2014, so long as the product container or package displays the date on which the product was manufactured, or a code indicating the date, in accordance with section 7(a) of this rule.

(3) Any person who sells or supplies a consumer product identified in subdivision (1) must notify the purchaser of the product in writing that the sell-through period for that product will end on June 1, 2014 if both of the following conditions are met:
(A) The product is sold or supplied to a distributor or retailer.
(B) The product is sold or supplied on or after May 31, 2014.

(4) The requirements of subdivisions (1) and (3) shall not apply to any adhesive remover, contact adhesive, electrical cleaner, electronic cleaner, footwear or leather care product, general purpose degreaser, or graffiti remover containing methylene chloride, perchloroethylene, or trichloroethylene that is present as an impurity in a combined amount equal to or less than one-hundredth of one percent (0.01%) by weight.

*This document is incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-15-3; filed Nov 1, 2010, 12:38 p.m.: 20101201-IR-326070351FRA)*

326 IAC 8-15-4 Exemptions

Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-127

Sec. 4. (a) This rule shall not apply to any consumer product manufactured in Indiana for shipment and use outside of Indiana.

(b) This rule shall not apply to a manufacturer or distributor who sells, supplies, or offers for sale in Indiana a consumer product that does not comply with the VOC standards specified in section 3(a) of this rule, as long as the manufacturer or distributor can demonstrate both that the:

(1) consumer product is intended for shipment and use outside of Indiana; and

(2) manufacturer or distributor has taken reasonable prudent precautions to assure that the consumer product is not distributed in Indiana.

(c) Subsection (b) does not apply to consumer products that are sold, supplied, or offered for sale by any person to retail outlets in Indiana.

(d) A retailer who sells, offers for sale, or holds for sale in Indiana a consumer product that violates the VOC content limits specified in section 3(a) of this rule will not be in violation of this rule if the retailer:

(1) upon determining that a noncomplying product was purchased, immediately discontinues sale of the consumer product in Indiana; and

(2) demonstrates to the satisfaction of the department that the purchase was made with reasonable good faith efforts to assure that the product met the applicable requirements of this rule. Good faith efforts may be demonstrated by the following:

(A) Written communication between the retailer and the manufacturers and distributors that the retailer will accept only consumer products for sale in Indiana that comply with this rule.

(B) Written agreements between the retailer and the manufacturers and distributors in which the manufacturers and distributors commit to supply to the retailer only consumer products that comply with this rule.

(C) The retailer's use of invoices, purchase orders, and other contractual and billing documents that specify that the retailer will only accept consumer products that comply with this rule.

(e) The MVOC content standards specified in section 3(a) of this rule for antiperspirants or deodorants shall not apply to ethanol.

(f) The VOC limits specified in section 3(a) of this rule shall not apply to the following:

(1) Fragrances up to a combined level of two percent (2%) by weight contained in any consumer product and shall not apply to colorants up to a combined level of two percent (2%) by weight contained in any antiperspirant or deodorant.

(2) Antiperspirants or deodorants, for those VOCs that contain more than ten (10) carbon atoms per molecule and for which the vapor pressure is unknown, or that have a vapor pressure of two (2) mm Hg or less at twenty (20) degrees Celsius.

(3) Any LVP-VOC.

(4) Air fresheners that are comprised entirely of fragrance, less compounds not defined as VOCs under section 2 of this rule or exempted under subdivision (3).

(5) Insecticides containing at least ninety-eight percent (98%) para-dichlorobenzne.

(6) Adhesives sold in containers of one (1) fluid ounce or less.

(7) Bait station insecticides. For purposes of this subsection, "bait station insecticides" means containers enclosing an insecticidal bait that is not more than five-tenths (0.5) ounce by weight, where the bait is:

(A) designed to be ingested by insects; and

(B) composed of solid material feeding stimulants with less than five percent (5%) active ingredients.

(g) The requirements of section 7(a) of this rule shall not apply to consumer products registered under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136, et seq.). *(Air Pollution Control Division; 326 IAC 8-15-4; filed Nov 1, 2010, 12:38 p.m.: 20101201-IR-326070351FRA)*

326 IAC 8-15-5 Innovative products exemption

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

Sec. 5. (a) A consumer product is exempt from the VOC limit requirements of section 3(a) of this rule if the manufacturer has been granted an innovative product exemption by one (1) of the following:

(1) The CARB under the Innovative Products provisions in:

(A) Subchapter 8.5, Article 2, Section 94511 of Title 17 of the California Code of Regulations; or

(B) Subchapter 8.5, Article 1, Section 94503.5 of Title 17 of the California Code of Regulations.

(2) The air pollution control agency of another state that has adopted a consumer and commercial product rule with an innovative products exemption provision substantially equivalent to the OTC "Model Rule for Consumer Products", September 13, 2006.

(b) An innovative products exemption in accordance with subsection (a) shall be valid for use in Indiana when all of the following requirements are met:

(1) The innovative product exemption is still in effect and has not expired.

(2) The manufacturer claiming an innovative products exemption in accordance with subsection (a)(1) shall do the following:

(A) Submit to the department a copy of the CARB innovative product exemption decision, that is, the Executive Order, including all conditions established by CARB applicable to the exemption.

(B) Maintain all information specified in the innovative product exemption approving an innovative product application for a minimum of three (3) years after the expiration of the exemption.

(C) Make all records available to the department or the U.S. EPA upon request.

(3) The manufacturer claiming an innovative products exemption in accordance with subsection (a)(2) shall certify to the department the following:

(A) The product (including its form) for which the innovative products exemption is being used to comply with this rule satisfies the following requirements:

(i) The product belongs to a chemically formulated consumer product category that is subject to a VOC content limit in section 3(a) of this rule.

(ii) The VOC content limit promulgated for this product by the air pollution control agency that issued the innovative products exemption is equal to or more stringent than the most stringent applicable VOC content limit specified in section 3(a) of this rule.

(B) The manufacturer must demonstrate to the department by clear and convincing evidence that, due to some characteristic of the product formulation, design, delivery systems, or other fact, the use of the product will result in less VOC emissions compared to either the VOC emissions from a representative chemically formulated consumer product that complies with the VOC content limits in section 3(a) of this rule, or as compared to the calculated VOC emissions from a noncomplying representative product, if the product has been reformulated to comply with the VOC limits specified in section 3(a) of this rule.

(C) Prior to relying on an innovative products exemption for compliance, the manufacturer must submit to the department the following information:

(i) A statement that, for a specified chemically formulated consumer product that it manufactures, the manufacturer intends to comply with this section under an innovative products exemption rather than meet the applicable VOC content limits in section 3(a) of this rule.

(ii) The brand name of the consumer product, and the specific chemically formulated consumer product category in section 3(a) of this rule that the product belongs to, including its forms (if applicable).

(iii) A copy of the following:

(AA) The documents setting forth the innovative products exemption.

(BB) The issuing state's air pollution control agency's approval.

(CC) The issuing state's air pollution control agency's conditions of approval.

(DD) The demonstration of clause (B).

(EE) Any documents from the issuing state's air pollution control agency that subsequently modifies or terminates its conditions of approval.

(FF) Documentation demonstrating compliance with the innovative products exemption.

(iv) A statement that the innovative products exemption and the product or products for which the innovative products exemption is being used conform with the requirements of clauses (A) and (B) and this clause.

(c) If the VOC limits specified in section 3(a) of this rule are lowered for a product category through any subsequent rulemaking, all innovative product exemptions granted for products in the product category shall have no force and effect as of the effective date of the modified VOC standard. This subsection shall not apply to those innovative products that have VOC emissions less than the applicable lowered VOC limit and for which a written notification of the product's emissions status versus the lowered VOC limit has been submitted to and approved by the department at least sixty (60) days before the effective date of the limits.

(d) If the consumer product for which an exemption has been granted no longer meets the criteria for an innovative product exemption, the department may revoke the exemption as necessary. *(Air Pollution Control Division; 326 IAC 8-15-5; filed Nov 1, 2010, 12:38 p.m.: 20101201-IR-326070351FRA)*

326 IAC 8-15-6 Alternative control plan

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

Sec. 6. (a) The purpose of this section is to provide an alternative method to comply with the limits in section 3(a) of this rule by allowing responsible alternative control plan (ACP) parties the option of voluntarily entering into separate ACPs for consumer

products as specified in this section. Only responsible ACP parties for consumer products may enter into an ACP.

(b) Any manufacturer of consumer products shall be exempt from the VOC limit requirements of section 3(a) of this rule if they have been granted an ACP agreement by one (1) of the following:

(1) The CARB under the provisions in Subchapter 8.5, Article 4, Sections 9450-94555, of Title 17 of the California Code of Regulations.

(2) The air pollution control agency of another state that has adopted a consumer and commercial product rule with ACP provisions substantially equivalent to the OTC "Model Rule for Consumer Products", September 13, 2006.

(c) An ACP agreement in accordance with subsection (b) shall be valid for use in Indiana when all of the following requirements are met:

(1) The ACP agreement is in effect and has not expired.

(2) The responsible ACP party claiming an exemption in accordance with subsection (b)(1) shall do the following:

(A) Submit to the department the following:

(i) A copy of the CARB ACP decision, that is, the Executive Order, including all conditions established by CARB applicable to the exemption.

(ii) A statement that all ACP products within the ACP agreement are subject to the VOC limits in section 3(a) of this rule.

(B) Maintain all information specified in the ACP agreement approving an ACP exemption for a minimum of three (3) years after the expiration of the ACP.

(C) Make all records available to the department or the U.S. EPA upon request.

(3) The responsible ACP party claiming an exemption in accordance with subsection (b)(2) shall certify to the department the following:

(A) The product (including its form) for which ACP agreement exemption is being used to comply with this rule satisfies the following requirements:

(i) The product belongs to a chemically formulated consumer product category that is subject to a VOC content limit in section 3(a) of this rule.

(ii) The VOC content limit promulgated for this product by the air pollution control agency that issued the ACP agreement is equal to or more stringent than the most stringent applicable VOC content limit specified in section 3(a) of this rule.

(B) Prior to relying on an ACP agreement for compliance, the responsible ACP party must submit to the department the following information:

(i) A statement that, for a specified chemically formulated consumer product that it manufactures, the manufacturer intends to comply with this section under an ACP agreement rather than meet the applicable VOC content limits in section 3(a) of this rule.

(ii) The brand name of the consumer product, and the specific chemically formulated consumer product category in section 3(a) of this rule that the product belongs to, including its forms (if applicable).

(iii) A copy of the following:

(AA) The documents setting forth the ACP agreement.

(BB) The issuing state's air pollution control agency's approval.

(CC) The issuing state's air pollution control agency's conditions of approval.

(DD) Any documents from the issuing state's air pollution control agency that subsequently modifies or terminates its conditions of approval.

(EE) Documentation demonstrating compliance with the ACP agreement.

(iv) A statement that the ACP agreement and the product or products for which the ACP agreement is being used conform with the requirements of clause (A) and this clause.

(d) The responsible ACP party shall notify the department, in writing, of any change not later than fifteen (15) working days from the date that a change occurs in an ACP product's:

(1) name;

(2) formulation;

(3) form;

(4) function;

(5) applicable product category or categories;
(6) VOC content;
(7) LVP content;
(8) date codes; or
(9) recommended product usage directions.

(e) If the VOC limits specified in section 3(a) of this rule are lowered for a product category through any subsequent rulemaking, all ACP agreements granted for products in the product category shall have no force and effect as of the effective date of the modified VOC standard. This subsection shall not apply to those ACP agreements that have VOC emissions less than the applicable lowered VOC limit and for which a written notification of the product's emissions status versus the lowered VOC limit has been submitted to and approved by the department at least sixty (60) days before the effective dates of the limits.

(f) The responsible ACP party shall notify the department, in writing, upon learning that a requirement of subsection (c) is no longer satisfied.

(g) If the ACP agreement does not meet the requirements of subsection (c), the department may revoke the exemption as necessary. *(Air Pollution Control Division; 326 IAC 8-15-6; filed Nov 1, 2010, 12:38 p.m.: 20101201-IR-326070351FRA)*

326 IAC 8-15-7 Administrative requirements

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

Sec. 7. (a) Each manufacturer of a consumer product subject to this rule shall clearly display on each consumer product container or package, the day, month, and year that the product was manufactured, or a code indicating the date according to the following requirements:

(1) A manufacturer who uses the following code to indicate the date of manufacture shall not be subject to the requirements of subsection (b) if the code is represented separately from other codes on the product container so that it is easily recognizable:

YY DDD = year year day day day

Where:	YY	=	two (2) digits representing the year in which the product was manufactured; and
	DDD	=	three (3) digits representing the day of the year on which the product was manufactured, with 001 representing the first day of the year, 002 representing the second day of the year, and so forth, that is, the Julian date.

(2) The date or code shall be displayed on each consumer product container or package not later than June 1, 2011.

(3) The date or code information shall be located on the container or inside the cover or cap so that it is readily observable or obtainable without irreversibly disassembling any part of the container or packaging. For the purpose of this subdivision, information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.

(4) The requirements of this subsection shall not apply to product containing no VOCs or containing VOCs at one-tenth percent (0.10%) by weight or less.

(b) Additional product dating requirements are as follows:

(1) If a manufacturer uses a code indicating the date of manufacture, for any consumer product subject to this rule, an explanation of the date portion of the code shall be filed with the department no later than June 1, 2011.

(2) If a manufacturer changes any code indicating the date of manufacture for any product subject to subdivision (1), an explanation of the modified code shall be submitted to the department before any products displaying the modified code are sold, supplied, or offered for sale in Indiana.

(3) No person shall:
(A) erase;
(B) alter;
(C) deface;
(D) otherwise remove; or
(E) make illegible;

any date or code indicating the date of manufacture from any regulated product container without the express authorization

of the manufacturer.

(4) Date code explanations for codes indicating the date of manufacture:

(A) are public information; and

(B) may not be claimed as confidential.

(c) Additional labeling requirements for aerosol adhesives, adhesive removers, electronic cleaner, electrical cleaner, energized electrical cleaner, and contact adhesives are as follows:

(1) In addition to the requirements specified in this section and section 7 of this rule, both the manufacturer and responsible party for each aerosol adhesive, adhesive remover, electronic cleaner, electrical cleaner, energized electrical cleaner, and contact adhesive product subject to this rule shall ensure that all products clearly display the following information on each product container that is manufactured on or after June 1, 2011:

(A) The product category as specified in section 3(a) of this rule or an abbreviation of the category.

(B) The applicable VOC standard for the product as specified in section 3(a) of this rule, except for energized electrical cleaner, expressed as a percentage by weight, unless the product is included in an ACP approved by the department in accordance with section 5 of this rule, and the product exceeds the applicable VOC content limit.

(C) If the product is included in an approved ACP and the product exceeds the applicable VOC content limits in section 3(a) of this rule, the product shall be labeled with the term "ACP" or "ACP product".

(D) If the product is classified as a special purpose spray adhesive, the applicable substrate or application, or both, or an abbreviation of the substrate or application that qualifies the product as special purpose.

(E) If the manufacturer or responsible party uses an abbreviation as allowed by clause (D), an explanation of the abbreviation must be filed with the department before the abbreviation is used.

(2) The information required by subsection (a) shall be displayed on the product container such that it is readily observable without removing or disassembling any portion of the product container or packaging. For the purposes of this rule, information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.

(3) No person shall:

(A) remove;

(B) alter;

(C) conceal; or

(D) deface;

the information required in subdivision (1) prior to final sale of the product.

(d) The following most restrictive limits apply:

(1) For products manufactured before June 1, 2011, and FIFRA registered insecticides manufactured before June 1, 2012, the following apply:

(A) Notwithstanding the definition of product category, as defined in section 2 of this rule, if anywhere on the principal display panel of any consumer product any representation is made that the product may be used as, or is suitable for use as, a consumer product for which a lower VOC content limit is specified in section 3(a) of this rule, then the lowest VOC limit shall apply.

(B) This requirement does not apply to general purpose cleaners, antiperspirant or deodorant products, and insecticide foggers.

(2) For products manufactured on or after June 1, 2011, and FIFRA registered insecticides manufactured on or after June 1, 2012, the following apply:

(A) Notwithstanding the definition of product category, as defined in section 2 of this rule, if anywhere on the container or packaging of any consumer product, or on any sticker or label affixed thereto, any representation is made that the product may be used as, or is suitable for use as, a consumer product for which a lower VOC content limit is specified in section 3(a) of this rule, then the lowest VOC limit shall apply.

(B) This requirement does not apply to general purpose cleaners, antiperspirant or deodorant products, and insecticide foggers.

(Air Pollution Control Division; 326 IAC 8-15-7; filed Nov 1, 2010, 12:38 p.m.: 20101201-IR-326070351FRA)

326 IAC 8-15-8 Record keeping and reporting requirements

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

Sec. 8. (a) The department may require any responsible party to report information, within ninety (90) days written notice, for any consumer product or products the department may specify, including, but not limited to, all or part of the following information:

(1) The name, address, and telephone number of the responsible party and the name and telephone number of the responsible party's designated contact person.
(2) Any claim of confidentiality made under 326 IAC 17.1.
(3) The product brand name for each consumer product and the product label.
(4) The product category to which the consumer product belongs.
(5) The applicable product form or forms listed separately.
(6) An identification of each product brand name and form as a "Household Product" or "I & I Product", or both.
(7) Separate Indiana sales in pounds per year, to the nearest pound, and the method used to calculate Indiana sales for each product form.
(8) For information submitted by multiple companies, an identification of each company that is submitting relevant data, separate from that submitted by the responsible party. All information from all companies shall be submitted within ninety (90) days written notice from the department.
(9) For each product brand name and form, the net percent by weight of the total product, less container and packaging, comprised of the following, rounded to the nearest one-tenth percent (0.1%):
    (A) Total of Table B compounds.
    (B) Total of LVP-VOCs that are not fragrances.
    (C) Total of all other carbon containing compounds that are not fragrances.
    (D) Total of all noncarbon containing compounds.
    (E) Total of fragrance.
    (F) For products containing greater than two percent (2%), by weight, fragrance:
        (i) the percent of fragrance that is LVP-VOCs; and
        (ii) the percent of fragrance that is all other carbon containing compounds.
    (G) Total of para-dichlorobenzene.
(10) For each product brand name and form, the identity, including the specific chemical name and associated Chemical Abstract Services (CAS) number, of the following:
    (A) Each Table B compound.
    (B) Each LVP-VOC that is not a fragrance.
(11) If applicable, the weight percent comprised of propellant for each product.
(12) If applicable, an identification of the type of propellant (Type A, Type B, Type C, or a blend of the different types).

(b) If the responsible party does not have or does not provide the information requested, the department may require the reporting of this information by the person that has the information, including, but not limited to, any of, the following:

(1) The formulator.
(2) The manufacturer.
(3) The supplier.
(4) The parent company.
(5) The private labeler.
(6) The distributor.
(7) The repackager.

(c) The following special reporting requirements apply to consumer products subject to this rule that contain perchloroethylene or methylene chloride:

(1) For each consumer product that contains perchloroethylene or methylene chloride, the responsible party shall report the following information for products sold in Indiana upon request of the department within ninety (90) days written notice:
    (A) The product brand name and a copy of the product label with legible usage instructions.

(B) The product category to which the consumer product belongs.

(C) The applicable product form or forms (listed separately).

(D) For each product form listed, the total sales in Indiana during the calendar year, to the nearest pound (exclusive of the container and packaging), and the method used for calculating the Indiana sales.

(E) The weight percent, to the nearest one-tenth percent (0.10%), of perchloroethylene and methylene chloride in the consumer product.

(2) For purposes of this subsection, "contains perchloroethylene or methylene chloride" means the product contains one percent (1.0%) or more by weight (exclusive of the container or packaging) of either perchloroethylene or methylene chloride.

(d) Persons subject to this rule shall do the following:

(1) Maintain all records for a minimum of three (3) years.

(2) Make records available to the department and U.S. EPA upon request.

(e) Any person supplying information under this rule may request that the information be kept confidential as trade secret information, and the department will evaluate the claim in accordance with 326 IAC 17.1. *(Air Pollution Control Division; 326 IAC 8-15-8; filed Nov 1, 2010, 12:38 p.m.: 20101201-IR-326070351FRA)*

326 IAC 8-15-9 Test methods

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

Affected: IC 13-17

Sec. 9. (a) Testing to determine compliance with the VOC content limits specified in section 3(a) of this rule shall be performed by either the manufacturer or responsible party using either of the following:

(1) CARB Method 310*, "Determination of Volatile Organic Compounds in Consumer Products".

(2) An alternative method that is shown to accurately determine the concentration of VOCs in a product. The alternative method must first be approved in writing by the department and U.S. EPA.

(b) Compliance with the VOC content limits specified in section 3(a) of this rule may be demonstrated through calculation of the VOC content of a consumer product from records of the amounts of constituents used to make the product (excluding packaging), under the following criteria:

(1) Compliance determinations based on these records may not be used unless the manufacturer of a consumer product keeps accurate records for each day of production of the amount and chemical composition of the individual product constituents. A manufacturer or responsible party subject to this rule shall do the following:

(A) Maintain all records for a minimum of three (3) years.

(B) Make records available to the department and U.S. EPA upon request.

(2) For purposes of this section, the VOC content of a product shall be calculated according to the following equation:

$$\text{VOC Content} = \frac{B - C}{A} \times 100$$

Where: A = Total net weight of a unit of product (excluding any packaging).

B = Total weight of all VOCs, per unit.

C = Total weight of VOCs exempted, per unit.

(3) If product records appear to demonstrate compliance with the VOC limits, but these records are contradicted by product testing performed using CARB Method 310*, the results of CARB Method 310*:

(A) shall take precedence over the product records; and

(B) may be used to establish a violation of the requirements of the VOC content limits in section 3(a) of this rule.

(c) Testing to determine whether a product is a liquid or a solid shall be performed using ASTM D4359-90(2000)e1 "Standard Test Method for Determining Whether a Material Is a Liquid or a Solid"*.

(d) Testing to determine distillation points of petroleum distillate based charcoal lighter materials shall be performed using ASTM D86-04b "Standard Test Method for Distallation of Petroleum Products at Atmospheric Pressure"*.

(e) No person shall create, alter, falsify, or otherwise modify records in such a way that the records do not accurately reflect:

(1) the constituents used to manufacture a product;

(2) the chemical composition of the individual product; and

(3) any other test, processes, or records used in connection with product manufacture.

*These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-15-9; filed Nov 1, 2010, 12:38 p.m.: 20101201-IR-326070351FRA)*

Rule 16. Offset Lithographic Printing and Letterpress Printing

326 IAC 8-16-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to sources in Lake County or Porter County that meet either of the following criteria:
(1) Have actual volatile organic compound (VOC) emissions, before consideration of controls, of equal to or greater than three (3) tons per rolling twelve (12) month period from all offset lithographic printing operations, including fountain solution and cleaning activities. Offset lithographic printing presses include heatset web, nonheatset web, and sheet-fed.
(2) Have actual VOC emissions, before consideration of controls, equal to or greater than three (3) tons per rolling twelve (12) month period from all letterpress printing operations, including cleaning activities.
(b) Offset lithographic printing operations and letterpress printing operations exempt from the requirements of this rule based on the threshold applicability in subsection (a) shall maintain records as required under section 11 of this rule. *(Air Pollution Control Division; 326 IAC 8-16-1; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)*

326 IAC 8-16-2 Exemptions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. The following exemptions apply in this rule:
(1) Any heatset web offset lithographic printing press or heatset web letterpress printing press with potential VOC emissions from the dryer (ink oil) less than twenty-five (25) tons per year before consideration of controls or any heatset web offset lithographic printing press or heatset web letterpress printing press with actual VOC emissions from the dryer (ink oil) limited through enforceable permit conditions to less than twenty-five (25) tons per year before consideration of controls is exempt from the add-on control requirements in section 4(a) of this rule.
(2) Any heatset web offset lithographic printing press used for book printing or with maximum web width of twenty-two (22) inches or less is exempt from the add-on control requirements in section 4(a) of this rule.
(3) Any offset lithographic printing press with a total fountain solution reservoir capacity of less than one (1) gallon is exempt from the fountain solution requirements in section 4(b), 4(c), and 4(d) of this rule.
(4) Any sheet-fed off-set lithographic printing press with a maximum sheet size of eleven (11) inches by seventeen (17) inches or smaller is exempt from the fountain solution control requirements in section 4(c) of this rule.
(Air Pollution Control Division; 326 IAC 8-16-2; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)

326 IAC 8-16-3 Definitions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 3. The following definitions apply throughout this rule:
(1) "Alcohol" means any of the following compounds, when used as a fountain solution additive for offset lithographic printing:
(A) Ethanol.
(B) n-Propanol.
(C) Isopropanol.
(2) "Alcohol substitute" means a nonalcohol additive that contains VOC and is used in the fountain solution. Some additives

are used to reduce the surface tension of water, and others are added to prevent piling (ink buildup).
(3) "Automatic blanket wash system" means equipment used to clean lithographic blankets, which can include, but is not limited to, those utilizing a cloth and expandable bladder, brush, spray, or impregnated cloth system.
(4) "Batch" means a supply of fountain solution that is prepared and used without alteration until completely used or removed from the printing process. For purposes of this rule, the term may apply to solutions prepared in either discrete batches or solutions that are continuously blended with automatic mixing units.
(5) "Cleaning material" means a liquid solvent or solution used to clean the operating surfaces of a printing press and its parts. For purposes of this rule, the term includes, but is not limited to:
(A) blanket wash;
(B) roller wash;
(C) plate cleaner;
(D) metering roller cleaner;
(E) impression cylinder washes;
(F) rubber rejuvenators; and
(G) other cleaners;
used for cleaning a press, press parts, or to remove dried ink or coating from the areas around the press. For purposes of this rule, the term does not include cleaners used on electronic components of a press, prepress cleaning operations (for example, platemaking), postpress cleaning operations (for example, binding), cleaning supplies (for example, detergents) used to clean the floor (other than dried ink) in the area around a press, or cleaning performed in parts washers or cold cleaners.
(6) "Composite partial vapor pressure" means the sum of the partial pressures of the VOC compounds in a solvent.
(7) "Fountain solution" means a mixture of water and other volatile and nonvolatile chemicals and additives used in the lithographic printing operations that maintains the quality of the printing plate including preventing debris buildup (for example, spray power, paper fiber, coating particles, dried ink particles, and other materials), and increases viscosity and reduces the surface tension of the water so that it spreads easily across the printing plate surface. The fountain solution wets the nonimage area so that the ink is maintained within the image areas. Nonvolatile additives include mineral salts and hydrophilic gums. Alcohol and alcohol substitutes are the most common VOC additives used to reduce the surface tension of the fountain solution.
(8) "Fountain solution reservoir" means the collection tank that accepts fountain solution recirculated from the printing unit. In some cases, the tanks are equipped with cooling coils for refrigeration of the fountain solution.
(9) "Heatset" means a class of lithography that requires a heated dryer to solidify the printing inks.
(10) "Letterpress printing" means a printing process in which the:
(A) image area is raised relative to the nonimage area; and
(B) paste ink is transferred to the substrate directly from the image surface.
(11) "Lithographic printing" means a printing process where the image and nonimage areas are chemically differentiated. The image area is oil receptive, and the nonimage area is water receptive. This method differs from other printing methods where the image is a raised or recessed surface.
(12) "Nonheatset" means a class of printing that does not require a heated dryer to solidify the printing inks. Ultraviolet-cured and electron beam-cured inks are considered nonheatset.
(13) "Offset printing" means a printing process that transfers the ink film from the plate to an intermediary surface (blanket) that, in turn, transfers the ink film to the substrate.
(14) "Sheet-fed printing" means a printing process where individual sheets of substrate are fed into the press sequentially.
(15) "Web" means a lithographic printing process where a continuous roll of substrate is fed into a press.
(Air Pollution Control Division; 326 IAC 8-16-3; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)

326 IAC 8-16-4 Control requirements
Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 4. (a) The owner or operator of a heatset web offset lithographic printing press or a heatset web letterpress, unless exempt as specified in section 2(1) or 2(2) of this rule, shall operate a control system that meets one (1) of the following requirements:

(1) Reduces VOC emissions from each dryer by at least ninety percent (90%) for a control system first installed before January 1, 2010.

(2) Reduces VOC emissions from each dryer by at least ninety-five percent (95%) for a control system first installed on or after January 1, 2010.

(3) Maintains a maximum VOC outlet concentration of twenty (20) parts per million by volume (ppmv), as hexane (C_6H_{14}) on a dry basis.

(b) The owner or operator of a heatset web offset lithographic printing press shall meet one (1) of the following requirements for the fountain solution used on that press:

(1) Maintain the as-applied VOC content of the fountain solution at or below five percent (5%), by weight, and use no alcohol in the fountain solution.

(2) If the fountain solution contains alcohol, maintain the as-applied VOC content of the fountain solution at or below one and six-tenths percent (1.6%), by weight.

(3) If the fountain solution contains alcohol, maintain the as-applied VOC content of the fountain solution at or below three percent (3%), by weight, and refrigerate the fountain solution to below sixty (60) degrees Fahrenheit.

(c) The owner or operator of a sheet-fed offset lithographic printing press shall meet one (1) of the following requirements for the fountain solution used on that press:

(1) Maintain the as-applied VOC content of the fountain solution at or below five percent (5%), by weight, and use no alcohol in the fountain solution.

(2) If the fountain solution contains alcohol, maintain the as-applied VOC content of the fountain solution at or below five percent (5%), by weight.

(3) If the fountain solution contains alcohol, maintain the as-applied VOC content of the fountain solution at or below eight and one-half percent (8.5%), by weight, and refrigerate the fountain solution to below sixty (60) degrees Fahrenheit.

(d) The owner or operator of a nonheatset web offset lithographic printing press shall maintain the as-applied VOC content of the fountain solution at or below five percent (5%), by weight, and use no alcohol in the fountain solution.

(e) Where it can be demonstrated that an offset lithographic printing press cannot be operated with fountain solutions meeting the requirements of this rule, the owner or operator may submit a petition to the commissioner requesting a site-specific reasonably available control technology (RACT) plan as specified in 326 IAC 8-1-5.

(f) The owner or operator of an offset lithographic printing press or letterpress printing press shall meet the following requirements for cleaning materials:

(1) Use not more than one hundred ten (110) gallons per rolling twelve (12) month period of cleaning materials that exceed both of the following requirements:

(A) An as-applied VOC content less than seventy percent (70%), by weight.

(B) An as-applied VOC composite partial vapor pressure less than ten (10) mmHg at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(2) When not in use, all cleaning materials and solvent-laden shop towels shall be kept in closed containers.

(Air Pollution Control Division; 326 IAC 8-16-4; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)

326 IAC 8-16-5 Compliance dates

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. The owner or operator of an offset lithographic or letter press printing press that is subject to this rule shall comply with the requirements of this rule no later than April 1, 2011, or upon initial startup of the press for new presses. *(Air Pollution Control Division; 326 IAC 8-16-5; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)*

326 IAC 8-16-6 Compliance test methods

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 6. (a) Compliance with the add-on control requirements shall be determined by performing emission tests as follows:

(1) Run at typical operating conditions and flow rates compatible with scheduled production during any emission testing.

(2) The initial emission test shall be performed, within ninety (90) days after the compliance date or within one hundred eighty (180) days after initial startup for new presses. An emission test conducted prior to April 1, 2011, may be accepted if the owner or operator provides records showing that:

(A) the test was conducted in accordance with a testing protocol approved by IDEM;

(B) a U.S. EPA approved emission test method was employed; and

(C) the operation of the press or presses was consistent with the current operating conditions and operating capacity.

(3) The negative dryer pressure shall be established during the initial test using an airflow direction indicator, such as a smoke stick or aluminum ribbons, or differential gauge. Continuous dryer air flow monitoring is not required.

(4) The test methods and procedures in 326 IAC 8-1-4(d) through 326 IAC 8-1-4(f) shall be followed. If the limit of twenty (20) ppmv is being met, only the VOC concentration of the exit exhaust shall be determined. The following test requirements apply:

(A) To prevent condensation when using 40 CFR 60, Method 25*, the probe should be heated to at least the gas stream temperature, typically close to three hundred fifty (350) degrees Fahrenheit.

(B) To prevent condensation when using 40 CFR 60, Method 25A* when testing heatset web offset presses, the sampling components and flame ionization detector block should be heated to at least the gas stream temperature, typically close to three hundred fifty (350) degrees Fahrenheit.

(b) VOC (alcohol) content of as-applied fountain solution shall be determined by using an accurate hydrometer to measure the alcohol content of the fountain solution. The hydrometer shall have a visual, analog, or digital readout with an accuracy of five-tenths percent (0.5%).

(c) VOC content of as-applied fountain solution or cleaning materials shall be determined in accordance with the following:

(1) Analysis by 40 CFR 60, Method 24*.

(2) Analytical data derived from a material safety data sheet (MSDS) or equivalent information from the supplier as long as it is based on 40 CFR 60, Method 24*.

(3) If diluted prior to use, a material balance calculation that combines 40 CFR 60, Method 24* analytical data or supplier information for the concentrated materials used to prepare the fountain solution or cleaning material and the proportions in which they are mixed to make the as-applied material.

(d) Temperature requirements for refrigeration shall be determined with a thermometer or other temperature detection device capable of reading to five-tenths (0.5) degree Fahrenheit.

(e) The composite partial vapor pressure of a cleaning material shall be determined according to the following:

(1) Determine the identity and quantity of each compound in a blended organic solvent using the manufacturer's product formulation data.

(2) Determine the vapor pressure of each pure VOC component by using one (1) of the following:

(A) Standard reference texts.

(B) ASTM Method D2879-92*, ASTM International, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428.

(3) Calculate the composite partial vapor pressure of the cleaning material by using the following formula:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_c}{MW_c} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:

W_i	=	Weight of the "i"th VOC compound, in grams
W_w	=	Weight of water, in grams
W_c	=	Weight of exempt compound, in grams
MW_i	=	Molecular weight of the "i"th VOC compound, in g/g-mole
MW_w	=	Molecular weight of water, in g/g-mole
MW_c	=	Molecular weight of exempt compound, in g/g-mole

PP_c = VOC composite partial vapor pressure at 20°C (68°F), in mmHg
VP_i = Vapor pressure of the "i"th VOC compound at 20°C (68°F), in mmHg

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-16-6; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA; errata filed Nov 18, 2009, 3:42 p.m.: 20091216-IR-326090221ACA; errata filed Jan 7, 2011, 1:18 p.m.: 20110126-IR-326090221ACA)*

326 IAC 8-16-7 Monitoring and record keeping

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 7. (a) The owner or operator of a press that is subject to the add-on control requirements of section 4(a) of this rule shall comply with the following:

(1) Install, calibrate, maintain, and operate temperature monitoring and recording equipment as follows:

(A) For catalytic oxidizer control systems, the temperature monitoring and recording equipment shall monitor the gas temperature upstream of the catalyst bed at least once every fifteen (15) minutes by an analog or digital recording device. The catalyst bed material shall be inspected annually for general catalyst condition and any signs of potential catalyst depletion. The source shall also collect a representative sample of the catalyst from the oxidizer, per manufacturer's recommendations, and have it tested to evaluate the catalyst's capability to continue to function at or above the required control efficiency. An evaluation of the catalyst bed material shall also be conducted whenever the results of the inspection indicate signs of potential catalyst depletion or poor catalyst condition based on manufacturer's recommendations, but not less than once per year.

(B) For thermal and regenerative oxidizer control systems, the temperature monitoring and recording equipment shall monitor and record the oxidizer operating temperature at least once every fifteen (15) minutes.

(C) The temperature needed to achieve compliance with the control systems described in clauses (A) and (B) shall be established during testing which demonstrates compliance with the emission standard. The temperature shall be computed as the time-weighted average of the temperature values recorded during the test. The source must maintain the oxidizer at a three (3) hour average temperature not less than fifty (50) degrees Fahrenheit below the average temperature observed during the most recent stack test which demonstrates continuous compliance. Temperature monitoring is required only when a connected printing press is operational.

(2) Collect and record or maintain at the subject source for a period of five (5) years the following information:

(A) The results of any required stack test to demonstrate compliance with the requirements of section 6(a)(4) of this rule.

(B) The operating parameters for any required control device as specified in subdivision (1).

(C) A log or record of any time when the control device or monitoring equipment, or both, are not in operation when any associated press is in operation.

(b) The owner or operator of a heatset web or sheet-fed offset lithographic printing press using alcohol shall measure the following:

(1) The VOC (alcohol) content, in accordance with section 6(b) of this rule, of any altered fountain solution, at the time of alteration, in percent by weight, of the fountain solution employed in the press using an hydrometer, as follows:

(A) A standard solution shall be used to calibrate the hydrometer for the type of alcohol used in the fountain solution, in accordance with manufacturer's specifications, against measurements performed to determine compliance.

(B) The hydrometer must be corrected for temperature at least once per eight (8) hour shift or once per batch of fountain solution prepared or modified, whichever is longer.

For fountain solutions to which VOC containing material is added at the source with automatic feed equipment, VOC content shall be determined for the as-applied fountain solution based on the setting of the automatic feed equipment that makes additions of VOC containing material up to a pre-set level. The equipment used to make automatic additions must be installed, calibrated, operated, and maintained in accordance with manufacturer's specifications.

(2) The temperature, in degrees Fahrenheit, of the fountain solution, on a daily basis, as measured at the recirculating tank,

if the owner or operator refrigerates the fountain solution to comply with the VOC content limit.

(c) The owner or operator of an offset lithographic printing press shall maintain records for each batch of fountain solution prepared for use in the press as follows:

(1) The volume and VOC content of each concentrated alcohol substitute added to make the batch of fountain solution.

(2) The volume of alcohol added to make the batch of fountain solution.

(3) The volume of water added to make the batch of fountain solution.

(4) The calculated VOC content of the final mixed batch.

(5) The date and time the batch was prepared.

(6) As an alternative to the records required by subdivisions (1) through (5), an owner or operator may maintain a recipe log that identifies all mix ratio recipes used to prepare the as-applied fountain solution, as follows:

(A) Records shall be maintained identifying the recipe used to prepare each batch of fountain solution for use in the press, the date and time when the batch was prepared, and a confirmation that the batch was prepared in accordance with the recipe.

(B) Each recipe shall be maintained in the mix ratio recipe log for a period of five (5) years from the date the mix ratio recipe was last prepared. Each mix ratio recipe shall clearly identify the following:

(i) The VOC content of each concentrated alcohol substitute added to make the batch of fountain solution, based upon the manufacturer's laboratory analysis using 40 CFR 60, Method 24*.

(ii) The proportions in which the fountain solution is mixed, including the addition of alcohol or water, or both. The proportion may be identified as:

(AA) a volume when preparing a discrete batch; or

(BB) the settings when an automatic mixing unit is employed.

(iii) The calculated VOC content of the final mixed recipe.

(7) For fountain solutions containing alcohol substitutes purchased with less than five percent (5%) VOC content before dilution, the owner or operator may maintain a current MSDS with VOC content determined by 40 CFR 60, Method 24* and does not need to keep records of VOC dilution and addition.

(d) The owner or operator of a nonheatset web offset lithographic printing press shall document all periods of time when alcohol is used in the press's fountain solution and the amount of alcohol used in each instance. The use of alcohol in fountain solutions for nonheatset web offset lithographic printing presses is prohibited per 326 IAC 8-16-4(d) *[section 4(d) of this rule]*.

(e) The owner or operator of an offset lithographic printing press or letterpress printing press shall maintain monthly records of the following information:

(1) The total amount, in gallons, of each cleaning material used.

(2) The VOC content or VOC composite vapor pressure of all cleaning material used.

(3) The total amount, in gallons, of each cleaning material used that exceed the allowable VOC content or VOC composite partial vapor pressure.

(4) The total amount, in gallons, of all inks used.

(f) An owner or operator of a heatset web offset lithographic printing or heatset web letterpress printing press that is exempt from the add-on control requirements in section 4(a) of this rule shall maintain monthly records of the following information:

(1) The total pounds of each ink used.

(2) The VOC content of each ink.

(3) The hours of operation of each press.

(g) All records required by this rule shall be maintained at the source for a period of five (5) years.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-16-7; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA; errata filed Nov 18, 2009, 3:42 p.m.: 20091216-IR-326090221ACA; errata filed Jan 7, 2011, 1:18 p.m.: 20110126-IR-326090221ACA)*

326 IAC 8-16-8 Reporting requirements for monitoring and record keeping information

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

Affected: IC 13-15; IC 13-17

Sec. 8. The owner or operator shall notify the department of any exceedances of requirements in section 4 of this rule within forty-five (45) days after the instance occurs. *(Air Pollution Control Division; 326 IAC 8-16-8; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)*

326 IAC 8-16-9 Retention factors and capture efficiencies

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 9. For the purpose of determining VOC emissions from offset lithographic printing presses, the following retention factors and capture efficiencies shall be used:

(1) A portion of the VOC contained in inks and cleaning materials is retained in the printed web or in the shop towels used for cleaning. The following retention factors shall be used:

(A) A twenty percent (20%) VOC retention factor shall be used for heatset inks printed on absorptive substrates, meaning eighty percent (80%) of the VOC in the ink is emitted during the printing process and is available for capture and control by an add-on pollution control device.

(B) A ninety-five percent (95%) VOC retention factor shall be used for sheet-fed and nonheatset web inks printed on absorptive substrates, meaning five percent (5%) of the VOC in the ink is emitted during the printing process.

(C) A fifty percent (50%) VOC retention factor shall be used for cleaning material VOC in shop towels for cleaning materials with a VOC composite partial vapor pressure of not more than ten (10) mmHg at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit) if the contaminated shop towels are kept in closed containers, meaning fifty percent (50%) of the VOC used on the shop towels is emitted during the cleaning process.

(2) A portion of the VOC contained in inks, fountain solutions, and automatic blanket washes on the heatset presses is captured in the press dryer for control by add-on pollution control devices. The following capture efficiencies are to be used:

(A) A one hundred percent (100%) VOC carry over efficiency shall be used for inks. All the VOC in the ink that is not retained is assumed to be volatilized in the press dryer. Capture efficiency testing for heatset dryers is not required if it is demonstrated that pressure in the dryer is negative relative to the surrounding press room and the airflow is into the dryer.

(B) A seventy percent (70%) VOC carry over efficiency shall be used for fountain solutions containing alcohol substitutes.

(C) A forty percent (40%) VOC carry over efficiency shall be used for automatic blanket wash solutions with a VOC composite partial vapor pressure of not more than ten (10) mmHg at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(Air Pollution Control Division; 326 IAC 8-16-9; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)

326 IAC 8-16-10 Requirements on compliance certification

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 10. The owner or operator of an offset lithographic printing or letterpress printing operation shall submit to the department a compliance certification not later than thirty (30) days after the compliance date. The compliance certification shall contain the following, where applicable:

(1) A description of the control requirements to which the operation is subject.

(2) A description of the add-on control system or systems at the source.

(3) A description of the monitoring devices at the source.

(4) A description of compliance records required by section 7 of this rule.

(5) The results of any compliance tests, including documentation of test data.

(6) A statement by the owner or operator of the lithographic printing or letterpress printing operation as to whether the offset lithographic printing or letterpress printing press has complied with the requirement or requirements to which it is subject.

(Air Pollution Control Division; 326 IAC 8-16-10; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)

326 IAC 8-16-11 Record keeping requirements for exempt sources

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 11. (a) An owner or operator of an offset lithographic printing or letterpress printing source that is exempt from the requirements of this rule based on the threshold applicability in section 1(a) of this rule shall maintain records:

(1) specified in subdivision (4)(A) and (4)(C) for sheet-fed or nonheatset web presses and the pounds of ink, cleaning solvent and fountain solution additives for heatset web presses in order to demonstrate that the material use threshold in subdivision (3) has not been exceeded; or

(2) as specified in subdivision (4)(A) through (4)(F) in order to demonstrate that the emission threshold in section 1(a) of this rule has not been exceeded.

(3) Material use thresholds are as follows:

Type of Offset Lithographic Printing Operation	Twelve (12) Month Rolling Threshold (twelve (12) consecutive month period on a rolling basis)
Sheet-fed or nonheatset web	768 gallons of cleaning solvent and fountain solution additives
Heatset web	5,400 pounds of ink, cleaning solvent, and fountain solution additives

A source that employs a combination of printing technologies that includes a heatset web offset printing press or presses must maintain records specified in subdivision (4)(A) through (4)(F) demonstrating actual emissions are less than three (3) tons per rolling twelve (12) month period.

(4) As specified under subdivision (2), an owner or operator of an offset lithographic printing or letterpress printing source shall maintain the following records on a monthly basis:

(A) The total gallons of each cleaning solvent used.
(B) The VOC content of each cleaning solvent.
(C) The total gallons of each fountain solution used.
(D) The VOC content of each fountain solution.
(E) The total pounds of each ink used.
(F) The VOC content of each ink.

(b) An owner or operator of an offset lithographic printing or letterpress printing source that is exempt from the add-on control requirements of this rule based on the applicability criteria in section 2(1) of this rule shall maintain the following records on a monthly basis:

(1) The total pounds of each ink used.
(2) The VOC content of each ink.
(3) The hours of operation of each press.

(c) Records required by subsection (a) shall be submitted to the department within thirty (30) days of the receipt of a written request. If the records are not available, the source shall be considered to be subject to the requirements in section 4 of this rule. *(Air Pollution Control Division; 326 IAC 8-16-11; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA; errata filed Nov 18, 2009, 3:42 p.m.: 20091216-IR-326090221ACA)*

Rule 17. Industrial Solvent Cleaning Operations

326 IAC 8-17-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to sources that meet the following criteria:

(1) Are located in Lake County or Porter County.

(2) Employ solvent materials in solvent cleaning operations during the production, repair, maintenance, or servicing of any of the following:

(A) Parts.

(B) Products.
(C) Tools.
(D) Machinery.
(E) Equipment.
(F) General work areas.

(3) Have actual volatile organic compound (VOC) emissions, before consideration of controls, of equal to or greater than three (3) tons per rolling twelve (12) month period from all solvent cleaning operations.

(b) Solvent cleaning operations exempt from the requirements of this rule based on the threshold applicability in subsection (a)(3) shall maintain records as required under section 10 of this rule. *(Air Pollution Control Division; 326 IAC 8-17-1; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)*

326 IAC 8-17-2 Exemptions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. (a) This rule does not apply to cleaning operations in the following source categories listed for regulation under Section 183(e) of the Clean Air Act:

(1) Aerospace coatings.
(2) Flexible packaging printing materials.
(3) Lithographic printing materials.
(4) Letterpress printing materials.
(5) Flat wood paneling coatings.
(6) Large appliance coatings.
(7) Metal furniture coatings.
(8) Paper, film, and foil coatings.
(9) Wood furniture coatings.
(10) Shipbuilding and repair coatings.
(11) Plastic parts coatings.
(12) Miscellaneous metal parts coatings.
(13) Miscellaneous industrial adhesives.
(14) Auto and light duty truck assembly coatings.

(b) The following solvent cleaning operations are exempt from all the requirements of this rule:

(1) Any solvent cleaning operation that is subject to 326 IAC 8-3 (Organic Solvent Degreasing Operations).
(2) Janitorial cleaning, including graffiti removal.
(3) Stripping of cured coatings, cured ink, or cured adhesives.
(4) Cleaning operations in printing prepress or graphic arts prepress areas, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning.
(5) Cleaning operations at digital printing presses.

(c) The following solvent cleaning operations are exempt from the VOC content limitations in section 4 of this rule:

(1) Cleaning of the following:
(A) Solar cells.
(B) Laser hardware.
(C) Scientific instruments.
(D) High-precision optics.

(2) Cleaning conducted as part of the following:
(A) Performance laboratory tests on coatings, adhesives, or inks.
(B) Research and development programs.
(C) Laboratory tests in quality assurance laboratories.

(3) Cleaning of paper-based gaskets and clutch assemblies where the rubber is bonded to metal by means of an adhesive.
(4) Cleaning of cotton swabs to remove cottonseed oil before cleaning of high precision optics.

(5) Medical device and pharmaceutical sources using up to one and one-half (1.5) gallons per day of solvents.
(6) Cleaning of adhesive application equipment used for thin metal laminating.
(7) Cleaning of electronic or electrical cables.
(8) Touch-up cleaning performed on printed circuit boards where surface mounted devices have already been attached.
(9) Cleaning of coating and adhesive application processes used to manufacture transdermal drug delivery product using less than three (3) gallons per day of ethyl acetate.
(10) Cleaning of application equipment used to apply coatings on satellites and radiation effect coatings.
(11) Cleaning of application equipment used to apply solvent-borne fluoropolymer coatings.
(12) Cleaning of ultraviolet or electron beam adhesive application.
(13) Cleaning of sterilization indicating ink application equipment if the source employs less than one and one-half (1.5) gallons per day of solvents for the cleaning.
(14) Cleaning of the following:
(A) Metering rollers.
(B) Dampening rollers.
(C) Printing plates.
(15) Cleaning of polyester resin application equipment for sources subject to 40 CFR 63, Subpart WWWW*.
(d) The following solvent cleaning operations are exempt from the work practice standards in section 4(c) of this rule:
(1) Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems.
(2) Cleaning with spray bottles or containers described in section 4(b)(2) of this rule.
(3) Printing operations where the roller or blanket wash is applied automatically.
(e) Cleaning with aerosol products shall be exempt from the requirements of section 4(a) and 4(c) of this rule if the source employs one and one-quarter (1.25) gallons or less of the aerosol products per day.
*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-17-2; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA; errata filed Nov 18, 2009, 3:42 p.m.: 20091216-IR-326090221ACA; filed Apr 3, 2012, 4:12 p.m.: 20120502-IR-326110401FRA)*

326 IAC 8-17-3 "Composite partial vapor pressure" defined
Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 3. For purposes of this rule, "composite partial vapor pressure" means the sum of the partial pressures of the VOC compounds in a solvent. *(Air Pollution Control Division; 326 IAC 8-17-3; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)*

326 IAC 8-17-4 VOC emissions control requirements
Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 4. (a) The owner or operator of a source that is subject to this rule shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable VOC content limitation as follows:

Solvent Cleaning Operation	VOC Limit (as-applied) (pounds/gallon)
Product cleaning during manufacturing process or surface preparation for coating, adhesive, or ink application:	
General	0.42
Electrical apparatus components and electronic components	0.83
Medical devices and pharmaceuticals	6.7
Repair and maintenance cleaning:	

General	0.42
Electrical apparatus components and electronic components	0.83
Medical devices and pharmaceuticals:	
Tools, equipment, and machinery	6.7
General work surfaces	5.0
Cleaning of coating or adhesive application equipment	0.42
Cleaning of ink application equipment:	
General	0.42
Flexographic printing	0.42
Gravure printing:	
Publication	0.83
Packaging	0.42
Screen printing	4.2
Ultraviolet ink and electron beam ink application equipment, except screen printing	5.4
Specialty flexographic printing	0.83
Cleaning of polyester resin application equipment not subject to 40 CFR 63, Subpart WWWW*	0.42

(b) The owner or operator of a source that is subject to this rule shall employ only the following cleaning devices and methods:

(1) Wipe cleaning.

(2) Closed containers or hand-held spray bottles from which solvents are applied without a propellant-induced force.

(3) Cleaning equipment that has a solvent container that is closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during nonoperation with the exception of maintenance and repair to the cleaning equipment itself.

(4) Remote reservoir cleaner that complies with all of the following:

(A) Prevents solvent vapors from escaping from the solvent container by using such devices as a cover or a valve when the remote reservoir is not being used, cleaned, or repaired.

(B) Directs solvent flow in a manner that will prevent liquid solvent from splashing outside of the remote reservoir cleaner.

(C) Does not clean porous or absorbent materials, such as:

(i) cloth;

(ii) leather;

(iii) wood; or

(iv) rope.

(D) Uses only solvent containers free of all liquid leaks. Auxiliary equipment, such as pumps, pipelines, or flanges, shall not have any liquid leaks, visible tears, or cracks. Any liquid leak, visible tear, or crack detected shall be repaired within one (1) calendar day, or the leaking section of the remote reservoir cold cleaner shall be drained of all solvent and shut down until it is replaced or repaired.

(5) Nonatomized solvent flow method where the cleaning solvent is collected in a container or a collection system that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure buildup inside the container.

(6) Solvent flushing where the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure buildup inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure or by pumping.

(c) The owner or operator of a source that is subject to this rule is prohibited from atomizing any solvent unless the emissions are vented to VOC emission control equipment that meets the requirements of subsection (e).

(d) Work practices shall be used to minimize VOC emissions from the use, handling, storage, and disposal of cleaning solvents and shop towels. Work practices shall include, at a minimum, but not be limited to, the following:

(1) Covering open containers and used applicators.

(2) Minimizing air circulation around cleaning operations.

(3) Properly disposing of used solvent and shop towels.

(4) Implementing equipment practices that minimize emissions, for example, keeping parts cleaners covered and maintaining cleaning equipment to repair solvent leaks.

(e) As an alternative to complying with the requirements in subsections (a) and (b), the owner or operator of a source that is subject to this rule may comply with this rule by installing and operating VOC emission control equipment for the solvent cleaning operation. The VOC emission control equipment shall comply with the following requirements:

(1) A capture efficiency of at least ninety percent (90%), by weight, for the VOC emissions.

(2) Either a destruction efficiency of at least ninety percent (90%), by weight, or an outlet concentration of less than fifty (50) parts per million, by volume, dry basis, for the VOC emissions.

(f) As an alternative to complying with the VOC content limits in subsection (a), the owner or operator of a source may use solvents or solvent solutions for industrial cleaning operations that have a VOC composite partial vapor pressure at or below eight (8) millimeters of mercury (mmHg) at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(g) As an alternative to complying with the requirements in subsections (a) and (b), a manufacturer of coatings, inks, adhesives, or resins may comply with the following requirements:

(1) Clean portable or stationary mixing vats, high dispersion mills, grinding mills, tote tanks, and roller mills by one (1) or more of the following methods:

(A) Use a cleaning solvent that either contains less than one and sixty-seven hundredths (1.67) pounds per gallon of VOC or has a composite partial vapor pressure at or below eight (8) mmHg at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(B) Comply with the following work practices:

(i) Equipment being cleaned must be maintained leak free.

(ii) Drain VOC-containing cleaning materials from the cleaned equipment upon completion of cleaning.

(iii) Store or dispose of VOC-containing cleaning materials, including waste solvent, in a manner that will not cause or allow evaporation into the atmosphere.

(iv) Store all VOC-containing cleaning materials in closed containers.

(C) Collect and vent the emissions from equipment cleaning to a VOC emission control system that has an overall capture and control efficiency of at least eighty percent (80%), by weight, for the VOC emissions. If the reduction is achieved by incineration, at least ninety percent (90%) of the organic carbon shall be oxidized to carbon dioxide.

(D) Use organic solvents other than those allowed in clause (A) provided not more than sixty (60) gallons of fresh solvent shall be used per month. Organic solvent that is reused or recycled (either on-site or off-site), for further use in equipment cleaning or the manufacture of coatings, inks, or adhesives shall not be included in this limit. All VOC-containing cleaning materials shall be stored in closed containers.

(2) When using solvent for wipe cleaning, the owner or operator of a facility shall not:

(A) use open containers for the storage or disposal of cloth or paper impregnated with organic compounds that are used for cleanup or the removal of coatings, inks, adhesives, or resins; or

(B) store spent or fresh organic compounds to be used for cleanup or the removal of coatings, inks, adhesives, or resins in open containers.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-17-4; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA; errata filed Nov 18, 2009, 3:42 p.m.: 20091216-IR-326090221ACA; filed Apr 3, 2012, 4:12 p.m.: 20120502-IR-326110401FRA)*

326 IAC 8-17-5 Compliance dates

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

Affected: IC 13-15; IC 13-17

Sec. 5. The owner or operator of a source that is subject to this rule shall comply with the requirements of this rule no later than April 1, 2011, or upon initial startup of the operation for new solvent cleaning operations. *(Air Pollution Control Division; 326*

IAC 8-17-5; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)

326 IAC 8-17-6 Compliance test methods

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 6. (a) Compliance with add-on control requirements shall be determined by performing emission tests as follows:
(1) Run at typical operating conditions and flow rates compatible with scheduled production during any emission testing.
(2) The initial emission test shall be performed, within ninety (90) days after the compliance date for the solvent cleaning operation or startup, when the control device is installed and operating to demonstrate compliance with the applicable emission control requirement.
(3) The test methods and procedures in 326 IAC 8-1-4(d) through 326 IAC 8-1-4(f) shall be followed.
(b) VOC content of solvents shall be determined in accordance with the following:
(1) Analysis by 40 CFR 60, Method 24*.
(2) Analytical data derived from a material safety data sheet (MSDS) or equivalent information from the supplier as long as it is based on 40 CFR 60, Method 24*.
(3) If diluted prior to use, a material balance calculation that combines 40 CFR 60, Method 24* analytical data or supplier information for the concentrated materials used to prepare the cleaning solvent and the proportions in which they are mixed to make the as-applied material.
(c) The composite partial vapor pressure of solvents shall be determined as follows:
(1) Determine the identity and quantity of each compound in a blended organic solvent using the manufacturer's product formulation data.
(2) Determine the vapor pressure of each pure VOC component by using one (1) of the following:
(A) Standard reference texts.
(B) ASTM Method D2879-92*, ASTM International, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428.
(3) Calculate the composite partial vapor pressure of the cleaning material by using the following formula:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_c}{MW_c} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:
W_i = Weight of the "i"th VOC compound, in grams
W_w = Weight of water, in grams
W_c = Weight of exempt compound, in grams
MW_i = Molecular weight of the "i"th VOC compound, in g/g-mole
MW_w = Molecular weight of water, in g/g-mole
MW_c = Molecular weight of exempt compound, in g/g-mole
PP_c = VOC composite partial vapor pressure at 20°C (68°F), in mmHg
VP_i = Vapor pressure of the "i"th VOC compound at 20°C (68°F), in mmHg

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-17-6; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA; errata filed Nov 18, 2009, 3:42 p.m.: 20091216-IR-326090221ACA)*

326 IAC 8-17-7 Monitoring and record keeping

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 7. (a) The owner or operator of a solvent cleaning operation that is subject to one (1) or more of the VOC content limits

in section 4 of this rule shall collect and record the following information each month for each cleaning material subject to a VOC content limit:

(1) The name and identification of each cleaning material and the associated solvent cleaning activity.

(2) The VOC content of each cleaning material, in pounds per gallon, as applied or the VOC composite partial vapor pressures of the solvents or solvent solutions used in the industrial cleaning operation.

(b) The owner or operator of a solvent cleaning operation installing and operating VOC emission control equipment to achieve and maintain compliance with the requirements in section 4(e) or 4(g)(1)(C) of this rule shall comply with the following:

(1) Monitoring equipment requirements in 326 IAC 8-1-12(b)(2).

(2) The control device monitoring data in 326 IAC 8-1-12(c)(6) through 326 IAC 8-1-12(c)(8) shall be collected and recorded each day of operation of the solvent cleaning operation and control device.

(c) Any owner or operator of a solvent cleaning operation that is exempt from the VOC content limits specified in section 4 of this rule, under section 2(c)(5) or 2(c)(12) of this rule, shall collect and record the following information each day for each such solvent cleaning operation:

(1) The name and identification of each solvent used in the solvent cleaning activity.

(2) The volume, in gallons, of each solvent used in the industrial cleaning operation.

(3) The total volume, in gallons, of all the solvents used in the industrial cleaning operation.

(d) Any owner or operator of a solvent cleaning operation that is exempt from the requirements in section 4(a) and 4(c) of this rule, under section 2(e) of this rule, shall collect and record the following information each day for each such solvent cleaning operation:

(1) The name and identification of each aerosol product used in the solvent cleaning activity.

(2) The volume, in gallons, of each aerosol product used in the industrial cleaning operation.

(3) The total volume, in gallons, of all the aerosol product used in the industrial cleaning operation.

(e) Any owner or operator of a solvent cleaning operation that is exempt from the VOC content limits specified in section 4 of this rule, under section 2(c)(9) of this rule, shall record each day the total volume of ethyl acetate employed in such solvent cleaning operation.

(f) A manufacturer of coatings, inks, adhesives, or resins that complies with section 4(g)(1)(D) of this rule shall record and maintain each month for each cleaning material the following information:

(1) The name, identification, and volume of each VOC-containing cleaning solution as applied in each cleaning operation.

(2) The total volume of fresh cleaning solvent material used for cleaning coating, ink, adhesive, or resin manufacturing equipment.

(3) The total volume of cleaning solvent material recovered for either on-site or off-site reuse or recycling for further use in the cleaning of coating, ink, adhesive, or resin manufacturing equipment.

(g) All records required by this rule shall be maintained at the source for a period of five (5) years. *(Air Pollution Control Division; 326 IAC 8-17-7; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA; filed Apr 3, 2012, 4:12 p.m.: 20120502-IR-326110401FRA)*

326 IAC 8-17-8 Reporting requirements for monitoring and record keeping information

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 8. (a) The owner or operator of a solvent cleaning operation shall notify the department of the following exceedances of applicable requirements in section 4 of this rule within forty-five (45) days after the instance occurs:

(1) Each record showing the use of noncomplying solvents.

(2) Each record showing that the solvent cleaning operation exceeded an applicable maximum daily solvent usage limit specified in section 2(c)(5), 2(c)(9), 2(c)(12), or 2(e) of this rule.

(b) The owner or operator of a solvent cleaning operation that employs control equipment to comply with this rule shall submit to the department quarterly summaries of the records required by section 7(b) of this rule. These quarterly reports shall:

(1) be submitted no later than April 30, July 31, October 31, and January 31; and

(2) cover records for the previous calendar quarter.

(Air Pollution Control Division; 326 IAC 8-17-8; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)

326 IAC 8-17-9 Requirements on compliance certification

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 9. (a) The owner or operator of an affected solvent cleaning operation shall submit to the department a compliance certification within thirty (30) days following the completion of any of the following requirements:

(1) The first documented achievement of compliance with each of the requirements in section 4 of this rule, as applicable.
(2) The installation and initial use of a VOC emission controls system for the solvent cleaning operation.
(3) The installation and initial use of any monitoring device.
(4) A compliance test to demonstrate compliance with the applicable control requirement.

(b) The compliance certification under subsection (a) shall provide the following information, where applicable:

(1) A description of the requirements.
(2) A description of the VOC emission control system.
(3) A description of the monitoring devices.
(4) A description of the records that document continuing compliance.
(5) The results on any compliance tests, including documentation of test data.
(6) The results of any records that document continuing compliance, including calculations.
(7) A statement by the owner or operator of the affected source as to whether the solvent cleaning operation has complied with applicable requirements.

(Air Pollution Control Division; 326 IAC 8-17-9; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)

326 IAC 8-17-10 Record keeping requirements for exempt sources

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 10. (a) An owner or operator employing a solvent cleaning operations that is exempt from the requirements of this rule, other than the record keeping requirements of this section, based on the threshold applicability in section 1(a)(3) of this rule shall maintain the following records on a monthly basis:

(1) The total gallons of each cleaning solvent used.
(2) The VOC content of each cleaning solvent.

(b) Records required by subsection (a) shall be submitted to the department within thirty (30) days of the receipt of a written request. If the records are not available, the source shall be considered to be subject to the requirements in section 4 of this rule. *(Air Pollution Control Division; 326 IAC 8-17-10; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)*

Rule 18. Synthetic Organic Chemical Manufacturing Industry Air Oxidation, Distillation, and Reactor Processes

326 IAC 8-18-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to any vent stream originating from a process unit in which an air oxidation and distillation operation or reactor process is located that meets the following criteria:

(1) Is located in Lake County or Porter County.
(2) Produces one (1) or more of the chemicals as a product, coproduct, byproduct, or intermediate listed in:
    (A) Appendix A of Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations in Synthetic Organic Chemical Manufacturing Industry (SOCMI) for reactor and distillation CTG (EPA-450/4-91-031, August 1993)*; or
    (B) 40 CFR 60.617* for air oxidation unit processes.

(b) Air oxidation unit processes, distillation operations, and reactor processes are defined in 40 CFR 60.611* "air oxidation

unit processes", 40 CFR 60.661* "distillation operation", and 40 CFR 60.701* "reactor processes".

(c) Product means any compound or chemical listed in Appendix A of Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations in Synthetic Organic Chemical Manufacturing Industry (SOCMI) for reactor and distillation CTG (EPA-450/4-91-031, August 1993)* that is produced as that chemical for sale as a product, byproduct, coproduct, or intermediate or for use in the production of other chemicals or compounds.

(d) For purposes of this rule, reference to total organic compounds or TOC in 40 CFR 60, Subpart III*, 40 CFR 60, Subpart NNN* or 40 CFR 60, Subpart RRR* shall be considered to mean VOC as defined in 326 IAC 1-2-90.

(e) For process vents that are subject to equivalent VOC control provisions under an existing 40 CFR Part 60 or 40 CFR Part 63 standard, compliance with the requirements of the existing 40 CFR Part 60 or 40 CFR Part 63 standard shall constitute compliance with the provisions of this rule.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-18-1; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-18-2 Air oxidation unit processes

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. (a) The owner or operator of a source with air oxidation unit processes meeting the applicability criteria in section 1 of this rule shall comply with the requirements of 40 CFR 60, Subpart III*.

(b) The exemption listed in 40 CFR 60.610(c)* shall apply to an owner or operator otherwise subject to this rule.

(c) Notwithstanding 40 CFR 60.610*, for purposes of this rule:

(1) an affected source shall be one that is described by the criteria in 40 CFR 60.610(a)* without consideration of the specific date of construction, modification, or reconstruction of the source; and

(2) the owner or operator of an affected source shall comply with this rule no later than April 1, 2011.

(d) Notwithstanding 40 CFR 60.615(a)*, each owner or operator subject to this rule shall notify the department how the source will comply with the specific provisions of 40 CFR 60.612*:

(1) no later than one (1) year after the effective date of this rule; or

(2) no later than sixty (60) days after becoming subject to this section;

whichever is later.

(e) For the purposes of this rule, 40 CFR 60.616* is not applicable.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-18-2; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-18-3 Distillation operations

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 3. (a) The owner or operator of a source with distillation operations meeting the applicability criteria in section 1 of this rule shall comply with the requirements of 40 CFR 60, Subpart NNN*.

(b) The following exemptions apply:

(1) Exemptions listed in 40 CFR 60.660(c)* shall apply to an owner or operator otherwise subject to this rule.

(2) Any vent stream for a distillation operation with a total VOC concentration of less than five hundred (500) parts per million by volume is not subject to this rule except for the test method and procedure and the record keeping and reporting requirements specified in 40 CFR 60.660(c)(6)*.

(c) Notwithstanding 40 CFR 60.660*, for purposes of this rule:

(1) an affected source shall be one that is described by the criteria in 40 CFR 60.660(a)* without consideration of the specific date of construction, modification, or reconstruction of the source;

(2) an applicable chemical is one described in section 1(a)(2)(A) of this rule instead of 40 CFR 60.667*; and

(3) the owner or operator of an affected source shall comply with this rule no later than April 1, 2011.

(d) Notwithstanding 40 CFR 60.665(a)*, each owner or operator subject to this rule shall notify the department how the source will comply with the specific provisions of 40 CFR 60.662*:

(1) no later than one (1) year after the effective date of this rule; or

(2) no later than sixty (60) days after becoming subject to this section;

whichever is later.

(e) For the purposes of this rule, 40 CFR 60.666* is not applicable.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-18-3; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-18-4 Reactor processes

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 4. (a) The owner or operator of a source with reactor processes meeting the applicability criteria in section 1 of this rule shall comply with the requirements of 40 CFR 60, Subpart RRR*.

(b) The following exemptions apply:

(1) Exemptions listed in 40 CFR 60.700(c)* shall apply to an owner or operator otherwise subject to this rule, except that the cutoff for the vent stream flow rate is eighty-five ten-thousandths (0.0085) standard cubic meter per minute (scm/min), not eleven-thousandths (0.011) scm/min as specified in 40 CFR 60.700(c)(4)*.

(2) Any vent stream for a reactor operation with a total VOC concentration of less than five hundred (500) parts per million by volume is not subject to this rule except for the test method and procedure and the record keeping and reporting requirements specified in 40 CFR 60.700(c)(8)*.

(c) Notwithstanding 40 CFR 60.700*, for purposes of this rule:

(1) an affected source shall be one that is described by the criteria in 40 CFR 60.700(a)* without consideration of the specific date of construction, modification, or reconstruction of the source;

(2) an applicable chemical is one described in section 1(a)(2)(A) of this rule instead of 40 CFR 60.707*; and

(3) the owner or operator of an affected source shall comply with this rule no later than April 1, 2011.

(d) Notwithstanding 40 CFR 60.705(a)*, each owner or operator subject to this rule shall notify the department how the source will comply with the specific provisions of 40 CFR 60.702*:

(1) no later than one (1) year after the effective date of this rule; or

(2) no later than sixty (60) days after becoming subject to this section;

whichever is later.

(e) For the purposes of this rule, 40 CFR 60.706* is not applicable.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-18-4; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-18-5 Delayed compliance

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. If the owner or operator of a source employs a VOC emission combustion control device that does not achieve compliance with an emission limitation in 40 CFR 60.612*, 40 CFR 60.662*, or 40 CFR 60.702* as applicable under this rule, the owner or operator is not required to comply with the emission limitation until the combustion control device is replaced for reasons other than compliance with this rule. A combustion control device is considered to be replaced when one (1) of the following occur:

(1) All of the control device is replaced.

(2) The cost of repair of the control device or the cost of replacement of part of the control device exceeds fifty percent (50%) of the cost of replacing the entire control device with a control device that is capable of complying with the respective requirements of 40 CFR 60.612*, 40 CFR 60.662*, or 40 CFR 60.702*.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-18-5; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

Rule 19. Control of Volatile Organic Compound Emissions from Process Vents in Batch Operations

326 IAC 8-19-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to any source that has a batch process train associated with any of the SIC codes 2821, 2833, 2834, 2861, 2865, 2869, or 2879, and that meets the following criteria:

(1) Is located in Lake County or Porter County.

(2) Has the potential to emit emissions of VOCs greater than or equal to one hundred (100) tons per year from all of the following:

(A) Process vents from all batch operations.

(B) All noncontrol technique guideline (non-CTG) emission units.

(C) Unregulated emissions from CTG emission units, except emission units regulated under 40 CFR 60, Subpart BBB*; 40 CFR 60, Subpart III*; 40 CFR 60, Subpart NNN*; or 40 CFR 63, Subpart T*.

(b) If a source meets the applicability requirements under subsection (a), but reduces its potential to emit for VOCs by means of federally enforceable operational restriction (for example, production, hours of operation, or capacity utilization) to less than one hundred (100) tons per year by April 1, 2011, the source is not subject to the requirements of section 3 of this rule.

(c) The owner or operator of a batch process train at a source that meets the applicability criteria of subsection (a) is subject to this rule with the following exceptions:

(1) Any source subject to control requirements in 326 IAC 8-5-3 is not subject to this rule.

(2) The following unit operations within a batch process train and batch process trains are exempt from section 3 of this rule, control requirements, but are subject to section 7 of this rule, record keeping, and section 8 of this rule, reporting:

(A) Any unit operation with uncontrolled total annual mass emissions of less than or equal to five hundred (500) pounds per year of VOC. Such unit operations are also excluded from the calculation of the total annual mass emissions for a batch process train. If the uncontrolled total annual mass emissions from such exempt unit operation exceed five hundred (500) pounds per year of VOC in any subsequent year, the owner or operator shall calculate and determine applicability in accordance with subsection (d) for both the individual unit operation and the batch process train containing the unit operation.

(B) Any batch process train containing process vents that have, in the aggregate, uncontrolled total annual mass emissions, as determined in accordance with section 4(a)(1) of this rule, of less than thirty thousand (30,000) pounds per year of VOC for all products manufactured in such batch process train.

(d) The applicability equations in subsection (e), which require the calculation of uncontrolled total annual mass emissions and flow rate value, shall be used to determine whether a unit operation or a batch process train is subject to the control requirements in section 3 of this rule. The applicability equations shall be applied to the following:

(1) Any unit operation with uncontrolled total annual mass emissions that exceed five hundred (500) pounds per year and with

a VOC concentration greater than five hundred (500) parts per million by volume (ppmv). In this individual determination, no applicability analysis shall be performed for any unit operation with a VOC concentration of less than or equal to five hundred (500) ppmv.

(2) Any batch process train containing process vents that, in the aggregate, have uncontrolled total annual mass emissions of thirty thousand (30,000) pounds per year or more of VOC from all products manufactured in the batch process train. Any unit operation with uncontrolled total annual mass emissions exceeding five hundred (500) pounds per year, regardless of VOC concentration, shall be included in the aggregate applicability analysis.

(e) Applicability equations under this subsection are specific to volatility and are as follows:

(1) Abbreviations are as follows:

(A) FR = calculated applicability flow rate, scfm.

(B) UTAME = uncontrolled total annual mass emissions of VOC, expressed as pounds per year.

(C) WAV = weighted average volatility.

(D) $MVOC_i$ = mass of VOC component i.

(E) $MWVOC_i$ = molecular weight of VOC component i.

(F) VP_i = vapor pressure of VOC component i.

(G) i = subscript denoting a specific VOC component.

(H) n = total number of VOC components.

(2) Weighted average volatility shall be calculated as follows:

$$WAV = \left(\sum_{i=1}^{n} \frac{(VP_i)(MVOC_i)}{(MWVOC_i)} \right) \div \left(\sum_{i=1}^{n} \frac{(MVOC_i)}{(MWVOC_i)} \right)$$

(3) For purposes of determining applicability, calculated applicability flow rate values shall be determined as follows:

(A) Process vents with a WAV that is less than or equal to seventy-five (75) mmHg at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit), shall use the following equation:

FR = [0.07 (UTAME)] - 1,821

(B) Process vents with a WAV that is greater than seventy-five (75) mmHg, but less than or equal to one hundred fifty (150) mmHg at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit), shall use the following equation:

FR = [0.031 (UTAME)] - 494

(C) Process vents with a WAV that is greater than one hundred fifty (150) mmHg at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit), shall use the following equation:

FR = [0.013 (UTAME)] – 301

(f) For purposes of subsection (a), an emission unit shall be considered regulated by a rule, section, or subpart if it is subject to the limits of that rule, section, or subpart. An emission unit is not considered regulated by a rule, section, or subpart if it is not subject to the limits of that rule, section, or subpart. For example, if the emission unit is covered by an exemption in the rule, section, or subpart, or the applicability criteria of the rule, section, or subpart are not met, then the source is not subject to rule, section, or subpart. An emission unit is also not considered regulated if there is no rule contained in this article regulating the source category.
(Air Pollution Control Division; 326 IAC 8-19-1; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)

326 IAC 8-19-2 Definitions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. The following definitions apply throughout this rule:

(1) "Aggregate" means the summation of all process vents containing VOC within a process.

(2) "Batch cycle" means a manufacturing event of an intermediate or product from start to finish in a batch process train.

(3) "Batch operation" means a noncontinuous operation in which a discrete quantity or batch of feed is charged into a unit operation within a batch process train and processed at one (1) time. Batch operation includes noncontinuous operations in which the equipment is fed intermittently or discontinuously. Addition of raw material and withdrawal of product do not occur simultaneously in a batch operation. After each batch operation, the equipment is generally emptied before a fresh batch is

started.
(4) "Batch process train" means the collection of equipment, such as:
(A) reactors;
(B) filters;
(C) dryers;
(D) distillation columns;
(E) extractors;
(F) crystallizers;
(G) blend tanks;
(H) neutralizer tanks;
(I) digesters;
(J) surge tanks; and
(K) product separators;
configured to produce a specific product or intermediate by a batch operation. A batch process train terminates at the point of storage or product handling of the product or intermediate being produced in the batch process train. Irrespective of the product being produced, a batch process train that is independent of other processes shall be considered a single batch process train for purposes of this rule.
(5) "Boiler" means any enclosed combustion device that extracts useful energy in the form of steam.
(6) "Btu" means British thermal unit.
(7) "Continuous recorder" means a data recording device that either records:
(A) an instantaneous data value at least once every fifteen (15) minutes; or
(B) fifteen (15) minute or more frequent block average values.
(8) "Control device" means any device or combination of devices designed to recover or destroy VOC vapors received from the process vents. A recovery device that is a required part of the process, for example, but not limited to, condensers operating under reflux conditions, is not a control device.
(9) "Emission event" means a discrete period of venting that is associated with a unit operation. For example, a displacement of vapor resulting from the charging of a unit operation with VOC will result in a discrete emission event that will last through the duration of the charge and will have an average flow rate equal to the rate of the charge. The expulsion of expanded unit operation vapor space when the vessel is heated is also an emission event. Both of these examples of emission events and others may occur in the same unit operation during the course of the batch cycle. If the flow rate measurement for any discrete period of venting is zero (0), then the event is not an emission event for purposes of this rule.
(10) "Flame zone" means the portion of the combustion chamber in a boiler occupied by the flame envelope.
(11) "Incinerator" means any enclosed combustion device that is used for destroying organic compounds. Auxiliary fuel may be used to heat waste gas to combustion temperatures. Any energy recovery section present is not physically formed into one (1) section; rather, the energy recovery system is a separate section following the combustion section and the two are joined by ducting or connections that carry fuel gas.
(12) "MmHg" means millimeters of mercury.
(13) "Permit" means a permit issued by the commissioner under 326 IAC 2.
(14) "Ppmv" means parts per million by volume.
(15) "Process vent" means a vent gas stream that is discharged from a unit operation or multiple unit operations within the same batch process train that are manifolded together into a common header. A process vent begins at the inlet to the control device prior to mixing with vent gas streams from other process trains or unrelated operations or, in the absence of a control device, at the point of discharge to the atmosphere. The term does not include exhaust streams from exhaust hood and building ventilation fans that are used to provide ventilation for workers and not to collect and discharge emissions from specific unit operations. Process vents exclude the following:
(A) Relief valve discharges.
(B) Leaks from equipment.
(C) Vents from storage tanks.
(D) Vents from transfer or loading operations.
(E) Vents from wastewater.

(16) "Recovery device" means an individual unit of equipment, such as:
(A) an absorber;
(B) a carbon adsorber; or
(C) a condenser;
capable of and used for the purpose of recovering chemicals for use, reuse, or sale.
(17) "Recovery system" means an individual recovery device or series of such devices applied to the same vent stream.
(18) "Scfm" means standard cubic feet per minute.
(19) "Standard industrial classification code" or "SIC code" means a series of four (4) digit codes devised by the office of management and budget (OMB) of the federal government to classify establishments according to the type of economic activity in which they are engaged.
(20) "Unit operation" means one (1) or more pieces of process equipment used to make a single change to the physical or chemical characteristics of one (1) or more process streams. Equipment used for these purposes includes, but is not limited to, the following:
(A) Reactors.
(B) Filters.
(C) Dryers.
(D) Distillation columns.
(E) Extractors.
(F) Crystallizers.
(G) Blend tanks.
(H) Neutralizer tanks.
(I) Digesters.
(J) Surge tanks.
(K) Product separators.
(Air Pollution Control Division; 326 IAC 8-19-2; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)

326 IAC 8-19-3 Control requirements for VOC emissions from process vents
Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 3. The control requirements set forth in this rule shall apply to process vents of batch process trains and unit operations within batch process trains (batch operations) as follows:
(1) The owner or operator of a unit operation with an average flow rate, as determined in accordance with section 4(b) of this rule, below the flow rate value calculated by the applicability equations contained in section 1(e) of this rule, shall reduce uncontrolled VOC emissions from such unit operation by an overall efficiency, on average, of at least ninety percent (90%), or to twenty (20) ppmv, per batch cycle.
(2) The owner or operator of a batch process train with an average flow rate, as determined in accordance with section 4(b)(2) of this rule, below the flow rate value calculated by the applicability equations contained in section 1(e) of this rule, shall reduce uncontrolled VOC emissions from such batch process train by an overall efficiency, on average, of at least ninety percent (90%), or to twenty (20) ppmv, per batch cycle.
(3) If a boiler or process heater is used to comply with subdivision (1) or (2), the vent stream shall be introduced into the flame zone of the boiler or process heater.
(4) If a flare is used to comply with subdivision (1) or (2), the flare shall comply with the requirements of 40 CFR 60.18*.
(5) If a process, not subject to this rule, vents an emergency relief discharge into a common flare header of this flare, the requirements of 40 CFR 60.18* shall not apply during the emergency relief discharge.
*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington D.C. or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-19-3; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-19-4 Determination of uncontrolled total annual mass emissions and actual weighted average flow rate values for a batch process train or unit operation

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 4. (a) Uncontrolled total annual mass emissions shall be determined by the following methods:

(1) Direct process vent emissions measurements taken prior to any release to the atmosphere, following any recovery device, prior to mixing with vents from other process trains or unrelated operations, and prior to any control device, provided the measurements conform with the requirements of measuring the mass flow rate of VOC incoming to the control device as set forth in section 5(f)(2), 5(f)(3)(A)(i), and 5(f)(3)(A)(ii) of this rule.

(2) Engineering estimates of the uncontrolled VOC emissions from a process vent or process vents, in the aggregate, within a batch process train, using either the potential or permitted number of batch cycles per year or total production as represented in the permit for the batch process train as follows:

(A) Engineering estimates of the uncontrolled VOC emissions shall be based upon accepted chemical engineering principles, measurable process parameters, or physical or chemical laws and their properties. Examples of methods include, but are not limited to, the following:

(i) Use of material balances based on process stoichiometry to estimate maximum VOC concentrations.

(ii) Estimation of maximum flow rate based on physical equipment design, such as pump or blower capacities.

(iii) Estimation of VOC concentrations based on saturation conditions.

(B) All data, assumptions, and procedures used in any engineering estimate shall be documented.

(b) Average flow rate shall be determined by any of the following methods:

(1) Direct process vent flow rate measurements taken prior to any release to the atmosphere, following any recovery device, prior to mixing with vents from other process trains or unrelated operations, and prior to any control device, provided the measurements conform with the requirements of measuring incoming volumetric flow rate set forth in section 5(f)(2) of this rule.

(2) Average flow rate for a unit operation having multiple emission events or batch process trains shall be the weighted average flow rate, calculated as follows:

$$WAF = \frac{\sum_{i-1}^{n} (AFR_i)(ADE_i)}{\sum_{i-1}^{n} (ADE_i)}$$

Where:
- WAF = actual weighted average flow rate for a unit operation or batch process train.
- AFR_i = average flow rate of emission event i.
- ADE_i = annual duration of emission event i.
- i = subscript denoting a specific emission event.
- n = number of emission events.

(3) Engineering estimates calculated in accordance with the requirements in subsection (a)(2).

(c) For purposes of determining the average flow rate for steam vacuuming systems, the steam flow shall be included in the average flow rate calculation. *(Air Pollution Control Division; 326 IAC 8-19-4; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)*

326 IAC 8-19-5 Compliance testing requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. (a) Upon the commissioner's request, the owner or operator of a batch process train or unit operation within a batch process train shall conduct testing to demonstrate compliance with section 3 this rule. The owner or operator shall, at its own expense,

conduct the tests in accordance with the applicable test methods and procedures specified in subsections (d), (e), and (f).

(b) Notwithstanding subsection (a), flares and process boilers used to comply with the control requirements of section 3 of this rule shall be exempt from compliance testing requirements.

(c) When a flare is used to comply with the control requirements of section 3 of this rule, the flare shall comply with the requirements of 40 CFR 60.18*.

(d) The owner or operator of a batch process train or unit operation within a batch process train that is exempt from the control requirements of section 3 of this rule due to:

(1) an average flow rate that is equal to or above the calculated applicability flow rate; or

(2) a VOC concentration of less than or equal to five hundred (500) ppmv (unit operation);

shall demonstrate, upon the commissioner's request, the absence of oversized gas moving equipment in any manifold. Gas moving equipment shall be considered oversized if it exceeds the maximum requirements of the exhaust flow rate by more than thirty percent (30%).

(e) For the purpose of demonstrating compliance with the control requirements in section 3 of this rule, the batch process train or unit operation shall be run at representative operating conditions and flow rates during any compliance test.

(f) The following methods in 40 CFR 60, Appendix A* shall be used to demonstrate compliance with the reduction efficiency requirement set forth in section 3 of this rule:

(1) U.S. EPA Method 1 or 1A, as appropriate, for selection of the sampling sites if the flow measuring device is not a rotameter. The control device inlet sampling site for determination of vent stream VOC composition reduction efficiency shall be prior to the control device and after the control device.

(2) U.S. EPA Method 2, 2A, 2B, 2C, or 2D, as appropriate, for determination of gas stream volumetric flow rate flow measurements, which shall be taken continuously. No traverse is necessary when the flow measuring device is an ultrasonic probe.

(3) U.S. EPA Method 25A or U.S. EPA Method 18, if applicable, to determine the concentration of VOC in the control device inlet and outlet as follows:

(A) The sampling time for each run shall be as follows:

(i) For batch cycles less than eight (8) hours in length, readings shall be taken continuously over the entire length of the batch cycle with a maximum of fifteen (15) minute intervals between measurements if using U.S. EPA Method 25A. If using U.S. EPA Method 18, readings shall be taken continuously with a maximum of fifteen (15) minute intervals between measurements throughout the batch cycle unless it becomes necessary to change the impinger train, in which case a thirty (30) minute interval shall not be exceeded.

(ii) For batch cycles of eight (8) hours and greater in length, the owner or operator may either test in accordance with the test procedures defined in item (i) or the owner or operator may elect to perform tests, pursuant to either U.S. EPA Method 25A or U.S. EPA Method 18, only during those portions of each emission event that define the emission profile of each emission event occurring within the batch cycle. For each emission event of less than four (4) hours in duration, the owner or operator shall test continuously over the entire emission event as set forth in item (i). For each emission event of greater than four (4) hours in duration, the owner or operator shall elect either to perform a minimum of three (3) one (1) hour test runs during the emission event or shall test continuously over the entire emission event within each unit operation in the batch process train. To demonstrate that the portion of the emission event to be tested defines the emission profile for the emission event, the owner or operator electing to rely on this option shall develop an emission profile for the entire emission event. The emission profile shall be based upon either process knowledge or test data collected. Examples of information that could constitute process knowledge include, but are not limited to, calculations based on material balances and process stoichiometry. Previous test results may be used provided the results are still relevant to the current process vent stream conditions.

(B) The mass emission rate from the process vent or inlet to the control device shall be determined by combining concentration and flow rate measurements taken simultaneously at sampling sites selected in accordance with subdivision (1) throughout the batch cycle.

(C) The mass emission rate from the control device outlet shall be obtained by combining concentration and flow rate measurements taken simultaneously at sampling sites selected in accordance with subdivision (1) throughout the batch cycle.

(D) The efficiency of the control device shall be determined by integrating the mass emission rates obtained in clauses (B) and (C) over the time of the batch cycle and dividing the difference in inlet and outlet mass flow totals by the inlet mass flow total.

(g) The owner or operator of a batch process train or unit operation may propose an alternative test method or procedures to demonstrate compliance with the control requirements set forth in section 3 of this rule. The method or procedures shall be:

(1) approved by the commissioner and U.S. EPA in writing; and

(2) included as federally enforceable permit conditions.

(h) In the absence of a request by the commissioner to conduct compliance testing in accordance with provisions of this rule, the owner or operator may demonstrate compliance by the use of engineering estimates or process stoichiometry.

(i) During the compliance test conducted to demonstrate compliance with the control requirements of section 3 of this rule, the owner or operator shall establish the operating limits (operating parameter values) for the monitoring devices required under section 6 of this rule.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-19-5; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-19-6 Monitoring requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 6. (a) Every owner or operator using an incinerator to comply with section 3 of this rule shall install, calibrate, maintain, and operate, according to manufacturer's specifications, temperature monitoring devices with an accuracy of plus or minus one percent (1%) of the temperature being measured expressed in degrees Celsius or plus or minus one and eight-tenths percent (1.8%) of the temperature being measured expressed in degrees Fahrenheit, each equipped with a continuous recorder as follows:

(1) Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(2) Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the combustion chamber.

(b) The owner or operator using a flare to comply with section 3 of this rule shall install, calibrate, maintain, and operate, according to manufacturer's specifications, a heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light to indicate continuous presence of a flame.

(c) Every owner or operator using a scrubber to comply with section 3 of this rule shall install, calibrate, maintain, and operate, according to manufacturer's specifications:

(1) a temperature monitoring device for scrubbant liquid having an accuracy of plus or minus one percent (1%) of the temperature being monitored expressed in degrees Celsius or plus or minus one and eight-tenths percent (1.8%) of the temperature being measured expressed in degrees Fahrenheit and a specific gravity device for scrubbant liquid, each equipped with a continuous recorder; or

(2) a VOC monitoring device used to indicate the concentration of VOC exiting the control device based on a detection principle, such as infrared, photoionization, or thermal conductivity, equipped with a continuous recorder.

(d) Every owner or operator using a condenser to comply with section 3 of this rule shall install, calibrate, maintain, and operate, according to manufacturer's specifications:

(1) a condenser exit temperature monitoring device equipped with a continuous recorder and having an accuracy of plus or minus one percent (1%) of the temperature being monitored expressed in degrees Celsius or plus or minus one and eight-tenths percent (1.8%) of the temperature being measured expressed in degrees Fahrenheit, equipped with a continuous recorder; or

(2) a VOC monitoring device used to indicate the concentration of VOC, such as infrared, photoionization, or thermal conductivity, each equipped with a continuous recorder.

(e) Every owner or operator using a carbon adsorber to comply with section 3 of this rule shall install, calibrate, maintain, and operate, according to the manufacturer's specifications:

(1) an integrating regeneration steam flow monitoring device having an accuracy of plus or minus ten percent (10%), and a carbon bed temperature monitoring device having an accuracy of plus or minus one percent (1%) of the temperature being monitored expressed in degrees Celsius or plus or minus one and eight-tenths percent (1.8%) of the temperature being measured expressed in degrees Fahrenheit, both equipped with a continuous recorder; or

(2) a VOC monitoring device used to indicate the concentration level of VOC exiting the device based on a detection principle, such as infrared, photoionization, or thermal conductivity, equipped with a continuous recorder.

(f) Every owner or operator using a boiler or process heater with a design heat input capacity less than one hundred fifty million (150,000,000) Btu per hour that is to comply with section 3 of this rule shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, a temperature monitoring device in the firebox with an accuracy of plus or minus one percent (1%) of the temperature being measured expressed in degrees Celsius or plus or minus one and eight-tenths percent (1.8%) of the temperature being measured expressed in degrees Fahrenheit, equipped with a continuous recorder. Any boiler or process heater in which all process vent streams are introduced with primary fuel is exempt from this requirement.

(g) Every owner or operator of a process vent shall be permitted to monitor by an alternative method or may monitor parameters other than those listed in subsections (a) through (f), if approved by the commissioner and U.S. EPA in writing. The alternative method or parameters shall be contained in a permit pertaining to the process vent as federally enforceable permit conditions. *(Air Pollution Control Division; 326 IAC 8-19-6; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)*

326 IAC 8-19-7 Record keeping

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 7. (a) Every owner or operator of a unit operation or batch process train that is exempt from the control requirements in section 1(c)(2)(A) or 1(c)(2)(B) of this rule shall keep records of the uncontrolled total annual mass emissions for such unit operation or batch process train, as applicable, and documentation verifying these values or measurements. The documentation shall include the engineering calculations, any measurements made in accordance with section 5 of this rule, and the potential or permitted number of batch cycles per year or, in the alternative, total production as represented in the permit pertaining to the unit operation or batch process train.

(b) Every owner or operator of a unit operation or batch process train that is exempt from control requirements of section 1(c)(2) of this rule shall keep the following records:

(1) The uncontrolled total annual mass emissions and documentation verifying these values or measurements. The documentation shall include any engineering calculations, any measurements made in accordance with section 5 of this rule, and the potential or permitted number of batch cycles per year or, in the alternative, total production as represented in the permit pertaining to the unit operation or batch process train.

(2) The average flow rate in scfm and documentation verifying this value.

(3) The calculated weighted average volatility and documentation verifying this value.

(4) The calculated applicability flow rate value from section 1(e)(3) of this rule.

(c) Every owner or operator of a batch process train or unit operation subject to the control requirements of section 3 of this rule shall keep records of the following parameters required to be monitored under section 6 of this rule:

(1) If using a thermal or catalytic incinerator to comply with section 3 of this rule, records indicating the average combustion chamber temperature of the incinerator (or the average temperature upstream and downstream of the catalyst bed for a catalytic incinerator) measured continuously and averaged over the same time period as the compliance test that demonstrated compliance.

(2) If using a flare, either steam-assisted, air-assisted, or nonassisted, to comply with section 3 of this rule, continuous records of the flare pilot flame monitoring and records of all periods of operations during which the pilot flame is absent.

(3) If using any of the following as a control device, the following records:

(A) Where a scrubber is used, the exit specific gravity (or alternative parameter equivalent in ability to measure the degree of absorbing liquid saturation, if approved by the commissioner) and the average exit temperature of the absorbing liquid, measured continuously and averaged over the same time period as the compliance test that demonstrated compliance (both measured while the vent stream is routed normally).

(B) Where a condenser is used, the average exit (product side) temperature measured continuously and averaged over

the same time period as the compliance test that demonstrated compliance while the vent stream is routed normally.

(C) Where a carbon adsorber is used, the total steam mass flow measured continuously and averaged over the same time period as the compliance test that demonstrated compliance (full carbon bed cycle), temperature of the carbon bed after regeneration (and within fifteen (15) minutes after completion of any cooling cycle or cycles), and duration of the carbon bed steaming cycle (all measured while the vent stream is routed normally).

(D) As an alternative to clause (A), (B), or (C), at a minimum, records indicating the concentration level or reading indicated by the VOC monitoring device at the outlet of the scrubber, condenser, or carbon adsorber, measured continuously and averaged over the same time period as the compliance test that demonstrated compliance (while the vent stream is routed normally).

(d) Every owner or operator of a unit operation claiming a vent stream concentration exemption level, as set forth in section 1(d)(1) of this rule, shall:

(1) maintain records to indicate the vent stream concentration is less than or equal to five hundred (500) ppmv; and

(2) notify the commissioner in writing if the vent stream concentration at any time equals or exceeds five hundred (500) ppmv, within sixty (60) days after the event.

The notification shall include a copy of all records of the event.

(e) An owner or operator of a batch process train or unit operation subject to the control requirements of section 3 of this rule may maintain alternative records other than those listed in section 1 of this rule. Any alternative record keeping shall be:

(1) approved by the commissioner and U.S. EPA in writing; and

(2) contained in the permit pertaining to the batch process train or unit operation as federally enforceable permit conditions.

(f) The owner or operator of a unit operation or batch process train that is exempt from the control requirements of section 3 of this rule shall notify the commissioner in writing if the uncontrolled total annual mass emissions from such unit operation or batch process train exceed the threshold in section 1(c)(2)(A) or 1(c)(2)(B) of this rule, respectively, within sixty (60) days after the event occurs. The notification shall include a copy of all records of the event.

(g) Every owner or operator of a batch process train or unit operation required to keep records under this rule shall:

(1) maintain the records at the source for a minimum period of five (5) years; and

(2) make the records available to the commissioner upon request.

(Air Pollution Control Division; 326 IAC 8-19-7; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)

326 IAC 8-19-8 Reporting

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 8. Reporting requirements are as follows:

(1) Initial compliance status report. Each owner or operator of a batch process train or unit operation subject to this rule shall submit an initial compliance status report within sixty (60) calendar days after the compliance dates specified in section 9 of this rule as follows:

(A) The initial compliance status report shall include the following:

(i) The results of exemption.

(ii) Process vent determinations.

(iii) Compliance tests.

(iv) Values of monitored parameters established during compliance tests.

(v) Any other information used to demonstrate compliance and recorded under section 7 of this rule.

(B) For compliance tests and process vent determinations based on measurements, the initial compliance status report shall include one (1) complete test report for each test method used for a particular kind of process vent. For additional tests and measurements performed for the same kind of process vent using the same test method, the test results or measurement results shall be submitted, but a complete test report is not required.

(C) A complete test report shall include the following:

(i) A brief process description.

(ii) A sampling site description.

(iii) A description of sampling and analysis procedures and any modifications to standard procedures.

(iv) Quality assurance procedures.
(v) A record of operating conditions during the test.
(vi) A record of preparation of standards.
(vii) A record of calibrations.
(viii) Raw data sheets for field sampling.
(ix) Raw data sheets for field and laboratory analyses.
(x) Documentation of calculations.
(xi) Any other information required by the test method.

(D) For each monitored parameter for which a range is required to be established under section 5(i) of this rule, the compliance status report shall include the following information:

(i) The specific range of the monitored parameter or parameters for each control device.
(ii) The rationale for the specific range for each parameter for each control device, including the following:
(AA) Any data and calculations used to develop the range.
(BB) A description of why the range indicates proper operation of the control device or final recovery device.

(2) Semiannual compliance status reports. The owner or operator of a batch process train or unit operation subject to this rule shall submit semiannual compliance status reports containing the information in clauses (A) and (B). The semiannual compliance status report shall be submitted no later than sixty (60) calendar days after the end of each six (6) month period to the department. The first report shall be submitted no later than eight (8) months after the date the initial compliance status report is due and shall cover the six (6) month period beginning on the date the initial compliance status report is due as follows:

(A) Semiannual reports on parameter monitoring for controlled process vents. For a process vent equipped with a control device to meet the requirement of section 3 of this rule, the semiannual compliance status reports shall include the following recorded information:

(i) Reports of monitored parameters for all operating days when the average values recorded under section 7(c) of this rule were outside the ranges established in the initial compliance status report or permit issued by the commissioner.
(ii) Reports of the times and durations of all periods recorded under section 9(3) of this rule when the monitoring device is not working or monitoring data is not collected during process operation generating the process vent stream or during operation of the control or recovery device.
(iii) Reports of the times and durations of all periods recorded under section 7(c)(2) of this rule in which the pilot flame is absent.
(iv) Reports on monitoring devices and parameters approved by the commissioner under section 7(e) of this rule.

(B) Semiannual reports on subsequent compliance tests for controlled process vents and subsequent process vent determination tests. If any subsequent compliance tests or subsequent process vent determination tests are conducted during the semiannual reporting period after the initial compliance status report has been submitted, the semiannual compliance status report shall include the data recorded under section 7 of this rule.

(Air Pollution Control Division; 326 IAC 8-19-8; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)

326 IAC 8-19-9 Compliance dates

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 9. Except where otherwise specified in this rule, the compliance dates for any batch process train that is subject to this rule are as follows:

(1) If installation commenced before the effective date of this rule, the compliance date of the batch process train is:

(A) April 1, 2011; or
(B) the date the source becomes subject to this rule;

whichever is later.

(2) If installation commenced on or after the effective date on this rule, the compliance date of the batch process train is the

date of initial startup of the batch process train.

(3) If a source reduces its potential to emit under section 1(b) of this rule, the date on which the source subsequently meets the applicability criteria of section 1(a) of this rule is the date the source becomes subject to this rule.

(4) If a batch process train or unit operation is exempted under section 1(c)(2) of this rule or is not required to reduce uncontrolled VOC emissions under section 3(1) or 3(2) of this rule and is subsequently equipped with a control device to meet the VOC reduction requirements of section 3(1) or 3(2) of this rule, the compliance date of the batch process train or unit operation is the date of first startup of the installed control device. Until the date of first startup of the installed control device, the batch process train or unit operation shall continue to meet either the exemption level or the criteria pertaining to applicability equations.

(5) For any control device that is used to comply with section 3 of this rule, the owner or operator shall demonstrate compliance by testing the control device in accordance with section 5 of this rule within ninety (90) days after the compliance date.

(6) Additional testing of the control device or testing of the process vents of a batch process train or unit operation in accordance with section 5 of this rule may be required by the commissioner to ensure continued compliance with section 3 of this rule.

(Air Pollution Control Division; 326 IAC 8-19-9; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)

Rule 20. Industrial Wastewater

326 IAC 8-20-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to any source that generates process wastewater and meets all of the following criteria:

(1) Is located in Lake County or Porter County.

(2) Has the combined total potential to emit VOC emissions equal to or greater than one hundred (100) tons per year from all of the following:

(A) Industrial wastewater sources (all waste management units).

(B) All noncontrol technique guideline (non-CTG) sources.

(C) Unregulated emissions from CTG emission units, except emission units regulated under 40 CFR 60, Subpart BBB*; 40 CFR 60, Subpart III*; 40 CFR 60, Subpart NNN*; or 40 CFR 63, Subpart T*.

(3) Has facility operations specifically listed under any of the following industrial categories:

(A) Organic chemicals, plastics, and synthetic fibers manufacturing industry under Standard Industrial Classification (SIC) codes 2821, 2823, 2824, 2865, and 2869.

(B) Pharmaceutical industry under SIC codes 2833, 2834, and 2836.

(C) Pesticide manufacturing industry under SIC code 2879.

(D) Hazardous waste treatment, storage, and disposal facilities under SIC codes 4952, 4953, and 4959.

(b) If a source meets the applicability requirements under subsection (a), but reduces its potential to emit for VOCs by means of federally enforceable operational restrictions (for example, production, hours of operation, or capacity utilization) to less than one hundred (100) tons per year by April 1, 2011, the source is not subject to the emission control requirements of section 3 of this rule.

(c) For purposes of subsection (a), an emission unit shall be considered regulated by a rule, section, or subpart if it is subject to the limits of that rule, section, or subpart. An emission unit is not considered regulated by a rule, section, or subpart if it is not subject to the limits of that rule, section, or subpart. For example, if the emission unit is covered by an exemption in the rule, section, or subpart, or the applicability criteria of the rule, section, or subpart are not met, then the source is not subject to the rule, section, or subpart. An emission unit is also not considered regulated if there is no rule contained in this article regulating the source category.

(Air Pollution Control Division; 326 IAC 8-20-1; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)

326 IAC 8-20-2 Definitions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. The following definitions apply throughout this rule:
(1) "Affected residual" means a residual that is removed from an affected VOC wastewater stream.
(2) "Affected VOC" means VOC with a Henry's Law Constant greater than or equal to 1.8×10^{-6} atm-m3/mole (0.1y/x) at twenty-five (25) degrees Celsius.
(3) "Affected VOC wastewater stream" means the following:
(A) A process wastewater stream from a process unit at an affected industrial category with either an annual average concentration of affected VOC greater than or equal to:
(i) ten thousand (10,000) parts per million by weight (ppmw); or
(ii) one thousand (1,000) ppmw and an annual average flow rate greater than or equal to ten and zero-tenths (10.0) liters per minute (two and sixty-four hundredths (2.64) gallons per minute), as determined in accordance with section 9 of this rule.
(B) The term does not include the following:
(i) Maintenance wastewaters.
(ii) Stormwater from segregated sewers.
(iii) Water from firefighting and deluge systems.
(iv) Spills.
(v) Water from safety showers.
(vi) Samples of a size not greater than reasonably necessary for the method of analysis that is used.
(vii) Equipment leaks.
(viii) Wastewater drips from procedures such as disconnecting hoses after cleaning lines.
(ix) Noncontact cooling water.
(4) "Annual average concentration" means the flow-weighted annual average concentration, as determined according to the procedures specified in 40 CFR 60.782(b)*.
(5) "Annual average flow rate" means the annual average flow rate, as determined according to the procedures specified in section 9 of this rule.
(6) "Closed biological treatment process" means a tank or surface impoundment where biological treatment occurs and VOC emissions from the treatment process are routed either to a control device by means of a closed vent system or to a fuel gas system by means of hard-piping. The tank or surface impoundment has a fixed roof, as defined in this rule, or a floating flexible membrane cover that meets the requirements specified in section 9 of this rule.
(7) "Closed-vent system" means a system that:
(A) is not open to the atmosphere; and
(B) is composed of:
(i) hard-piping;
(ii) ductwork;
(iii) connections; and
(iv) if necessary, flow inducing devices that transport gas or vapor from an emission point to a control device.
(8) "Combustion device" means an individual unit of equipment, such as a:
(A) flare;
(B) incinerator;
(C) process heater; or
(D) boiler;
used for the combustion of VOC emissions.
(9) "Continuously monitor and record" means to measure data values of a parameter at least once every fifteen (15) minutes and to record either each measured data value or block average values for a fifteen (15) minute or shorter time period. A block average value is the average of all measured data values during the time period or, if data values are measured more frequently than once per minute, the average of measured data values taken at least once per minute during the time period.
(10) "Continuous seal" means a seal that forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the floating roof. A continuous seal may be a:
(A) vapor-mounted seal;
(B) liquid-mounted seal; or

(C) metallic shoe seal.

A continuous seal may be constructed of fastened segments so as to form a continuous seal.

(11) "Control device" means any of the following:

(A) Combustion device.

(B) Recovery device for vapor vents.

(C) Recapture device.

Such equipment includes, but is not limited to, absorbers, carbon adsorbers, condensers, incinerators, flares, boilers, and process heaters. For a steam stripper, a primary condenser is not considered a control device.

(12) "Cover" means the following:

(A) A device or system that is placed on or over a waste management unit containing wastewater or residuals so that the entire surface area is enclosed to minimize air VOC emissions.

(B) A cover may have openings necessary for operation, inspection, and maintenance of the waste management unit, such as:

(i) access hatches;

(ii) sampling ports; and

(iii) gauge wells;

provided that each opening is closed when not in use.

(C) The following are examples of covers:

(i) A fixed roof installed on a wastewater tank.

(ii) A lid installed on a container.

(iii) An air-supported enclosure installed over a waste management unit.

(13) "Ductwork" means a conveyance system such as those commonly used for heating and ventilation systems. It often:

(A) is made of sheet metal; and

(B) has sections connected by screws or crimping.

Hard-piping is not ductwork.

(14) "Enhanced biological treatment process" means the following:

(A) An aerated, thoroughly mixed treatment unit or units that contains biomass suspended in water followed by a clarifier that removes biomass from the treated water and recycles recovered biomass to the aeration unit.

(B) The mixed liquor volatile suspended solids (biomass) is greater than one (1) kilogram per cubic meter throughout each aeration unit. The biomass is suspended and aerated in the water of the aeration unit or units by either submerged air flow or mechanical agitation.

(C) A thoroughly mixed treatment unit is a unit that is designed and operated to approach or achieve uniform biomass distribution and organic compound concentration throughout the aeration unit by quickly dispersing the recycled biomass and the wastewater entering the unit.

(15) "External floating roof" means a pontoon-type or double-deck-type cover that rests on the liquid surface in a storage vessel or waste management unit with no fixed roof.

(16) "Fixed roof" means a cover that:

(A) is mounted on a waste management unit or storage vessel in a stationary manner; and

(B) does not move with fluctuations in liquid level.

(17) "Floating roof" means a cover:

(A) consisting of a:

(i) double deck;

(ii) pontoon single deck;

(iii) internal floating cover; or

(iv) covered floating roof;

that rests upon and is supported by the liquid being contained; and

(B) that is equipped with a closure seal or seals to close the space between the roof edge and waste management unit.

(18) "Fr" means fraction removed value for VOC, unitless.

(19) "Fuel gas system" means the off-site and on-site piping and control system that gathers gaseous stream or streams generated by on-site operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel

gas in combustion devices or in in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.

(20) "Hard-piping" means pipe or tubing.

(21) "Incinerator" means an enclosed combustion device that is used for destroying organic compounds. Auxiliary fuel may be used to heat waste gas to combustion temperatures. Any energy recovery section present is not physically formed into one (1) manufactured or assembled unit with the combustion section; rather, the energy recovery section is a separate section following the combustion section and the two are joined by ducts or connections carrying flue gas. The energy recovery section limitation does not apply to an energy recovery section used solely to preheat the incoming vent stream or combustion air.

(22) "Individual drain system" means the stationary system used to convey wastewater streams or residuals to a waste management unit or to discharge or disposal. The term includes:

(A) hard-piping;

(B) all process drains and junction boxes, together with their associated sewer lines and other junction boxes;

(C) manholes;

(D) sumps and lift stations;

(E) conveying wastewater streams; or

(F) residuals.

The term does not include a segregated storm water sewer system, which is a drain and collection system designed and operated for the sole purpose of collecting rainfall-runoff at a source, and which is segregated from all other individual drain systems.

(23) "Internal floating roof" means a cover that rests or floats on the liquid surface, but not necessarily in complete contact with it, inside a waste management unit that has a fixed roof.

(24) "Junction box" means a manhole or a lift station or access point to a wastewater sewer line.

(25) "Liquid-mounted seal" means a foam or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

(26) "Maintenance wastewater" means wastewater generated by the draining of process fluid from components in the process unit into an individual drain system prior to or during maintenance activities. Maintenance wastewater can be generated during planned and unplanned shutdowns and during periods not associated with a shutdown. Any generation of wastewater that is routine or is generated by designed manufacturing processes is not maintenance wastewater. Examples of activities that can generate maintenance wastewaters include the following:

(A) Descaling heat exchanger tubing bundles.

(B) Cleaning of distillation column traps.

(C) Draining of low legs and high point bleeds.

(D) Draining of pumps into an individual drain system.

(E) Draining of portions of the process unit for repair.

(27) "Mechanical shoe seal" or "metallic shoe seal" means metal sheets that are held vertically against the wall of the storage vessel by:

(A) springs;

(B) weighted levers; or

(C) other mechanisms;

and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(28) "Oil-water separator" or "organic-water separator" means the following:

(A) A waste management unit used to separate oil or organics from water.

(B) An oil-water or organic-water separator consists of not only the separation unit but also the forebay and other separator basins:

(i) skimmers;

(ii) weirs;

(iii) grit chambers; and

(iv) sludge hoppers;

and bar screens that are located directly after the individual drain system and prior to additional treatment units such

as an air flotation unit clarifier, or biological treatment unit.

(C) Examples of an oil-water or organic-water separator include, but are not limited to:

(i) an American Petroleum Institute separator;

(ii) a parallel-plate interceptor; or

(iii) a corrugated-plate interceptor with the associated ancillary equipment.

(29) "Open biological treatment process" means a biological treatment process that is not a closed biological treatment process as defined in this rule.

(30) "Point of determination" means each point where process wastewater exits a process unit.

(31) "Point of generation" means the location where process wastewater exits a process unit.

(32) "Pressure relief valve" means a valve used only to release an unplanned, nonroutine discharge. A relief valve discharge can result from:

(A) an operator error;

(B) a malfunction, such as a power failure or equipment failure; or

(C) another unexpected cause;

that requires immediate venting of gas from process equipment in order to avoid safety hazards or equipment damage.

(33) "Process drain" means any opening (including a covered or controlled opening) that is installed or used to receive or convey wastewater into the wastewater system.

(34) "Process unit" means the smallest set of process equipment that:

(A) can operate independently; and

(B) includes all operations necessary to achieve its process objective.

(35) "Process wastewater" means the following:

(A) Wastewater that during manufacturing or processing comes into direct contact with or results from the production or use of any:

(i) raw material;

(ii) intermediate product;

(iii) finished product;

(iv) byproduct; or

(v) waste product.

(B) The term includes, but is not limited to, the following:

(i) Product tank drawdown or feed tank drawdown.

(ii) Water formed during a chemical reaction or used as a reactant.

(iii) Water used to wash impurities from organic products or reactants.

(iv) Water used to cool or quench organic vapor streams through direct contact.

(v) Condensed steam from jet ejector systems pulling vacuum on vessels containing organics.

(36) "RCRA" means the Resource Conservation and Recovery Act.

(37) "Recapture device" means the following:

(A) An individual unit of equipment capable of and used for the purpose of recovering chemicals, but not normally for use, reuse, or sale. For example, a recapture device may recover chemicals primarily for disposal.

(B) Recapture devices include, but are not limited to, the following:

(i) Absorbers.

(ii) Carbon adsorbers.

(iii) Condensers.

(38) "Recovery device" means the following:

(A) An individual unit of equipment capable of and normally used for the purpose of recovering chemicals for fuel value (for example, net positive heating value), use, reuse, or for sale for fuel value, use, or reuse.

(B) Examples of equipment that may be recovery devices include the following:

(i) Absorbers.

(ii) Carbon adsorbers.

(iii) Condensers.

(iv) Oil-water separators or organic-water separators.

(v) Organic removal devices, such as the following:
(AA) Decanters.
(BB) Strippers.
(CC) Thin-film evaporation units.

(C) For purposes of the monitoring, record keeping, and reporting requirements of this rule, recapture devices are considered recovery devices.

(39) "Residual" means the following:

(A) Any liquid or solid material containing VOC that is removed from a wastewater stream by a waste management unit or treatment process that does not destroy organic compounds (nondestructive unit).

(B) Examples of residuals from nondestructive wastewater management units are the following:
(i) The organic layer and bottom residue removed by a decanter or organic-water separator.
(ii) The overheads from a steam stripper or air stripper.

(C) Examples of materials that are not residuals are:
(i) silt;
(ii) mud;
(iii) leaves;
(iv) bottoms from a steam stripper or air stripper; and
(v) sludges, ash, or other materials;

removed from wastewater being treated by destructive devices such as biological treatment units and incinerators.

(40) "Sewer line" means a lateral, trunk line, branch line, or other conduit including, but not limited to, grates and trenches, used to convey wastewater streams or residuals to a downstream waste management unit.

(41) "Single-seal system" means a floating roof having one (1) continuous seal that completely covers the space between the wall of the storage vessel and the edge of the floating roof. The seal may be a vapor-mounted, liquid-mounted, or metallic shoe seal.

(42) "Steam jet ejector" means a steam nozzle that discharges a high-velocity jet across a suction chamber that is connected to the equipment to be evacuated.

(43) "Steam stripper" means a column including:

(A) associated stripper feed tanks;

(B) condensers; or

(C) heat exchangers;

used to remove compounds from wastewater.

(44) "Surface impoundment" means the following:

(A) A waste management unit that is a:
(i) natural topographic depression;
(ii) man-made excavation; or
(iii) diked area formed primarily of earthen materials (although it may be lined with man-made materials);

designed to hold an accumulation of liquid wastes or waste containing free liquids.

(B) A surface impoundment is used for the purpose of treating, storing, or disposing of wastewater or residuals and is not an injection well.

(C) Examples of surface impoundments are the following:
(i) Equalization.
(ii) Settling and aeration pits.
(iii) Ponds.
(iv) Lagoons.

(45) "Tank drawdown" means any material or mixture of materials discharged from a product tank, feed tank, or intermediate tank for the purpose of removing water or other contaminants from the tank.

(46) "Temperature monitoring device" means a unit of equipment used to monitor temperature and having a minimum accuracy of:

(A) plus or minus one percent (1%) of the temperature being monitored expressed in degrees Celsius; or

(B) plus or minus five-tenths (0.5) degree Celsius;

whichever number is greater, for example, has the highest absolute value.

(47) "Treatment process" means a specific technique that removes or destroys the organics in a wastewater or residual stream, such as:

(A) a steam stripping unit (steam stripper);

(B) a thin-film evaporation unit;

(C) a waste incinerator;

(D) a biological treatment unit; or

(E) any other process applied to wastewater streams or residuals;

to comply with section 4(h) or 5 of this rule. Most treatment processes are conducted in tanks. Treatment processes are a subset of waste management units.

(48) "Vapor-mounted seal" means a continuous seal that:

(A) completely covers the annular space between the wall of the storage vessel or waste management unit and the edge of the floating roof; and

(B) is mounted such that there is a vapor space between the stored liquid and the bottom of the seal.

(49) "Waste management unit" means the following:

(A) Equipment, a structure or structures, or a device or devices used to convey, store, treat, or dispose of wastewater streams or residuals.

(B) Examples of waste management units include the following:

(i) Wastewater tanks.

(ii) Surface impoundments.

(iii) Individual drain systems.

(iv) Biological wastewater treatment units.

(C) Examples of equipment that may be waste management units include the following:

(i) Containers.

(ii) Air flotation units.

(iii) Oil-water separators or organic-waste separators.

(iv) Organic removal devices such as:

(AA) decanters;

(BB) strippers; or

(CC) thin-film evaporation units.

(D) If such equipment is used for recovery, then it is part of a process unit and is not a waste management unit.

(50) "Wastewater stream" means a stream that contains process wastewater.

(51) "Wastewater tank" means a stationary waste management unit that is:

(A) designed to contain an accumulation of wastewater or residuals; and

(B) constructed primarily of nonearthen materials, for example, wood, concrete, steel, or plastic, that provide structural support.

The term includes wastewater tanks used for flow equalization.

(52) "Water seal controls" means:

(A) a seal pot;

(B) a p-leg trap; or

(C) another type of trap filled with water;

for example, flooded sewers that maintain water levels adequate to prevent air flow through the system, that creates a water barrier between the water level of the seal and the atmosphere. The water level of the seal must be maintained in the vertical leg of a drain in order to be considered a water seal.

(53) "Wet weather retention basin" means an impoundment or tank that is used to store rainfall runoff that would exceed the capacity of the wastewater treatment system until it can be returned to the wastewater treatment system or, if the water meets the applicable discharge limits, discharged without treatment. These units may also be used to store wastewater during periods when the wastewater treatment system is shut down for maintenance or emergencies.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental

Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-20-2; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-20-3 Overall requirements for industrial wastewater

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 3. The owner or operator of a source subject to this rule shall ensure that all of the following are met:

(1) Except as otherwise exempted under subdivision (2), the owner or operator of a source that meets the applicability criteria in section 1 of this rule shall comply with the requirements in sections 4 through 12 of this rule.

(2) The following exemptions apply:

(A) Any source with an annual affected VOC loading in wastewater, as determined in accordance with section 9 of this rule, less than or equal to ten (10) megagrams (eleven and three-hundredths (11.03) tons) is exempt from the control requirements of section 4 of this rule.

(B) At any source with an annual affected VOC loading in wastewater, as determined in accordance with section 9 of this rule, greater than ten (10) megagrams (eleven and three-hundredths (11.03) tons), the owner or operator of the source may exempt from the control requirements of section 4 of this rule one (1) or more affected VOC wastewater streams for which the sum of the annual VOC loading in wastewater for all of the exempted streams is less than or equal to ten (10) megagrams (eleven and three-hundredths (11.03) tons).

(C) If compliance with the control requirements of section 4 of this rule would create a safety hazard in a waste management unit, the owner or operator may request U.S. EPA to exempt that waste management unit from the control requirements of section 4 of this rule. U.S. EPA shall approve the request if justified by the likelihood and magnitude of the potential injury and if U.S. EPA determines that reducing or eliminating the hazard is technologically or economically unreasonable. The approval shall occur when the department is informed, in writing, that U.S. EPA has no objections to this exemption.

(D) Wet weather retention basins are exempt from the requirements of this rule.

(Air Pollution Control Division; 326 IAC 8-20-3; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)

326 IAC 8-20-4 Control requirements for process wastewater

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 4. (a) Any waste management unit that receives, manages, or treats an affected VOC wastewater stream or affected residual shall be controlled in accordance with:

(1) this section; or

(2) one (1) of the alternate methods of control listed in section 5 of this rule.

(b) The control requirements apply from the point of generation of an affected VOC wastewater stream until the affected VOC wastewater stream, including any affected residual, is either returned to a process unit or treated in accordance with subsection (h).

(c) For each individual drain system that receives or manages an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with the following requirements:

(1) The owner or operator shall operate and maintain on each opening in the individual drain system a cover and, if vented, route the vapors to a process or through a closed vent system to a control device as follows:

(A) The cover and all openings shall be maintained in a closed position at all times that an affected VOC wastewater stream or an affected residual is in the drain system except when it is necessary to use the opening for sampling or removal or for equipment inspection, maintenance, or repair.

(B) The control device shall be designed and operated to reduce the affected VOC vented to it by at least ninety percent (90%) by weight.

(C) The individual drain system shall be designed and operated to segregate the vapors within the system from other drain systems and the atmosphere.

(2) The owner or operator shall comply with following requirements:

(A) Each drain shall be equipped with water seal controls or a tightly fitting cap or plug.

(B) If a water seal is used on a drain receiving an affected VOC wastewater stream or an affected residual, the owner or operator shall either extend the pipe discharging the wastewater below the liquid surface in the water seal of the receiving drain or install a flexible shield (or other enclosure that restricts wind motion across the open area between the pipe and the drain) that encloses the space between the pipe discharging the wastewater to the drain receiving the wastewater. A water seal that is used on a hub receiving a wastewater stream that is not an affected VOC wastewater stream or an affected residual for the purpose of eliminating cross ventilation to drains carrying an affected VOC wastewater stream or an affected residual is not required to have an extended subsurface discharging pipe or a flexible shield.

(C) Each junction box shall be equipped with a tightly fitting solid cover, for example, no visible gaps, cracks, or holes, which shall be kept in place at all times except during inspection and maintenance.

(D) If the junction box is vented, the owner or operator shall comply with one (1) of the following requirements:

(i) The junction box shall be vented to a process or through a closed vent system to a control device that is designed and operated to reduce the VOC vented to it by at least ninety percent (90%) by weight.

(ii) If the junction box is filled and emptied by gravity flow (for example, there is no pump) or is operated with no more than slight fluctuations in the liquid level, the owner or operator may vent the junction box to the atmosphere provided that the junction box complies with the following requirements:

(AA) The vent pipe shall be at least ninety (90) centimeters in length and not greater than ten and two-tenths (10.2) centimeters in nominal inside diameter.

(BB) Water seals shall be installed and maintained at the wastewater entrance or entrances to or exit from the junction box restricting ventilation in the individual drain system and between components in the individual drain system.

(E) Each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visible gaps or cracks in joints, seals, or other emission interfaces.

(d) For each surface impoundment that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with the following requirements:

(1) The surface impoundment shall be equipped with a cover, for example, air-supported structure or rigid cover, and a closed-vent system that routes the VOC vapors vented from the surface impoundment to a control device that meets the following requirements:

(A) Each opening, for example, access hatch, sampling port, and gauge well, shall be maintained in a closed position, for example, covered by a lid, at all times that an affected VOC wastewater stream or an affected residual is in the surface impoundment except when it is necessary to use the opening for sampling or removal or for equipment inspection, maintenance, or repair.

(B) The cover shall be used at all times that an affected VOC wastewater stream or an affected residual is in the surface impoundment except during removal of treatment residuals in accordance with 40 CFR 268.4* or closure of the surface impoundment in accordance with 40 CFR 264.228*.

(C) The control device shall be designed and operated to reduce the affected VOC vented to it by at least ninety percent (90%) by weight.

(2) The surface impoundment shall be equipped with a floating flexible membrane cover that meets the requirements specified in this subdivision as follows:

(A) The flexible membrane cover shall be designed to:

(i) float on the liquid surface during normal operations; and

(ii) form a continuous barrier over the entire surface area of the liquid.

(B) The flexible membrane cover shall be fabricated from a synthetic membrane material that is either a high density polyethylene with a thickness not less than two and five-tenths (2.5) millimeters (one hundred (100) mils) or a material (or a composite of different materials) determined to have both organic permeability properties that are equivalent to those of the high density polyethylene material and chemical and physical properties that maintain the material integrity for the intended service life of the material.

(C) The flexible membrane cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other

open spaces between cover section seams or between the interface of the cover edge and its foundation mountings.

(D) Except as provided for in clause (E), each opening in the flexible membrane cover shall be equipped with a closure device designed to operate such that, when the closure device is secured in the closed position, there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device.

(E) The flexible membrane cover may be equipped with one (1) or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening or a flexible fabric sleeve seal.

(F) Whenever an affected VOC wastewater stream or an affected residual is in the surface impoundment, the flexible membrane cover shall float on the liquid and each closure device shall be secured in the closed position. Opening of closure devices or removal of the flexible membrane cover is allowed to provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations or to remove accumulated sludge or other residues from the bottom of the surface impoundment.

(e) For each oil-water separator that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with the following requirements:

(1) The oil-water separator shall be equipped with a fixed roof and a closed vent system that routes the vapors vented from the oil-water separator to a control device in accordance with following requirements:

(A) Each opening in the fixed roof, for example, access hatches, sampling ports, and gauge wells, shall be maintained in a closed, sealed position, for example, covered by a lid that is gasketed and latched, at all times that the oil-water separator contains an affected VOC wastewater stream or an affected residual except when it is necessary to use the opening for sampling or removal or for equipment inspection, maintenance, or repair.

(B) The control device shall be designed and operated to reduce the VOC vented to it by at least ninety percent (90%) by weight.

(2) The oil-water separator shall be equipped with a floating roof in accordance with the requirements of this subdivision as follows:

(A) The oil-water separator shall be equipped with a floating roof that has a closure device between the floating roof and the wall of the separator. For portions of the oil-water separator where it is infeasible to construct and operate a floating roof, such as over the weir mechanism, the owner or operator shall operate and maintain a fixed roof, closed vent system, and control device that meet the requirements specified in subdivision (1).

(B) The closure device shall consist of a primary seal and a secondary seal. The primary seal shall be a liquid-mounted seal or a mechanical shoe seal. The secondary seal shall be above the floating roof and cover the annular space between the floating roof and the wall of the separator.

(C) The floating roof shall be floating on the liquid, such as, off the roof supports, at all times except during abnormal conditions, such as, low flow rate.

(D) Except as provided for in clause (E), each opening in the floating roof shall be equipped with a gasketed cover, seal or lid, which shall be maintained in the closed position at all times, except during inspection and maintenance.

(E) The floating roof may be equipped with one (1) or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening or a flexible fabric sleeve seal.

(f) For each portable container that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall operate and maintain a cover on the portable container and shall comply with the requirements of this subsection as follows:

(1) The cover shall remain in place and all openings, for example, bungs, hatches, sampling ports, and pressure relief devices, shall be maintained in a closed position, for example, covered by a lid, at all times that an affected VOC wastewater stream or an affected residual is in the portable container except when it is necessary to use the opening for filling, removal, inspection, sampling, or pressure relief events related to safety considerations to prevent physical damage or permanent deformation of the portable container or cover.

(2) For portable containers with a capacity greater than or equal to one hundred ten (110) gallons, a submerged fill pipe shall be used when a container is being filled by pumping with an affected VOC wastewater stream or an affected residual. The submerged fill pipe outlet shall extend to not more than six (6) inches or within two (2) fill pipe diameters of the bottom of

the container while the container is being filled.

(3) During treatment of an affected VOC wastewater stream or an affected residual, including aeration, thermal, or other treatment, in a portable container, whenever it is necessary for the container to be open, the container shall be located within an enclosure with a closed-vent system that routes the VOC vapors vented from the container to a control device. The control device shall be designed and operated to reduce the VOC vented to it by at least ninety percent (90%) by weight.

(g) For each wastewater tank that receives, manages, or treats an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with the requirements of either subdivision (1) or (2) as follows:

(1) The owner or operator shall operate and maintain a fixed roof for the wastewater tank, except that if the wastewater tank meets any of the conditions in clauses (A) through (D), the owner or operator shall operate and maintain one (1) of the emission control techniques listed in subdivision (2) as follows:

(A) Used for heating wastewater.

(B) Used for treating by means of an exothermic reaction.

(C) The contents of the tank is sparged.

(D) The wastewater tank has a capacity equal to or greater than forty thousand (40,000) gallons, and the maximum vapor pressure stored material is equal to or greater than one and five-tenths (1.5) pounds per square inch absolute.

(2) The owner or operator shall operate and maintain one (1) of the following emission control techniques:

(A) A fixed roof and a closed-vent system that routes the VOC vapors vented from the wastewater tank to a control device as follows:

(i) Each opening in the fixed roof, for example, access hatches, sampling ports, and gauge wells, shall be maintained in a closed position, for example, covered by a lid, at all times that the wastewater tank contains an affected VOC wastewater stream or an affected residual except when it is necessary to use the opening for wastewater sampling or removal or for equipment inspection, maintenance, or repair.

(ii) The control device shall be designed and operated to reduce the VOC vented to it by at least ninety percent (90%) by weight.

(B) A fixed roof and an internal floating roof that meets the requirements specified in this clause as follows:

(i) The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during initial fill, after the tank has been completely emptied and degassed, and when the tank is completely emptied before being subsequently refilled.

(ii) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

(iii) The internal floating roof shall be equipped with a closure device between the wall of the tank and the roof edge. The closure device shall consist of a liquid-mounted seal or a metallic shoe seal, or two (2) seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous seals.

(iv) Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

(v) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and rim space vents is to provide a projection below the liquid surface.

(vi) Each opening in the internal floating roof except for:

(AA) leg sleeves;

(BB) automatic bleeder vents;

(CC) rim space vents;

(DD) column wells;

(EE) ladder wells;

(FF) sample wells; and

(GG) stub drains;

shall be equipped with a cover or lid. The cover or lid shall be equipped with a gasket.

(vii) Each penetration of the internal floating roof for purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least ninety percent (90%) of the opening.

(viii) Each automatic bleeder vent shall be gasketed.
(ix) Each rim space vent shall be gasketed.
(x) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
(xi) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
(xii) Each cover or lid on any opening in the internal floating roof shall be closed, such as, no visible gaps, except when the cover or lid must be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened so as to be airtight when they are closed. Rim space vents are to be set to open only when the:
(AA) internal floating roof is not floating; or
(BB) pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(C) An external floating roof that meets the requirements specified in this clause as follows:
(i) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two (2) seals, one above the other. The lower seal (primary seal) shall be either a metallic shoe seal or a liquid-mounted seal. The upper seal (secondary seal) shall be a rim-mounted or shoe-mounted seal.
(ii) Except during inspections, both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.
(iii) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in the noncontact external floating roof shall provide a projection below the liquid surface.
(iv) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid, which is to be maintained in a closed position, such as, no visible gap, at all times except when the cover or lid must be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened so as to be airtight when they are closed.
(v) Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.
(vi) Rim space vents are to be set to open only when the:
(AA) roof is being floated off the roof leg supports; or
(BB) pressure beneath the rim seal exceeds the manufacturer's recommended setting.
(vii) Automatic bleeder vents and rim space vents are to be gasketed.
(viii) Each roof drain that empties into the stored liquid is to be provided with a slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening.
(ix) Each unslotted guide pole well shall have a gasketed sliding cover or a flexible fabric sleeve seal.
(x) Each unslotted guide pole shall have on the end of the pole a gasketed cap that is closed at all times except when gauging the liquid level or taking liquid samples.
(xi) Each slotted guide pole well shall have a gasketed sliding cover or a flexible fabric sleeve seal.
(xii) Each slotted guide pole shall have a gasketed float or other device that closes off the liquid surface from the atmosphere.
(xiii) Each gauge hatch or sample well shall have a gasketed cover that is closed at all times except when the hatch or well must be open for access.
(xiv) The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified in this item as follows:
(AA) During the initial fill.
(BB) After the tank has been completely emptied and degassed.
(CC) When the tank is completely emptied before being subsequently filled.
(xv) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

(h) For each treatment process managing an affected VOC wastewater stream or an affected residual, the owner or operator shall comply with the requirements as specified in this subsection. Once an affected VOC wastewater stream or an affected residual has been treated in accordance with the requirements of this subsection, it is no longer subject to the requirements of this rule as

follows:

(1) Each treatment process shall meet the applicable requirements of subsections (c) through (g).

(2) Gases vented from a treatment process shall be routed by means of a closed vent system to a control device that is designed and operated to reduce the VOC vented to it by at least ninety percent (90%) by weight. This requirement does not apply to any open biological treatment process that meets an alternative method of control under section 5 of this rule. Vents from anaerobic biological treatment processes may be routed through hard-piping to a fuel gas system.

(3) For each of the affected VOC wastewater streams that are treated in a nonbiological treatment process (or a combination of nonbiological treatment processes), the owner or operator shall, by removal or destruction, reduce the mass flow rate of affected VOC by ninety percent (90%) or more while reducing the affected VOC concentration to less than one thousand (1,000) parts per million by weight. Dilution shall not be used to achieve compliance with this subdivision. This requirement is not applicable for wastewater of residuals that comply with the requirements for RCRA treatment options specified in subdivision (6).

(4) The owner or operator using a closed biological treatment process for at least one (1) affected VOC wastewater stream shall reduce the mass flow rate for all affected VOC from all wastewater streams entering the biological treatment process by at least ninety percent (90%).

(5) Design steam stripper option. The owner or operator shall operate and maintain a steam stripper that meets all the requirements of this subdivision as follows:

(A) A minimum active column height of five (5) meters.

(B) A countercurrent flow configuration with a minimum of ten (10) actual trays.

(C) A minimum steam flow rate of four-hundredths (0.04) kilogram of steam per liter of wastewater feed within the column.

(D) A minimum wastewater feed temperature to the steam stripper of ninety-five (95) degrees Celsius or minimum column operating temperature of ninety-five (95) degrees Celsius.

(E) A maximum liquid loading of sixty-seven thousand one hundred (67,100) liters per hour per square meter.

(F) Operate at nominal atmospheric pressure.

(6) RCRA treatment options. The owner or operator may elect to treat the affected VOC wastewater stream or affected residual in a unit identified in, and complying with, clause (A), (B), or (C) as follows:

(A) The affected VOC wastewater stream or affected residual is discharged to a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR 270* and complies with the requirements of 40 CFR 264, Subpart O*, or has certified compliance with the interim status requirements of 40 CFR 265, Subpart O*.

(B) The affected VOC wastewater stream or affected residual is discharged to a process heater or boiler burning hazardous waste for which the owner or operator has:

(i) been issued a final permit under 40 CFR 270* and complies with the requirements of 40 CFR 266, Subpart H*; or

(ii) certified compliance with the interim status requirements of 40 CFR 266, Subpart H*.

(C) The affected VOC wastewater stream or affected residual is discharged to an underground injection well for which the owner or operator has been issued a final permit under 40 CFR 270* or 40 CFR 144* and complies with the requirements of 40 CFR 122*. The owner or operator shall comply with all applicable requirements of 40 CFR 122* prior to the point where the wastewater enters the underground portion of the injection well.

(7) Affected residuals. For each affected residual, the owner or operator shall control for air emissions by complying with subsections (c) through (g) and by complying with one (1) of the following requirements:

(A) Recycle the affected residual to a production process or sell the affected residual for the purpose of recycling. Once an affected residual is returned to a production process, the affected residual is no longer subject to this rule.

(B) Return the affected residual to the treatment process.

(C) Treat the affected residual to destroy the total combined mass flow rate of affected VOC by ninety-nine percent (99%) or more in a nonbiological treatment process.

(D) Comply with the requirements for RCRA treatment options specified in subdivision (6).

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana

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326 IAC 8-20-5 Alternate methods of control

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this rule may be used if approved by U.S. EPA. The approval shall occur when the department is informed, in writing, that U.S. EPA has no objections to the alternate method or methods of control. The alternate methods of control are as follows:

(1) Ninety percent (90%) overall control option. As an alternative to the control requirements of section 4 of this rule, the owner or operator of waste management units may elect to ensure that the overall control of VOC emissions at the source from wastewater from affected source industries is at least ninety percent (90%) less than the calendar year baseline emissions inventory for VOC emissions to the ambient air from process wastewater, provided that adequate documentation is submitted that supports the accuracy of the calendar year baseline emission inventory and the following requirements are met:

(A) To qualify for the control option available under this subdivision after the effective date of this rule, the owner or operator of a waste management unit for which a control plan was not previously submitted shall submit a control plan to the department that demonstrates that the overall control of VOC emissions at the source from wastewater from affected industrial categories will be at least ninety percent (90%) less than the calendar year baseline emissions inventory. Any control plan submitted after the effective date of this rule must be approved by U.S. EPA in writing before the owner or operator may use the control option available under this subdivision for compliance. At a minimum, the control plan shall include the following:

(i) The applicable emissions unit identification.

(ii) The source ID.

(iii) The calendar year baseline emission rates of VOC from wastewater from applicable industrial categories (consistent with the calendar year baseline emissions inventory).

(iv) A plot plan showing the location, the emissions unit identification, and ID associated with a waste management unit.

(v) The VOC emission rates for the preceding calendar year.

(vi) An explanation of the record keeping procedure and calculations that will be used to demonstrate compliance.

The VOC emission rates shall be calculated in a manner consistent with the calendar year baseline emissions inventory.

(B) The owner or operator shall submit an annual report no later than March 31 of each year to the department that demonstrates that the overall control of VOC emissions at the account from wastewater from affected industrial categories during the preceding calendar year is at least ninety percent (90%) less than the baseline emissions inventory. At a minimum, the report shall include the following:

(i) The source ID.

(ii) The emissions unit identification.

(iii) The throughput of wastewater from calendar year.

The emission rates for the preceding calendar year shall be calculated in a manner consistent with the calendar year baseline emissions inventory.

(C) All representations in control plans and annual reports become enforceable conditions. No variation from such representations is allowed if the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator submits a revised control plan to the department not later than thirty (30) days after the change. All control plans and reports shall include documentation that the overall reduction of VOC emissions at the account from wastewater from affected source categories continues to be at least ninety percent (90%) less than the calendar year baseline emissions inventory. The emission rates shall be calculated in a manner consistent with the calendar year baseline emissions inventory.

(D) For waste management units, the calendar year baseline is 2002.

(2) The owner or operator of an affected industrial category may elect to comply with the provisions of 40 CFR 63, Subpart

G* (National Emission Standards for Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater), 40 CFR 63, Subpart JJJ* (National Emission Standards for Hazardous Air Pollutants: Group IV Polymers and Resins), 40 CFR 63, Subpart FFFF* (National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing), or any other emission standard promulgated under 40 CFR 63 that references the wastewater control requirements set forth in 40 CFR 63, Subpart G* if the wastewater stream is subject to the national emission standards for hazardous air pollutants control requirements for that category, as alternatives to complying with this rule, provided the following:

(A) The term "affected VOC" is substituted each place that 40 CFR 63, Subpart G*, 40 CFR 63, Subpart JJJ*, 40 CFR 63, Subpart FFFF*, and any other 40 CFR 63 emission standard references the term "organic hazardous air pollutant" or "organic HAP".

(B) For affected VOC not specifically listed in table 9 of 40 CFR 63, Subpart G*, the corresponding fraction removed (Fr) value shall be determined using one (1) of the following methods:

(i) Determine the Fr value by the procedures in 40 CFR 60, Appendix J*, as proposed on December 9, 1998, in the Federal Register.

(ii) Assign an Fr value of 0.99.

(iii) Use WATER9, a wastewater treatment model of U.S. EPA, to determine the Fr value of a chemical.

(C) Before implementing the option available under this subdivision, the owner or operator provides written notice to the department of their intent to use this option.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-20-5; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-20-6 Inspection and monitoring

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 6. (a) The owner or operator of a waste management unit that is subject to requirements under section 4 or 5 of this rule shall comply with the inspection and monitoring requirements in subsections (b) through (f). An owner and operator choosing to comply with a subpart in 40 CFR 63 as allowed in section 5(2) of this rule, provided it is subject to that subpart, may comply with the inspection monitoring and record keeping requirements of the subpart instead of the requirements of this section.

(b) All seals, covers, closed vent systems, and other equipment used to comply with section 4 or 5 of this rule (relating to control requirements) shall be visually inspected for leaks and improper condition initially, semiannually, and upon repair as specified under this subsection. If any seal, cover, closed vent system, or other equipment is found to have a leak or improper condition, a first attempt at repair shall be completed as soon as possible, but not later than fifteen (15) calendar days after detection, unless the repair or correction is technically infeasible without requiring a process unit shutdown, in which case the repair or correction shall be made at the next process unit shutdown. The visual inspection requirements are as follows:

(1) For a wastewater tank equipped with a fixed roof and vapor control system (closed vent system and control device), visually inspect the fixed roof, openings, and the closed vent system for leaks, except for a cover and closed vent system maintained under negative pressure.

(2) For a wastewater tank equipped with an internal or external floating roof, visually inspect for the following improper conditions:

(A) Leaving open any access door or other opening when the door or opening is not in use.

(B) The floating roof is not resting on either the surface of the liquid or on the leg supports.

(C) There is stored liquid on the floating roof.

(D) A rim seal is detached from the floating roof.

(E) There are holes, tears, cracks, or gaps in the rim seal or seal fabric of the floating roof.

(F) There are visible gaps between the seal of an internal floating roof and the wall of the wastewater tank.

(G) Where a metallic shoe seal is used on an external floating roof, one (1) end of the metallic shoe does not extend into

the stored liquid or one (1) end of the metallic shoe does not extend a minimum vertical distance of sixty-one (61) centimeters above the surface of the stored liquid.

(H) A gasket, joint, lid, cover, or door has a crack or gap or is broken.

(3) For a surface impoundment, visually inspect the cover and all openings for leaks, except for a cover and closed vent system maintained under negative pressure.

(4) For a surface impoundment, visually inspect the following improper conditions:

(A) Leaving open any access hatch or other opening when the hatch or opening is not in use.

(B) A joint, lid, cover, or door has a crack or gap or is broken.

(5) For a portable container, visually inspect the cover and all openings for leaks.

(6) For a portable container that is located within an enclosure that is vented by means of a closed vent system to a control device, visually inspect the enclosure and closed vent system for leaks, except for an enclosure and closed vent system maintained under negative pressure.

(7) For a portable container, visually inspect for the following improper conditions:

(A) Leaving open any access hatch or other opening when the hatch or opening is not in use.

(B) A cover or door has a gap or crack or is broken.

(8) For an individual drain system, visually inspect for the following improper conditions:

(A) A joint, lid, cover, or door has a gap, crack, or hole or is broken.

(B) Leaving open any access hatch or other opening when the hatch or opening is not in use for sampling or removal or for equipment inspection, maintenance, or repair.

(C) Sufficient water is not present to properly maintain integrity of water seals.

(D) Drains using tightly-fitted caps or plugs have caps and plugs that are not in place or not properly installed.

(E) Junction boxes do not have covers in place or covers have visible gaps, cracks, or holes.

(F) Unburied portion of sewer lines have cracks or gaps.

(9) For a junction box vented to a process or through a closed vent system to a control device, visually inspect for leaks in the closed vent system.

(10) For oil-water separators, visually inspect fixed roof and all openings for leaks.

(11) For oil-water separators, visually inspect for the following improper conditions:

(A) Leaving open or ungasketed any access door or other opening when the door or opening is not in use.

(B) The floating roof is not resting on either the surface of the liquid or on the leg supports.

(C) There is stored liquid on the floating roof.

(D) A rim seal is detached from the floating roof.

(E) There are holes, tears, or other open spaces in the rim seal or seal fabric of the floating roof.

(F) A gasket, joint, lid, cover, or door has a gap or crack or is broken.

(c) For a wastewater tank or oil-water separator equipped with an external floating roof having primary and secondary seals used to comply with section 4 or 5 of this rule, the secondary seal shall be inspected for seal gaps and repaired as follows:

(1) The secondary seal shall be measured for seal gaps initially, annually, and after repair, as determined under 326 IAC 8-9-5(c)(2).

(2) The accumulated area of gaps that exceed one-eighth (1/8) inch (thirty-two hundredths (0.32 cm)) in width between the secondary seal and tank wall shall be not greater than one and zero-tenths (1.0) square inch per foot (twenty-one (21) square centimeters per meter) of tank diameter.

(3) If the seal gap requirement of subdivision (2) is not being met, the secondary seal shall be repaired or replaced within forty-five (45) days after detection of the improper seal gap unless the repair or correction is technically infeasible without requiring a process unit shutdown, in which case the repair or correction shall be made at the next process unit shutdown.

(d) The following records shall be maintained on leaks, improper conditions, and improper seal gaps:

(1) The date on which a leak, improper condition, or improper seal gap is discovered.

(2) The date on which a first attempt at repair was made to correct the leak or improper condition.

(3) The date on which a leak, improper condition, or improper seal gap is repaired.

(e) Monitors shall be installed and maintained as required by this subsection to measure operational parameters of any emission control device or other device installed to comply with section 4 or 5 of this rule. The monitoring and parameters shall be sufficient to demonstrate proper functioning of those devices to design specifications and include the monitoring and parameters listed in this

subsection, as applicable, except as provided in subdivision (1), as follows:

(1) For an enclosed noncatalytic combustion device, including, but not limited to, a thermal incinerator, boiler, or process heater, continuously monitor and record the temperature of the gas stream either in the combustion chamber or immediately downstream before any substantial heat exchange.

(2) For a catalytic incinerator, continuously monitor and record the temperature of the gas stream immediately before and after the catalyst bed.

(3) For a condenser (chiller), continuously monitor and record the temperature of the gas stream at the condenser exit.

(4) For a carbon adsorber, continuously monitor and record the VOC concentration of exhaust gas stream to determine if breakthrough has occurred. If the carbon adsorber does not regenerate the carbon bed directly in the control device, for example, a carbon canister, the exhaust gas stream shall be monitored daily or at intervals not greater than twenty percent (20%) of the design replacement interval, whichever is greater, or as an alternative to conducting monitoring, the carbon may be replaced with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and the VOC concentration in the gas stream vented to the carbon adsorber.

(5) For a flare, meet the requirements specified in 40 CFR 60.18(b)*.

(6) For a steam stripper, continuously monitor and record the steam flow rate, the wastewater feed mass flow rate, and either the wastewater feed temperature or the column operating temperature, such as, the temperature in the column top tray liquid phase at the downcomer.

(7) For vapor control systems other than those specified in this subsection, continuously monitor and record the appropriate operating parameters.

(8) In lieu of the monitoring and parameters listed in this subsection, other monitoring and parameters may be approved or required by U.S. EPA. The approval or requirement shall occur when the department is informed, in writing, that U.S. EPA has no objection to, or requires, the other monitoring and parameters that are indicated.

(f) For a closed-vent system that is:

(1) used to comply with section 4 or 5 of this rule; and

(2) designed to operate at a pressure below atmospheric pressure;

the closed-vent system shall be equipped with at least one (1) pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-20-6; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-20-7 Approved test methods

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 7. Compliance with the emission specifications, vapor control system efficiency, and certain control requirements, inspection requirements, and exemption criteria of sections 4 through 6 of this rule and section 3(2) of this rule (relating to control requirements, alternate control requirements, inspection and monitoring requirements, and exemptions) shall be determined by applying one (1) or more of the following test methods and procedures, as appropriate:

(1) Gas flow rate. U.S. EPA 40 CFR 60 Methods 1, 2, 3, and 4* are used for determining gas flow rates, as necessary.

(2) Concentration of affected VOCs in a gas stream shall be determined as follows:

(A) U.S. EPA 40 CFR 60 Method 18* is used for determining gaseous organic compound emissions by gas chromatography.

(B) U.S. EPA 40 CFR 60 Method 25* is used for determining total gaseous nonmethane organic emissions as carbon.

(C) U.S. EPA 40 CFR 60 Method 25A or 25B* are used for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis.

(3) Performance test for control devices are as follows:

(A) For flares, the performance test requirements of 40 CFR 60.18(b*) shall apply. Compliance with the requirements of 40 CFR 60.18(b)* will be considered to represent ninety-eight percent (98%) control of the VOC in the flare inlet.
(B) For control devices other than flares, the VOC control efficiency shall be determined in accordance with 326 IAC 8-1-4 where the flow rate and VOC concentration of the inlet and outlet gas streams of the control device are measured as specified under subdivisions (1) and (2).

(4) Vapor pressure shall be determined using standard reference texts or as specified in 326 IAC 8-9-3(5).
(5) Use U.S. EPA 40 CFR 60 Method 21 for determining VOC leaks and for monitoring a carbon canister in accordance with section 4(e)(4) of this rule.
(6) Use one (1) of the following for determining VOC concentration of wastewater samples:
(A) SW-846 Method 5030B (purge and trap) followed by SW-846 Method 8015B with a DB-5 boiling point (or equivalent column), and flame ionization detector, with the detector calibrated with benzene as required by 40 CFR 261*.
(B) SW-846 Methods 3810, 5030B (followed by 8021B), 8260B, and 9060 as required by 40 CFR 261*.
(C) U.S. EPA 40 CFR 136 Methods 602, 624, 1624, 625, 1625*.
(D) U.S. EPA 40 CFR 63 Method 305*.
(E) U.S. EPA 40 CFR 60 Method 25D*.

In the event of any conflict, U.S. EPA 40 CFR 60 Method 25D* takes precedence.
(7) Flow rate measurements shall be taken at the same time as the concentration measurements.
(8) Minor modifications to these test methods may be used, if approved by U.S. EPA. The approval shall occur when the department is informed, in writing, that U.S. EPA has no objections to the minor modifications to the test methods.
(9) Test methods other than those specified in this section may be used if validated by U.S. EPA 40 CFR 63 Method 301*.
*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-20-7; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-20-8 Record keeping

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 8. The owner or operator of an affected industrial category shall comply with the following record keeping requirements:
(1) Complete and up-to-date records shall be maintained as needed to demonstrate compliance with sections 4 and 5 of this rule (relating to control requirements and alternate control requirements) that are sufficient to demonstrate the characteristics of wastewater streams and the qualification for any exemptions claimed under section 3(2) of this rule (relating to exemptions).
(2) Records shall be maintained of the results of any inspection or monitoring conducted in accordance with section 6 of this rule (relating to inspection and monitoring requirements). Records shall be sufficient to demonstrate proper functioning of applicable control equipment to design specifications to ensure compliance with sections 4 and 5 of this rule.
(3) Records shall be maintained of the results of any testing conducted in accordance with section 7 of this rule (relating to approved test methods).
(4) All records shall be:
(A) maintained at the source for at least five (5) years; and
(B) made available upon request to U.S. EPA and the department.

(Air Pollution Control Division; 326 IAC 8-20-8; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)

326 IAC 8-20-9 Determination of wastewater characteristics

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 9. The determination of the characteristics of a wastewater stream for purposes of this rule shall be made as follows:

(1) The characteristics shall be determined at a location between the point of generation (as defined by this rule) and before the wastewater stream is exposed to the atmosphere, treated for VOC removal, or mixed with another wastewater stream.

(2) The flow rate of a wastewater stream shall be determined on the basis of an annual average by one (1) of the following methods:

(A) The highest annual quantity of wastewater managed, based on historical records for the most recent five (5) years of operation, or for the entire time the wastewater stream has existed if less than five (5) years, but at least one (1) year.

(B) The maximum design capacity of the waste management unit.

(C) The maximum design capacity to generate wastewater of the process unit generating the wastewater stream.

(D) Measurements that are representative of the actual, normal wastewater generation rates.

(3) If the department or U.S. EPA determines that the VOC concentration cannot be adequately determined by knowledge of the wastewater, or by bench-scale or pilot-scale test data, the VOC concentration shall be determined in accordance with clause (C), or by a combination of the methods in clauses (A) through (C). VOC with a "Henry's Law Constant" less than 1.8×10^{-6} atm-m3/mole (0.1 y/x) at twenty-five (25) degrees Celsius shall not be included in the determination of VOC concentration. The VOC concentration of a wastewater stream shall be determined on the basis of a flow-weighted annual average by one (1) or more of the following methods:

(A) Knowledge of the wastewater. Sufficient information to document the VOC concentration. Examples of information include the following:

(i) Material balances.

(ii) Records of chemical purchases.

(iii) Previous test results.

(B) Bench-scale or pilot-scale test data. Sufficient information to demonstrate that the bench-scale or pilot-scale test concentration data are representative of the actual VOC concentration.

(C) Measurements. Collect a minimum of three (3) representative samples from the wastewater stream and determine the affected VOC concentration for each sample in accordance with section 7 of this rule (relating to approved test methods). The affected VOC concentration of the wastewater stream shall be the flow-weighted average of the individual samples.

(4) The annual affected VOC loading in wastewater for a wastewater stream shall be the annual average flow rate determined in subdivision (2) multiplied by the annual average affected VOC concentration determined in subdivision (3).

(5) The annual VOC loading in wastewater for a source shall be the sum of the annual VOC loading in wastewater for each affected VOC wastewater stream.

(6) The "Henry's Law Constant" shall be determined by the procedures in 40 CFR 60, Appendix J*, as proposed on December 9, 1998, in the Federal Register*.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-20-9; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-20-10 Maintenance wastewater requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 10. Each owner or operator of a source subject to this rule shall comply with the following requirements for maintenance wastewaters containing VOC:

(1) The owner or operator shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair, such as a maintenance-turnaround, and during periods that are not shutdowns, such as routine maintenance. The descriptions shall specify the following:

(A) The process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities.

(B) The procedures that will be followed to properly manage the wastewater and control VOC emissions to the

atmosphere.

(C) The procedures to be followed when clearing materials from the process equipment.

(2) The owner or operator shall modify and update the information required by subdivision (1) as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure.

(3) The owner or operator shall maintain a record of the information required by this section.

(Air Pollution Control Division; 326 IAC 8-20-10; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)

326 IAC 8-20-11 Compliance

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 11. (a) Except where otherwise specified within this rule, any owner or operator of a source that is subject to this rule shall comply with the requirements of this rule by no later than:

(1) April 1, 2011; or

(2) the date of initial startup of the waste management unit;

whichever is later.

(b) For any emission control device that is used to comply with an emission control requirement of this rule, the owner or operator shall demonstrate compliance by testing the emission control device in accordance with section 7 of this rule within ninety (90) days after the compliance date.

(c) For any treatment process (or combined treatment processes) that is used to comply with this rule, the owner or operator shall demonstrate compliance by testing the treatment process (or combined treatment processes) in accordance with the methods in section 7 of this rule within ninety (90) days after the compliance date.

(d) Additional testing of the emission control device or the treatment process in accordance with section 7 of this rule may be required by the department to ensure continued compliance.

(e) In the event the owner or operator reduces the sources potential to emit under section 1(b) of this rule, the date on which the source subsequently meets the applicability criteria of section 1(a) of this rule is the date the source becomes subject to this rule.

(Air Pollution Control Division; 326 IAC 8-20-11; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)

Rule 21. Aerospace Manufacturing and Rework Operations

326 IAC 8-21-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) Except as provided in subsections (b) and (c), this rule applies to the manufacture or rework of commercial, civil, or military aerospace vehicles or components at sources that meet the following criteria:

(1) Are located in Lake County or Porter County.

(2) Have the potential to emit volatile organic compounds (VOC) equal to or greater than twenty-five (25) tons per year for all coating and cleaning operations combined where aerospace components and vehicles are coated and cleaned. The activities, operations, and materials described in subsections (b) and (c) are not included in the determination of potential to emit for VOC.

(b) This rule does not apply to the following activities where cleaning and coating of aerospace components and vehicles may take place:

(1) Research and development.

(2) Quality control.

(3) Laboratory testing.

(4) Electronic parts and assemblies, except for cleaning and coating of completed assemblies.

(c) This rule does not apply to manufacturing or rework operations involving space vehicles or rework operations performed on antique aerospace vehicles or components. *(Air Pollution Control Division; 326 IAC 8-21-1; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)*

326 IAC 8-21-2 Definitions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. The following definitions apply throughout this rule:

(1) "Ablative coating" means a coating that chars when exposed to open flame or extreme temperatures, as would occur during the failure of an engine casing or during aerodynamic heating. The ablative char surface serves as an insulative barrier, protecting adjacent components from the heat or open flame.

(2) "Adhesion promoter" means a very thin coating applied to a substrate to promote wetting and form a chemical bond with the subsequently applied material.

(3) "Adhesive bonding primer" means a primer applied in a thin film to aerospace components for the purpose of corrosion inhibition and increased adhesive bond strength by attachment. There are two (2) categories of adhesive bonding primers:

(A) Primers with a design cure at two hundred fifty (250) degrees Fahrenheit or below.

(B) Primers with a design cure above two hundred fifty (250) degrees Fahrenheit.

(4) "Aerosol coating" means a hand-held, pressurized, nonrefillable container that expels an adhesive or a coating in a finely divided spray when a valve on the container is depressed.

(5) "Aerospace vehicle or component" means any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft, including, but not limited to, the following:

(A) Airplanes.

(B) Helicopters.

(C) Missiles.

(D) Rockets.

(E) Space vehicles.

(6) "Aircraft fluid systems" means those systems that handle hydraulic fluids, fuel, cooling fluids, or oils.

(7) "Aircraft transparency" means the aircraft windshield, canopy, passenger windows, lenses, and other components that are constructed of transparent materials.

(8) "Antichafe coating" means a coating applied to areas of moving aerospace components that may rub during normal operations or installation.

(9) "Antique aerospace vehicle or component" means an aircraft or component thereof that was built at least thirty (30) years ago. An antique aerospace vehicle would not routinely be in commercial or military service in the capacity for which it was designed.

(10) "Aqueous cleaning solvent" means a solvent in which water is at least eighty percent (80%) of the solvent as applied.

(11) "Bearing coating" means a coating applied to an antifriction bearing, a bearing housing, or the area adjacent to such a bearing in order to facilitate bearing function or to protect base material from excessive wear. A material shall not be classified as a bearing coating if it can also be classified as a dry lubricative material or a solid film lubricant.

(12) "Bonding maskant" means a temporary coating used to protect selected areas of aerospace parts from strong acid or alkaline solutions during processing for bonding.

(13) "Caulking and smoothing compounds" means semisolid materials that are:

(A) applied by hand application methods; and

(B) used to aerodynamically smooth exterior vehicle surfaces or fill cavities, such as bolt hole accesses.

A material shall not be classified as a caulking and smoothing compound if it can also be classified as a sealant.

(14) "Chemical agent resistant coating" or "CARC" means an exterior topcoat designed to withstand exposure to chemical warfare agents or the decontaminants used on these agents.

(15) "Chemical milling maskant" means a coating that is applied directly to aluminum components to protect surface areas when chemical milling the component with a Type I or II etchant. Type I chemical milling maskants are used with a Type I etchant and Type II chemical milling maskants are used with a Type II etchant. The term does not include bonding maskants, critical use and line sealer maskants, and seal coat maskants. Additionally, maskants that must be used with a combination of Type I or Type II etchants and bonding, critical use and line sealer, or seal coat maskants are not included. The term does not include maskants that are defined as specialty coatings.

(16) "Cleaning operations" means collectively spray gun, hand wipe, and flush cleaning operations.

(17) "Cleaning solvent" means a liquid material used for hand wipe, spray gun, or flush cleaning. The term does not include solutions that contain no VOC.
(18) "Clear coating" means a transparent coating usually applied over a colored opaque coating, metallic substrate, or placard to give improved gloss and protection to the color coat. In some cases, a clearcoat refers to any transparent coating without regard to substrate.
(19) "Coating" means a material that is applied to the surface of an aerospace vehicle or component to form a decorative, protective, or functional solid film or the solid film itself.
(20) "Coating operation" means using a spray booth, tank, or other enclosure or any area, such as a hangar, for applying a single type of coating, for example, primer. Using the same spray booth for applying another type of coating, for example, topcoat, constitutes a separate coating operation for which compliance determinations are performed separately.
(21) "Coating unit" means a series of one (1) or more coating applicators and any associated drying area or oven, or both, wherein a coating is applied, dried, or cured or any combination of those. A coating unit ends at the point where the coating is dried or cured or prior to any subsequent application of a different coating. It is not necessary to have an oven or flashoff area to be included in the term.
(22) "Commercial exterior aerodynamic structure primer" means a primer used on aerodynamic components and structures that protrude from the fuselage, such as:
(A) wings and attached components;
(B) control surfaces;
(C) horizontal stabilizers;
(D) vertical fins;
(E) wing-to-body fairings;
(F) antennae;
(G) landing gear; and
(H) doors;
for the purpose of extended corrosion protection and enhanced adhesion.
(23) "Commercial interior adhesive" means materials used in the bonding of passenger cabin interior components. These components must meet the U.S. Federal Aviation Administration (FAA) fireworthiness requirements.
(24) "Compatible substrate primer" means either compatible epoxy primer or adhesive primer. Compatible epoxy primer is primer that is compatible with the filled elastomeric coating and is epoxy based. The compatible substrate primer is an epoxypolyamide primer used to promote adhesion of elastomeric coatings, such as impact resistant coatings. Adhesive primer is a coating that:
(A) inhibits corrosion and serves as a primer applied to bare metal surfaces or prior to adhesive application; or
(B) is applied to surfaces that can be expected to contain fuel.
The term does not include fuel tank coatings.
(25) "Confined space" means a space that:
(A) is large enough and so configured that an employee can bodily enter and perform assigned work;
(B) has limited or restricted means for entry or exit, for example, fuel tanks, fuel vessels, and other spaces that have limited means of entry; and
(C) is not suitable for continuous employee occupancy.
(26) "Corrosion prevention system" means a coating system that provides corrosion protection by displacing water and penetrating mating surfaces, forming a protective barrier between the metal surface and moisture. The term does not include coatings containing oils or waxes.
(27) "Critical use and line sealer maskant" means a temporary coating, not covered under other maskant categories, used to protect selected areas of aerospace parts from strong acid or alkaline solutions, such as those used in:
(A) anodizing;
(B) plating;
(C) chemical milling; and
(D) processing;
of magnesium, titanium, or high strength steel, high precision aluminum chemical milling of deep cuts, and aluminum chemical milling of complex shapes. The term includes materials used for repairs or to bridge gaps left by scribing operations,

for example, line sealer.
(28) "Cryogenic flexible primer" means a primer designed to provide corrosion resistance, flexibility, and adhesion of subsequent coating systems when exposed to loads up to and surpassing the yield point of the substrate at cryogenic temperatures (negative two hundred seventy-five (-275) degrees Fahrenheit and below).
(29) "Cryoprotective coating" means a coating that insulates cryogenic or subcooled surfaces to limit propellant boil off, maintain structural integrity of metallic structures during ascent or reentry, and prevent ice formation.
(30) "Cyanoacrylate adhesive" or "super glue" means a fast setting, single component adhesive that cures at room temperature.
(31) "Dry lubricative material" means a coating consisting of lauric acid, cetyl alcohol, waxes, or other noncross linked or resin bound materials that act as a dry lubricant.
(32) "Electric or radiation effect coating" means a coating or coating system engineered to interact, through absorption or reflection, with specific regions of the electromagnetic energy spectrum, such as the ultraviolet, visible, infrared, or microwave regions. Uses include, but are not limited to, the following:
(A) Lightning strike protection.
(B) Electromagnetic pulse (EMP) protection.
(C) Radar avoidance.
Coatings that have been designated as "classified" by the U.S. Department of Defense are exempt.
(33) "Electrostatic discharge and electromagnetic interference (EMI) coating" means a coating applied to:
(A) space vehicles;
(B) missiles;
(C) aircraft radomes; and
(D) helicopter blades;
to disperse static energy or reduce electromagnetic interference.
(34) "Elevated temperature Skydrol resistant commercial primer" means a primer applied primarily to commercial aircraft (or commercial aircraft adapted for military use) that must withstand immersion in phosphate ester (PE) hydraulic fluid (Skydrol 500b or equivalent) at the elevated temperature of one hundred fifty (150) degrees Fahrenheit for one thousand (1,000) hours.
(35) "Epoxy polyamide topcoat" means a coating used where harder films are required or in some areas where engraving is accomplished in camouflage colors.
(36) "Exempt solvent" means a specified organic compound that has been determined by U.S. EPA to have negligible photochemical reactivity and is listed in 40 CFR 51.100*.
(37) "Fire resistant (interior) coating" means, for civilian aircraft, fire resistant interior coatings that are used on passenger cabin interior parts that are subject to the U.S. Federal Aviation Administration (FAA) fireworthiness requirements. For military aircraft, fire resistant interior coatings are used on parts that are subject to the flammability requirements of MIL-STD-1630A and MIL-A-87721. For space applications, these coatings are used on parts that are subject to the flammability requirements of SE-R-0006 and SSP 30233.
(38) "Flexible primer" means a primer that meets flexibility requirements, such as those needed for adhesive bond primed fastener heads or on surfaces expected to contain fuel. The flexible coating is required because it provides a compatible, flexible substrate over bonded sheet rubber and rubber type coatings as well as a flexible bridge between the fasteners, skin, and skin-to-skin joints on outer aircraft skins. This flexible bridge:
(A) allows more topcoat flexibility around fasteners; and
(B) decreases the chance of the topcoat cracking around the fasteners.
The result is better corrosion resistance.
(39) "Flight test coating" means a coating applied to aircraft other than missiles or single use aircraft prior to flight testing to:
(A) protect the aircraft from corrosion; and
(B) provide required marking during flight test evaluation.
(40) "Flush cleaning" means removal of contaminants, such as dirt, grease, oil, and coatings, from an aerospace vehicle or component or coating equipment by passing solvent over, into, or through the item being cleaned. The solvent may simply be poured into the item being cleaned and then drained, or assisted by air or hydraulic pressure, or by pumping. The term does not include hand wipe cleaning operations where wiping, scrubbing, mopping, or other hand actions are used.
(41) "Fuel tank adhesive" means an adhesive used to bond components exposed to fuel and must be compatible with fuel tank

coatings.

(42) "Fuel tank coating" means a coating applied to fuel tank components:

(A) for the purpose of corrosion or bacterial, or both, growth inhibition; and

(B) to assure sealant adhesion in extreme environmental conditions.

(43) "Grams of VOC per liter of coating (less water and less exempt solvent)" means the weight of VOC per combined volume of total volatiles and coating solids, less water and exempt compounds, and can be calculated by the following equation:

Grams of VOC per liter of coating = $(W_s - W_w - W_{es}) \div (V_s - V_w - V_{es})$ (less water and less exempt solvent)

Where:

W_s = weight of total volatiles in grams

W_w = weight of water in grams

W_{es} = weight of exempt compounds in grams

V_s = volume of coating in liters

V_w = volume of water in liters

V_{es} = volume of exempt compounds in liters

(44) "Hand wipe cleaning operation" means removing contaminants, such as dirt, grease, oil, and coatings, from an aerospace vehicle or component by physically rubbing it with a material, such as a rag, paper, or a cotton swab, that has been moistened with a cleaning solvent.

(45) "High temperature coating" means a coating designed to withstand temperatures of more than three hundred fifty (350) degrees Fahrenheit.

(46) "High volume low pressure (HVLP) spray equipment" means spray equipment that is used to apply coating by means of a spray gun that operates at ten and zero-tenths (10.0) psig of atomizing air pressure or less at the air cap.

(47) "Insulation covering" means material that is applied to foam insulation to protect the insulation from mechanical or environmental damage.

(48) "Intermediate release coating" means a thin coating applied beneath topcoats to:

(A) assist in removing the topcoat in depainting operations; and

(B) generally, allow the use of less hazardous depainting methods.

(49) "Lacquer" means a clear or pigmented coating formulated with a nitrocellulose or synthetic resin to dry by evaporation without a chemical reaction. Lacquers are resoluble in their original solvent.

(50) "Leak" means any visible leakage, including misting and clouding.

(51) "Limited access space" means internal surfaces or passages of an aerospace vehicle or component that cannot be reached without the aid of an airbrush or a spray gun extension for the application of coatings.

(52) "Metalized epoxy coating" means a coating that contains relatively large quantities of metallic pigmentation for appearance or added protection, or both.

(53) "Mold release" means a coating applied to a mold surface to prevent the molded piece from sticking to the mold as it is removed.

(54) "Nonstructural adhesive" means an adhesive that:

(A) bonds nonload bearing aerospace components in noncritical applications; and

(B) is not covered in any other specialty adhesive categories.

(55) "Operating parameter value" means a minimum or maximum value established for a control equipment or process parameter that, if achieved by itself or in combination with one (1) or more other operating parameter values, determines that an owner or operator has continued to comply with an applicable emission limitation.

(56) "Optical antireflection coating" means a coating with a low reflectance in the infrared and visible wavelength ranges that is used for antireflection on or near optical and laser hardware.

(57) "Part marking coating" means coatings or inks used to make identifying markings on materials, components, or assemblies or any combination. These markings may be either permanent or temporary.

(58) "Pretreatment coating" means an organic coating that:

(A) contains at least five-tenths percent (0.5%) acids by weight; and

(B) is applied directly to metal or composite surfaces to provide:

(i) surface etching;

(ii) corrosion resistance;

(iii) adhesion; and
(iv) ease of stripping.

(59) "Primer" means the first layer and any subsequent layers of identically formulated coating applied to the surface of an aerospace vehicle or component. Primers are typically used for the following:
(A) Corrosion prevention.
(B) Protection from the environment.
(C) Functional fluid resistance.
(D) Adhesion of subsequent coatings.
The term does not include primers that are defined as specialty coatings.

(60) "Radome" means the nonmetallic protective housing for electromagnetic transmitters and receivers, for example, radar, electronic countermeasures.

(61) "Rain erosion-resistant coating" means a coating or coating system used to protect the leading edges of parts, such as:
(A) flaps;
(B) stabilizers;
(C) radomes; and
(D) engine inlet nacelles;
against erosion caused by rain impact during flight.

(62) "Research and development" means an operation:
(A) whose primary purpose is for research and development of new processes and products; and
(B) that is:
(i) conducted under the close supervision of technically trained personnel; and
(ii) not involved in the manufacture of final or intermediate products for commercial purposes, except in a de minimis manner.

(63) "Rocket motor bonding adhesive" means an adhesive used in rocket motor bonding applications.

(64) "Rocket motor nozzle coating" means a catalyzed epoxy coating system used in elevated temperature applications on rocket motor nozzles.

(65) "Rubber based adhesive" means a quick setting contact cement that provides a strong yet flexible bond between two (2) mating surfaces that may be of dissimilar materials.

(66) "Scale inhibitor" means a coating that is applied to the surface of a part prior to thermal processing to inhibit the formation of scale.

(67) "Screen print ink" means an ink used in screen printing processes during fabrication of decorative laminates and decals.

(68) "Sealant" means a material used to prevent the intrusion of water, fuel, air, or other liquids or solids from certain areas of aerospace vehicles or components. There are two (2) categories of sealants as follows:
(A) Extrudable, rollable, or brushable sealants.
(B) Sprayable sealants.

(69) "Seal coat maskant" means an overcoat applied over a maskant to improve abrasion and chemical resistance during production operations.

(70) "Self priming topcoat" means a topcoat that is applied directly to an uncoated aerospace vehicle or component for purposes of:
(A) corrosion prevention;
(B) environmental protection; and
(C) functional fluid resistance.
More than one (1) layer of identical coating formulation may be applied to the vehicle or component.

(71) "Semiaqueous cleaning solvent" means a solution in which water is a primary ingredient. More than sixty percent (60%) of the solvent solution as applied must be water.

(72) "Silicone insulation material" means an insulating material applied to exterior metal surfaces for protection from high temperatures caused by atmospheric friction or engine exhaust. These materials differ from ablative coatings in that they are not sacrificial.

(73) "Solid film lubricant" means a very thin coating consisting of a binder system containing as its chief pigment material one (1) or more of the following:

(A) Molybdenum.
(B) Graphite.
(C) Polytetrafluoroethylene (PTFE).
(D) Other solids that act as a dry lubricant between faying, for example, closely or tightly fitting, surfaces.

(74) "Solids" means the nonvolatile portion of the coating that after drying makes up the dry film.

(75) "Space vehicle" means a man-made device, either manned or unmanned, designed for operation beyond earth's atmosphere. The term includes the following:

(A) Integral equipment such as the following:
(i) Models.
(ii) Mockups.
(iii) Prototypes.
(iv) Molds.
(v) Jigs.
(vi) Tooling.
(vii) Hardware jackets.
(viii) Test coupons.

(B) Auxiliary equipment associated with test, transport, and storage, that through contamination can compromise the space vehicle performance.

(76) "Specialized function coating" means a coating that fulfills extremely specific engineering requirements that are limited in application and are characterized by low volume usage. The term does not include coatings covered in other specialty coating categories.

(77) "Specialty coating" means a coating that, even though it meets the definition of a primer, topcoat, or self priming topcoat, has additional performance criteria beyond those of primers, topcoats, and self priming topcoats for specific applications. These performance criteria may include, but are not limited to, the following:

(A) Temperature or fire resistance.
(B) Substrate compatibility.
(C) Antireflection.
(D) Temporary protection or marking.
(E) Sealing.
(F) Adhesively joining substrates.
(G) Enhanced corrosion protection.

(78) "Spray gun" means a device that:

(A) atomizes a coating or other material; and
(B) projects the particulates or other material onto a substrate.

(79) "Structural autoclavable adhesive" means an adhesive used to bond load carrying aerospace components that is cured by heat and pressure in an autoclave.

(80) "Structural nonautoclavable adhesive" means an adhesive cured under ambient conditions that is used to bond load carrying aerospace components or other critical functions, such as nonstructural bonding in the proximity of engines.

(81) "Surface preparation" means the:

(A) removal of contaminants from the surface of an aerospace vehicle or component; or
(B) activation or reactivation of the surface in preparation for the application of a coating.

(82) "Temporary protective coating" means a coating applied to provide scratch or corrosion protection during manufacturing, storage, or transportation. Two (2) types include peelable protective coatings and alkaline removable coatings. These materials are not intended to protect against strong acid or alkaline solutions. The term does not include coatings that provide this type of protection from chemical processing.

(83) "Thermal control coating" means a coating formulated with specific thermal conductive or radiative properties to permit temperature control of the substrate.

(84) "Topcoat" means a coating that is applied over a primer on an aerospace vehicle or component for:

(A) appearance;
(B) identification;

(C) camouflage; or

(D) protection.

The term does not include topcoats that are defined as specialty coatings.

(85) "Touch-up and repair coating" means a coating used to cover minor coating imperfections appearing after the main coating operation.

(86) "Touch-up and repair operation" means that portion of the coating operation that is the incidental application of coating used to:

(A) cover minor imperfections in the coating finish; or

(B) achieve complete coverage.

The term includes out of sequence or out of cycle coating.

(87) "VOC composite vapor pressure" means the sum of the partial pressures of the compounds defined as VOCs and is determined by the following calculation:

$$PP_c = \sum_{i=1}^{n} \frac{\frac{(W_i)(VP_i)}{MW_i}}{\frac{W_w}{MW_w} + \sum_{e=1}^{n} \frac{W_e}{MW_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:	W_i	=	Weight of the "i"th VOC compound, grams.
	W_w	=	Weight of water, grams.
	W_e	=	Weight of nonwater, non-VOC compound, grams.
	MW_i	=	Molecular weight of the "i"th VOC compound, g/g-mole.
	MW_w	=	Molecular weight of water, g/g-mole.
	MW_e	=	Molecular weight of exempt compound, g/g-mole.
	PP_c	=	VOC composite partial pressure at 20°C, mmHg.
	VP_i	=	Vapor pressure of the "i"th VOC compound at 20°C, mmHg.

(88) "Waterborne (water reducible) coating" means a coating that contains more than five percent (5%) water by weight as applied in its volatile fraction.

(89) "Wet fastener installation coating" means a primer or sealant applied by dipping, brushing, or daubing to fasteners that are installed before the coating is cured.

(90) "Wing coating" means a corrosion resistant topcoat that is resilient enough to withstand the flexing of the wings.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-21-2; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

326 IAC 8-21-3 VOC emissions control requirements

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

Affected: IC 13-15; IC 13-17

Sec. 3. (a) The owner or operator of a source that is subject to this rule shall not apply to aerospace vehicles or components any coatings, including any VOC containing materials added to the original coating supplied by the manufacturer, that contain VOC in excess of the limits specified as follows:

VOC Content Limit for Primers, Topcoats, and Chemical Milling Maskants (lbs/gallon)[a]

Coating Type	Limit
Primer	2.9
Primer for general aviation rework	4.5
Exterior primer for large commercial aircraft (components or fully assembled)	5.4

Topcoat	3.5
Topcoat for general aviation rework	4.5
Self-priming topcoat	3.5
Self-priming topcoat for general aviation rework	4.5
Chemical milling maskant, type I	5.2
Chemical milling maskant, type II	1.3

[a]Coating limits expressed in terms of pounds of VOC per gallon of coating less water and less exempt solvent.

VOC Content Limits for Specialty Coatings (g/L)[b]

Coating Type		Limit	Coating Type		Limit
Ablative coating		600	Flight test coatings:		
Adhesion promoter		890		Missile or single use aircraft	420
Adhesive bonding primers:				All other	840
	Cured at 250°F or below	850	Fuel tank coating		720
	Cured above 250°F	1030	High temperature coating		850
Adhesives:			Insulation covering		740
	Commercial interior adhesive	760	Intermediate release coating		750
	Cyanoacrylate adhesive	1020	Lacquer		830
	Fuel tank adhesive	620	Maskants:		
	Nonstructural adhesive	360		Bonding maskant	1230
	Rocket motor bonding adhesive	890		Critical use and line sealer maskant	1020
	Rubber based adhesive	850		Seal coat maskant	1230
	Structural autoclavable adhesive	60	Metallized epoxy coating		740
	Structural nonautoclavable adhesive	850	Mold release		780
Antichafe coating		660	Optical antireflective coating		750
Bearing coating		620	Part marking coating		850
Caulking and smoothing compounds		850	Pretreatment coating		780
Chemical agent resistant coating		550	Rain erosion resistant coating		850
Clear coating		720	Rocket motor nozzle coating		660
Commercial exterior aerodynamic structure primer		650	Scale inhibitor		880
Compatible substrate primer		780	Screen print ink		840
Corrosion prevention compound		710	Sealants:		
Cryogenic flexible primer		645		Extrudable/rollable/brushable sealant	280
Dry lubricative material		880		Sprayable sealant	600
Cryoprotective coating		600	Silicone insulation material		850
Electric or radiation effect coating		800	Solid film lubricant		880
Electrostatic discharge and electromagnetic interference (EMI) coating		800	Specialized function coating		890
Elevated temperature Skydrol resistant commercial primer		740	Temporary protective coating		320
Epoxy polyamide topcoat		660	Thermal control coating		800
Fire resistant (interior) coating		800	Wet fastener installation coating		675
Flexible primer		640	Wing coating		850

[b]Coating limits expressed in terms of mass (grams) of VOC per volume (liters) of coating less water and less exempt solvent.

(b) The following coating applications are exempt from the VOC content limits listed in subsection (a):

(1) Touch-up, aerosol, and U.S. Department of Defense "classified" coatings.
(2) Coating of space vehicles.
(3) Facilities that use separate formulations in volumes of less than fifty (50) gallons per year subject to a maximum exemption of two hundred (200) gallons total for such formulations applied annually.

(c) The broad categories of primers, topcoats (including self priming topcoats), and chemical milling maskants (Type I or II) are not specialty coatings as listed in the table in subsection (a). The requirements do not apply to facilities that use separate formulations of primers, topcoats, and chemical milling maskants (Type I or II) in volumes of less than fifty (50) gallons per year, subject to a maximum exemption of two hundred (200) gallons total for such formulations applied annually. *(Air Pollution Control Division; 326 IAC 8-21-3; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)*

326 IAC 8-21-4 Application equipment

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 4. (a) The owner or operator of a source that is subject to this rule shall use one (1) or more of the following application techniques in applying any primer or topcoat to aerospace vehicles or components:
(1) Flow or curtain coat.
(2) Dip coat.
(3) Roll coating.
(4) Brush coating.
(5) Cotton tipped swab application.
(6) Electrodeposition coating.
(7) High volume low pressure (HVLP) spraying.
(8) Electrostatic spray.
(9) Other coating application methods that achieve emission reductions equivalent to HVLP or electrostatic spray application methods.

(b) The following situations are exempt from application equipment requirements listed in subsection (a):
(1) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces.
(2) The application of specialty coatings.
(3) The application of coatings that:
(A) contain fillers that adversely affect atomization with HVLP spray guns; and
(B) the permitting agency has determined cannot be applied by any of the application methods specified in subsection (a).
(4) The application of coatings that:
(A) normally have a dried film thickness of less than thirteen ten-thousandths (0.0013) centimeter (five ten-thousandths (0.0005) inch); and
(B) the permitting agency has determined cannot be applied by any of the application methods specified in subsection (a).
(5) The use of airbrush application methods for stenciling, lettering, and other identification markings.
(6) The use of handheld spray can application methods.
(7) Touch-up and repair operations.

(Air Pollution Control Division; 326 IAC 8-21-4; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)

326 IAC 8-21-5 Solvent cleaning

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. The owner or operator of a source that is subject to this rule shall comply with the following solvent cleaning requirements:

(1) Cleaning solvents used in hand wipe cleaning operations shall:

(A) meet the definition of aqueous cleaning solvent; or

(B) have a VOC composite vapor pressure less than or equal to forty-five (45) mmHg at twenty (20) degrees Celsius.

(2) The cleaning operations in the aerospace NESHAP at 40 CFR 63.744(e)* are exempt from the requirements in subdivision (1).

(3) Cleaning solvents used in the flush cleaning of parts, assemblies, and coating unit components shall be emptied into an enclosed container or collections system that is kept closed when not in use or captured with wipers provided they comply with the housekeeping requirements in subdivision (5).

(4) All spray guns must be cleaned by one (1) or more of the methods in the aerospace NESHAP at 40 CFR 63.744(c)(1) through 40 CFR 63.744(c)(5)*.

(5) All fresh and used cleaning solvents, except semiaqueous cleaning solvents, used in solvent cleaning operations shall be stored in containers that shall be kept closed at all times except when filling or emptying. The owner or operator shall implement handling and transfer procedures to minimize spills during filling and transferring the cleaning solvent to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that holds or stores fresh or used cleaning solvents. The following are exempt from requirements in this subdivision:

(A) Aqueous cleaning solvents.

(B) Cotton tipped swabs used for very small cleaning operations.

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326 IAC 8-21-6 Control equipment and monitoring

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 6. (a) As an alternative to complying with the VOC content limits in section 3(a) of this rule, an owner or operator may achieve compliance with this rule by using approved air pollution control equipment provided that the control system has combined VOC emissions capture and control equipment efficiency of at least eighty-one percent (81%) by weight.

(b) Each owner or operator shall submit a monitoring plan that specifies the applicable operating parameter value, or range of values, to ensure ongoing compliance with subsection (a). The monitoring device shall be:

(1) installed;

(2) calibrated;

(3) operated; and

(4) maintained;

in accordance with the manufacturer's specifications.

(c) Each owner or operator using an enclosed spray gun cleaner shall visually inspect the seals and all other potential sources of leaks at least once per month. Each inspection shall occur while the spray gun cleaner is in operation. *(Air Pollution Control Division; 326 IAC 8-21-6; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)*

326 IAC 8-21-7 Compliance schedule

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 7. The owner or operator of any source subject to this rule shall achieve final compliance with the requirements of this rule no later than April 1, 2011, or upon startup for new sources. *(Air Pollution Control Division; 326 IAC 8-21-7; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA)*

326 IAC 8-21-8 Record keeping requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 8. (a) Each owner or operator using coatings listed in section 3(a) of this rule shall do the following:

(1) Maintain a current list of coatings in use with category and volatile organic compound content as applied.

(2) Record coating usage on an annual basis.

(b) Each owner or operator using cleaning solvents required in section 5 of this rule shall do the following:

(1) For aqueous and semiaqueous hand wipe cleaning solvents, maintain a list of materials used with corresponding water contents.

(2) For vapor pressure compliant hand wipe cleaning solvents, do the following:

(A) Maintain a current list of cleaning solvents in use with their respective vapor pressures or, for blended solvents, VOC composite vapor pressures.

(B) Record cleaning solvent usage on an annual basis.

(3) For cleaning solvents with a vapor pressure greater than forty-five (45) mmHg used in exempt hand wipe cleaning operations, do the following:

(A) Maintain a list of exempt hand wipe cleaning processes.

(B) Record cleaning solvent usage on an annual basis.

(c) Each owner or operator using control equipment under section 6 of this rule shall record monitoring parameters as specified in the monitoring plan required under section 6(b) of this rule.

(d) Except for specialty coatings, any source that complies with the substantive record keeping requirements of the aerospace NESHAP, 40 CFR 63.752*, is deemed to be in compliance with the requirements of this section.

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326 IAC 8-21-9 Test methods

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 9. (a) For coatings that are not waterborne (water reducible), the owner or operator shall determine the VOC content of each formulation (less water and less exempt solvents) as applied using manufacturer's supplied data or 40 CFR 60, Appendix A, Method 24*. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance shall be based on the results from the Method 24 analysis. For waterborne (water reducible) coatings, manufacturer's supplied data alone can be used to determine the VOC of each formulation.

(b) The following test methods apply to cleaning solvents:

(1) For aqueous and semiaqueous cleaning solvents, manufacturers' supplied data shall be used to determine the water content.

(2) For hand wipe cleaning solvents, manufacturers' supplied data or standard engineering reference texts or other equivalent methods shall be used to determine the vapor pressure or VOC composite vapor pressure for blended cleaning solvents.

(c) Measurements of volatile organic compound emissions for control equipment, subject to section 6 of this rule, shall be conducted in accordance with 326 IAC 8-1-4(d) through 326 IAC 8-1-4(f).

(d) Except for specialty coatings, any source that complies with the test method requirements of the aerospace NESHAP, 40 CFR 63.750*, is deemed to be in compliance with the requirements of this section.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-21-9; filed Nov 3, 2009, 3:32 p.m.: 20091202-IR-326090222FRA; errata filed Nov 19, 2009, 10:03 a.m.: 20091216-IR-326090222ACA)*

Rule 22. Miscellaneous Industrial Adhesives

326 IAC 8-22-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to each miscellaneous industrial adhesive application process at sources that meet the following criteria:

(1) Are located in Lake County or Porter County.

(2) Have actual volatile organic compound (VOC) emissions, before consideration of controls, equal to or greater than three (3) tons per rolling twelve (12) month period from all miscellaneous industrial adhesive application processes and related cleaning activities.

(b) An application process consists of a series of one (1) or more adhesive applicators and any associated drying area or oven, or both, wherein an adhesive is applied, dried or cured, or both. An application process ends at the point where the adhesive is dried or cured, or prior to any subsequent application of a different adhesive. It is not necessary for an application process to have an oven or flash-off area.

(c) Industrial adhesive application operations exempt from the requirements of this rule based on the threshold applicability in subsection (a)(2) shall maintain records as required under section 8 of this rule. *(Air Pollution Control Division; 326 IAC 8-22-1; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)*

326 IAC 8-22-2 Definitions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. The following definitions apply throughout this rule:

(1) "Acrylonitrile-butadiene-styrene welding" or "ABS welding" means any process to weld acrylonitrile-butadiene-styrene pipe.

(2) "Adhesive" means any chemical substance that is applied for the purpose of bonding two (2) surfaces together other than by mechanical means.

(3) "Adhesive primer" means any product intended by the manufacturer for application to a substrate, prior to the application of an adhesive, to provide a bonding surface.

(4) "Aerosol adhesive or adhesive primer" means an adhesive or adhesive primer packaged as an aerosol product in which the spray mechanism is permanently housed in a nonrefillable can designed for hand-held application without the need for ancillary hoses or spray equipment.

(5) "Ceramic tile installation adhesive" means any adhesive intended by the manufacturer for use in the installation of ceramic tiles.

(6) "Contact bond adhesive" means an adhesive that:

(A) is designed for application to both surfaces that are to be bonded together;

(B) is allowed to dry before the two (2) surfaces are placed in contact with each other;

(C) forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other; and

(D) does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces.

The term does not include rubber cements that are primarily intended for use on paper substrates or vulcanizing fluids that are designed and labeled for tire repair only.

(7) "Cove base" means a flooring trim unit, generally made of vinyl or rubber, having a concave radius on one (1) edge and a convex radius on the opposite edge that is used:

(A) in forming a junction between the bottom wall course and the floor; or

(B) to form an inside corner.

(8) "Cove base installation adhesive" means any adhesive intended by the manufacturer to be used for the installation of cove

base or wall base on a wall or vertical surface at floor level.
(9) "Cyanoacrylate adhesive" means any adhesive with a cyanoacrylate content of at least ninety-five percent (95%) by weight.
(10) "Ethylene propylene diene monomer roof membrane" or "EPDM roof membrane" means a prefabricated single sheet of elastomeric material that is:
(A) composed of ethylene propylene diene monomer (EPDM); and
(B) field applied to a building roof using one (1) layer of membrane material.
(11) "Flexible vinyl" means nonrigid polyvinyl chloride plastic with a least five percent (5%) by weight plasticizer content.
(12) "Indoor floor covering installation adhesive" means the following:
(A) Any adhesive intended by the manufacturer for use in the installation of the following:
(i) Wood flooring.
(ii) Carpet.
(iii) Resilient tile.
(iv) Vinyl tile.
(v) Vinyl backed carpet.
(vi) Resilient sheet and roll or artificial grass.
(B) Excluded from this definition are adhesives used to install:
(i) ceramic tile; and
(ii) perimeter bonded sheet flooring with vinyl backing onto a nonporous substrate, such as flexible vinyl.
(13) "Laminate" means a product made by bonding together two (2) or more layers of material.
(14) "Metal to urethane or rubber molding or casting adhesive" means any adhesive intended by the manufacturer to bond metal to:
(A) high density or elastomeric urethane; or
(B) molded rubber materials;
in heater molding or casting processes, to fabricate products such as rollers for computer printers or other paper handling equipment.
(15) "Motor vehicle adhesive" means an adhesive, including glass bonding adhesive, used at a source that is not an automobile or light duty truck assembly coating source, applied for the purpose of bonding two (2) vehicle surfaces together without regard to the substrates involved.
(16) "Motor vehicle glass bonding primer" means a primer, used at a source that is not an automobile or light duty truck assembly coating source, that:
(A) is applied to:
(i) windshields;
(ii) other glass; or
(iii) body openings;
to prepare the glass or body opening for the application of glass bonding adhesives or the installation of adhesive bonded glass; and
(B) includes:
(i) glass bonding; and
(ii) cleaning primers;
that perform both functions (cleaning and priming of the windshield or other glass, or body openings) prior to the application of adhesive or the installation of adhesive bonded glass.
(17) "Motor vehicle weather-strip adhesive" means an adhesive, used at a source that is not an automobile or light duty truck assembly coating source, applied to weather-stripping materials for the purpose of bonding the weather-strip material to the surface of the vehicle.
(18) "Multipurpose construction adhesive" means any adhesive intended by the manufacturer for use in the installation or repair of various construction materials, including, but not limited to, the following:
(A) Drywall.
(B) Subfloor.
(C) Panel.
(D) Fiberglass reinforced plastic (FRP).

(E) Ceiling tile.
(F) Acoustical tile.

(19) "Outdoor floor covering installation adhesive" means any adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use.

(20) "Panel installation" means the installation of any:
(A) plywood;
(B) predecorated hardboard (or tileboard);
(C) FRP; and
(D) similar predecorated or nondecorated panels;
to studs or solid surfaces using an adhesive formulated for that purpose.

(21) "Perimeter bonded sheet flooring installation" means the installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip of up to four (4) inches wide around the perimeter of the sheet flooring.

(22) "Plastics" means synthetic materials chemically formed by the polymerization of organic (carbon-based) substances. Plastics are described as follows:
(A) Usually compounded with one (1) or more of the following:
(i) Modifiers.
(ii) Extenders.
(iii) Reinforcers.
(B) Capable of being:
(i) molded;
(ii) extruded;
(iii) cast into various shapes and films; or
(iv) drawn into filaments.

(23) "Plastic solvent welding adhesive" means any adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces.

(24) "Plastic solvent welding adhesive primer" means any primer intended by the manufacturer for use to prepare plastic substrates prior to bonding or welding.

(25) "Porous material" means a substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, paper and corrugated paperboard. For purposes of this rule, the term does not include wood.

(26) "Reinforced plastic composite" means a composite material consisting of plastic reinforced with fibers.

(27) "Rubber" means any natural or manmade rubber substrate, including, but not limited to, the following:
(A) Styrene-butadiene rubber.
(B) Polychloroprene (neoprene).
(C) Butyl rubber.
(D) Nitrile rubber.
(E) Chlorosulfonated polyethylene.
(F) Ethylene propylene diene terpolymer.

(28) "Sheet rubber lining installation" means the process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric by hand.

(29) "Single-ply roof membrane" means a prefabricated single sheet of rubber, normally ethylene propylene diene terpolymer, that is field applied to a building roof using one (1) layer of membrane material. For purposes of this rule, the term does not include membranes prefabricated from EPDM.

(30) "Single-ply roof membrane adhesive primer" means any primer labeled for use to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding.

(31) "Single-ply roof membrane installation and repair adhesive" means any adhesive labeled for use in the installation or repair of single-ply roof membrane, where the following apply:
(A) Installation includes, at a minimum, the following:

(i) Attaching the edge of the membrane to the edge of the roof.
(ii) Applying flashings to vents, pipes, and ducts that protrude through the membrane.
(B) Repair includes the following:
(i) Gluing the edges of torn membrane together.
(ii) Attaching a patch over a hole.
(iii) Reapplying flashings to vents, pipes, or ducts installed through the membrane.

(32) "Structural glazing adhesive" means any adhesive intended by the manufacturer to apply any of the following to exterior building frames:
(A) Glass.
(B) Ceramic.
(C) Metal.
(D) Stone.
(E) Composite panels.

(33) "Subfloor installation" means the installation of subflooring material over floor joists, including the construction of any load bearing joists. Subflooring is covered by a finish surface material.

(34) "Thin metal laminating adhesive" means any adhesive intended by the manufacturer for use in bonding multiple layers of:
(A) metal to metal; or
(B) metal to plastic;
in the production of electronic or magnetic components in which the thickness of the bond line or lines is less than twenty-five hundredths (0.25) mils.

(35) "Tire repair" means a process that includes:
(A) expanding a:
(i) hole;
(ii) tear;
(iii) fissure; or
(iv) blemish;
in a tire casing; and
(B) completing the process by:
(i) grinding or gouging;
(ii) applying adhesive; and
(iii) filling;
the hole or crevice with rubber.

(36) "Waterproof resorcinol glue" means a two (2) part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh water or salt water.

(Air Pollution Control Division; 326 IAC 8-22-2; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)

326 IAC 8-22-3 VOC content limits

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 3. (a) Except as provided in subsection (c) and section 4 of this rule, on and after April 1, 2011, an owner or operator applying miscellaneous industrial adhesives or adhesive primers within Lake County or Porter County shall comply with applicable VOC content limits specified in subsection (f).

(b) The VOC content limits in subsection (f) for adhesives or adhesive primers applied to particular substrates shall apply as follows:

(1) If an operator uses an adhesive that is subject to a specific VOC content limit in subsection (f), the specific limit is applicable rather than an adhesive-to-substrate limit.

(2) The applicable substrate category with the highest VOC content shall be the limit when an adhesive is used to bond dissimilar substrates together.

(c) A person using an adhesive or adhesive primer subject to this rule may comply with subsection (a) by using add-on air pollution control equipment if the equipment meets the following requirements:

(1) The VOC emissions from the use of all adhesives or adhesive primers subject to this rule are reduced by an overall capture and control efficiency of at least eighty-five percent (85%) by weight.

(2) The combustion temperature is monitored continuously if a thermal incinerator is operated.

(3) Inlet and exhaust gas temperatures are monitored continuously if a catalytic incinerator is operated.

(4) Control device efficiency is monitored continuously if a carbon absorber or control device other than a thermal or catalytic incinerator is operated.

(5) Operation records sufficient to demonstrate compliance with the requirements of this subsection are maintained as required by section 6 of this rule.

(d) Work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for adhesives, adhesive primers, cleaning materials, and waste materials. Work practices shall include, at a minimum, the following:

(1) Store all VOC adhesives, adhesive primers, and cleaning materials in closed containers or pipes.

(2) Minimize spills of VOC adhesives, adhesive primers, and clean up any spill immediately.

(3) Convey any adhesives, adhesive primers, and cleaning materials in closed containers or pipes.

(4) Keep mixing vessels that contain VOC adhesives, adhesive primers, or other materials closed except when specifically in use.

(5) Clean equipment without atomizing the cleaning solvent and ensure all spent solvent is captured in a closed container.

(e) In addition to the VOC content limits in subsection (f), one (1) or a combination of the following equipment shall be used for adhesive or adhesive primer application:

(1) Electrostatic equipment.

(2) High volume low-pressure (HVLP) spray equipment.

(3) Flow coating.

(4) Roller coating or hand application, including nonspray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application.

(5) Dip coating, including electrodeposition.

(6) Airless spray.

(7) Air-assisted airless spray.

(8) Other coating application method capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spraying.

(f) The VOC content limits for adhesives and adhesive primers are as follows:

Category**		VOC Content Limit	
Specialty Adhesive Application Processes		grams/liter	lb/gal
	Ceramic tile installation	130	1.1
	Contact adhesive	250	2.1
	Cove base installation	150	1.3
	Indoor floor covering installation	150	1.3
	Metal to urethane or rubber molding or casting	850	7.1
	Motor vehicle adhesive	250	2.1
	Motor vehicle weather-strip adhesive	750	6.3
	Multipurpose construction	200	1.7
	Outdoor floor covering installation	250	2.1
	Single-ply roof membrane installation or repair (except EPDM)	250	2.1
	Structural glazing	100	0.8
	Thin metal laminating	780	6.5
	Tire repair	100	0.8
	Perimeter bonded sheet vinyl flooring installation	660	5.5

	Plastic solvent welding (ABS)	400	3.3
	Plastic solvent welding (except ABS)	500	4.2
	Sheet rubber lining installation	850	7.1
	Waterproof resorcinol glue	170	1.4
Adhesive Primer Application Processes			
	Motor vehicle glass bonding primer	900	7.5
	Plastic solvent welding adhesive primer	650	5.4
	Single-ply roof membrane adhesive primer	250	2.1
	Other adhesive primer	250	2.1
Adhesives Applied to the Listed Substrate			
	Flexible vinyl	250	2.1
	Reinforced plastic composite (fiberglass)	200	1.7
	Metal	30	0.3
	Porous material (except wood)	120	1.0
	Rubber	250	2.1
	Other substrates	250	2.1
	Wood	30	0.3

** The VOC content is determined as the weight of VOC, less water and exempt compounds. *(Air Pollution Control Division; 326 IAC 8-22-3; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)*

326 IAC 8-22-4 Exemptions and exceptions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 4. (a) The requirements of this rule shall not apply to the following:

(1) The use of the following compounds:

(A) Adhesives or adhesive primers being tested or evaluated in any:

(i) research and development;

(ii) quality assurance; or

(iii) analytical;

laboratory, provided records are maintained as required in section 6 of this rule.

(B) Cyanoacrylate adhesives.

(C) Adhesives or adhesive primers that are sold or supplied by the manufacturer or supplier in containers with a net:

(i) volume of sixteen (16) fluid ounces or less; or

(ii) weight of one (1) pound or less;

except plastic solvent welding adhesives and contact adhesives.

(D) Contact adhesives that are sold or supplied by the manufacturer or supplier in containers with a net volume of one (1) gallon or less.

(E) Aerosol adhesives and aerosol adhesive primers.

(2) The use of adhesives or adhesive primers in the following operations:

(A) Tire repair operations, provided the label of the adhesive states "For tire repair only".

(B) In the assembly, repair, and manufacture of aerospace or undersea-based weapon systems.

(C) The manufacture of medical equipment.

(D) Plaque laminating operations in which adhesives are used to bond clear, polyester acetate laminate to wood with lamination equipment installed prior to July 1, 1992. Any person claiming an exemption under this subdivision shall record and maintain monthly operational records sufficient to demonstrate compliance with this exemption and in accordance with section 6 of this rule.

(E) Processes using polyester bonding putties to assemble fiberglass parts at:

(i) fiberglass boat manufacturing sources; and
(ii) other reinforced plastic composite manufacturing sources.

(b) Section 3 of this rule shall not apply to the use of any adhesives or adhesive primers provided the total volume of adhesives and adhesive primers applied source wide does not exceed fifty-five (55) gallons per calendar year. Any person claiming an exemption under this subsection shall record and maintain monthly operational records sufficient to demonstrate compliance with this exemption and in accordance with section 6 of this rule. *(Air Pollution Control Division; 326 IAC 8-22-4; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA; errata filed Nov 18, 2009, 3:42 p.m.: 20091216-IR-326090221ACA)*

326 IAC 8-22-5 Compliance dates

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. The owner or operator of a source that is subject to this rule shall comply with the requirements of this rule no later than April 1, 2011, or upon initial start-up of the operation for new miscellaneous industrial adhesive operations. *(Air Pollution Control Division; 326 IAC 8-22-5; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)*

326 IAC 8-22-6 Record keeping

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 6. (a) Each person subject to this rule, including the exemption in section 4(b) of this rule, shall maintain records demonstrating compliance with this rule, including, but not limited to, the following information:

(1) A list of each adhesive or adhesive primer in use and in storage.
(2) A data sheet or material list that provides the following:
(A) Material name.
(B) Manufacturer identification.
(C) Material application.
(3) The use and mix ratio of the following:
(A) Catalysts.
(B) Reducers.
(C) Other components.
(4) The VOC content of each product, as supplied.
(5) The final VOC content or vapor pressure, as applied.
(6) The monthly volume of each adhesive or adhesive primer used.

(b) Any person who complies with section 3(a) of this rule through the use of add-on air pollution control equipment shall record the key operating parameters for the control equipment, including, but not limited to, the following information:

(1) The volume used per day of each adhesive or adhesive primer that:
(A) is subject to a VOC content limit in section 3(f) of this rule; and
(B) exceeds a limit listed in section 3(f) of this rule.
(2) On a daily basis, the:
(A) combustion temperature;
(B) inlet and exhaust gas temperatures; and
(C) control device efficiency, as appropriate;
under section 3(c) of this rule.
(3) Daily hours of operation.
(4) All maintenance performed, including the following:
(A) Date of maintenance.
(B) Type of maintenance.

(c) All records documenting compliance with this rule shall be:

(1) maintained for five (5) years from the date a record is created; and

(2) made available to the department within ninety (90) days of a request.

(d) For adhesives or adhesive primers subject to the laboratory testing exemption under section 4(a)(1)(A) of this rule, the person conducting the testing shall make and maintain records of all adhesive or adhesive primer materials used, including, but not limited to, the following:

(1) Product name.

(2) Product category of the material or type of application.

(3) VOC content of each material.

(4) The dates when the exempt adhesives or adhesive primers were used.

(Air Pollution Control Division; 326 IAC 8-22-6; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)

326 IAC 8-22-7 Compliance procedures and test methods

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

Affected: IC 13-15; IC 13-17

Sec. 7. (a) Except as provided in subsections (c) and (d), the VOC and solids content of adhesives or adhesive primers shall be determined in accordance with the following:

(1) 40 CFR 60, Appendix A, Method 24*.

(2) Analytical data derived from a material safety data sheet (MSDS) or equivalent information from the supplier as long as it is based on 40 CFR 60, Appendix A, Method 24*.

(b) The organic content of exempt organic compounds shall be determined using ASTM D4457-85*, ASTM International, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, as applicable.

(c) The VOC content for reactive adhesives shall be determined using the procedures for reactive adhesives in 40 CFR 63, Subpart PPPP, Appendix A*.

(d) If air pollution control equipment is used to meet the requirements of this rule, the owner or operator shall make the following determinations:

(1) The measurement of capture efficiency shall be conducted and reported in accordance with 326 IAC 8-1-4(c).

(2) The control efficiency shall be determined in accordance with 326 IAC 8-1-4(d) through 326 IAC 8-1-4(f).

(e) Grams of VOC per liter of adhesive, less water and exempt compounds, shall be calculated according to the following equation:

$$\text{Grams of VOC per liter of adhesive} = \frac{Ws - Ww - We}{Vm - Vw - Ve}$$

Where:
- Ws = weight of volatile compounds, in grams
- Ww = weight of water, in grams
- We = weight of exempt compounds, in grams
- Vm = volume of material, in liters
- Vw = volume of water, in liters
- Ve = volume of exempt compounds, in liters

(f) Grams of VOC per liter of material shall be calculated according to the following equation:

$$\text{Grams of VOC per liter of materials} = \frac{Ws - Ww - We}{Vm}$$

Where:
- Ws = weight of volatile compounds, in grams
- Ww = weight of water, in grams
- We = weight of exempt compounds, in grams
- Vm = volume of material, in liters

(g) Percent VOC by weight shall be calculated according to the following equation:

$$\text{\% VOC by weight} = (Wv / W) \times 100$$

Where:
- Wv = weight of VOCs in grams
- W = weight of material in grams

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental

Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 8-22-7; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA; errata filed Nov 18, 2009, 3:42 p.m.: 20091216-IR-326090221ACA)*

326 IAC 8-22-8 Record keeping requirements for exempt sources

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 8. (a) An owner or operator applying industrial adhesives that is exempt from the requirements of this rule based on the threshold applicability in section 1(a)(2) of this rule shall maintain the following records on a monthly basis:

(1) The total gallons of each adhesive.

(2) The VOC content of each adhesive.

(b) Records required by subsection (a) shall be submitted to the department within thirty (30) days of the receipt of a written request. If the records are not available, the source shall be considered to be subject to the requirements in section 3 of this rule. *(Air Pollution Control Division; 326 IAC 8-22-8; filed Nov 3, 2009, 3:31 p.m.: 20091202-IR-326090221FRA)*

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