TITLE 326 AIR POLLUTION CONTROL BOARD

FINDINGS AND DETERMINATION OF THE COMMISSIONER
PURSUANT TO IC 13-14-9-7 AND SECOND NOTICE OF COMMENT PERIOD
LSA Document #09-222

DEVELOPMENT OF NEW RULES CONCERNING APPLICATION OF REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) FOR VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY (SOCMI), INDUSTRIAL WASTEWATER OPERATIONS, BATCH PROCESSES, AND AEROSPACE

PURPOSE OF NOTICE

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for new rules in 326 IAC 8 for application of reasonably available control technology (RACT) to limit emissions of volatile organic compound (VOC) from synthetic organic chemical manufacturing industry (SOCMI) distillation and reactors, industrial wastewater operations, batch processes, and aerospace in ozone nonattainment areas. The purpose of this notice is to seek public comment on the draft rule, including suggestions for specific language to be included in the rule. IDEM seeks comment on the affected citations listed and any other provisions of Title 326 that may be affected by this rulemaking.

CITATIONS AFFECTED: 326 IAC 8; 326 IAC 8-18; 326 IAC 8-19; 326 IAC 8-20; 326 IAC 8-21.

AUTHORITY: IC 13-14-18; IC 13-17-3-4; IC 13-17-3-11.

STATUTORY REQUIREMENTS

IC 13-14-9-7 recognizes that under certain circumstances it may be appropriate to reduce the number of public comment periods routinely provided. In cases where the commissioner determines that the rulemaking policy alternatives available to IDEM are so limited that the notice of first public comment period would provide no substantial benefit, IDEM may forgo this comment period and proceed directly to the notice of second public comment period.

If the commissioner makes the determination of limited rulemaking policy alternatives required by IC 13-14-9-7, the commissioner shall prepare written findings and include them in the second notice of public comment period published in the Indiana Register. This document constitutes the commissioner's written findings pursuant to IC 13-14-9-7.

The statute provides for this shortened rulemaking process if the commissioner determines that "the rulemaking policy alternatives available to the department are so limited that the public notice and comment period under (IC 13-14-9-3)... would provide no substantial benefit to:

(1) the environment; or

(2) persons to be regulated or otherwise affected by the proposed rule.".

BACKGROUND

Section 182(b)(2) of the Clean Air Act requires implementation of RACT for sources of VOCs in moderate ozone nonattainment areas, for which U.S. EPA has published a Control Technique Guideline (CTG). CTGs are used under U.S. EPA regulations to presumptively define RACT. Indiana is under a federal time clock that runs out in September 2009 for implementing VOC RACT in counties that were designated as nonattainment for the 8-hour standard for ozone (85 ppb). States with moderate ozone nonattainment areas are also required to update existing VOC RACT regulations within one year of U.S. EPA issuing an updated CTG or before a county can be redesignated as attaining the standard. This rulemaking addresses synthetic organic chemical manufacturing (SOCMI) and aerospace manufacturing for CTGs issued by U.S. EPA in August 1993 and December 1997, respectively. The SOCMI source category includes two CTGs: (1) air oxidation and (2) distillation and reactor processes.

Section 182(b)(2) of the Clean Air Act also requires implementation of RACT for major VOC sources in moderate ozone nonattainment areas not covered by a CTG. Source categories not covered by a CTG are called non-CTG RACT sources. U.S. EPA has not issued CTGs for industrial wastewater collection and treatment and batch processes. Instead, states must implement control recommendations contained in an alternative control techniques (ACT) document for wastewater and batch processes. IDEM is proposing to adopt four rules to address the three CTG and two ACT documents. IDEM has not previously adopted rules for these source categories; instead, IDEM submitted negative declarations for these sources categories (June 8, 2000, 65 FR 36343). Air oxidation SOCMI, a pre-1990 CTG was submitted to U.S. EPA as a negative declaration state implementation plan (SIP) revision on March 24, 1986. Adoption of VOC RACT rules in Lake and Porter counties, both currently designated as moderate nonattainment areas, is necessary to amend the SIP to secure

redesignation approval by U.S. EPA consistent with current federal regulations.

Although IDEM expects Lake and Porter counties to be redesignated as attainment by early 2010, there is no guarantee that the counties will in fact be redesignated. This is primarily due to uncertainty associated with the meteorological conditions from one ozone season to another. Therefore, sources need to be prepared to comply with the requirements of these rules on April 1, 2011. However, it is IDEM's intention to repeal these rules once Lake County and Porter County are redesignated as attainment for the 1997 8-hour standard for ozone (85 ppb). IDEM is currently in discussions with U.S. EPA in regards to available options with moving these VOC RACT controls to contingency measures in the maintenance plan. These VOC RACT rules were not part of the control measures that IDEM used to demonstrate redesignation of attainment. Redesignation could be effective in early 2010, which means that it is possible that these requirements may be repealed prior to the compliance date.

This proposed rulemaking adds VOC RACT rules in 326 IAC 8 consistent with the control recommendations in the applicable CTG (that is, presumptive RACT) and the ACT recommendations for facilities located in Lake County and Porter County. IDEM is proposing that the requirements from the CTGs and ACTs for Lake County and Porter County facilities would be applicable on and after April 1, 2011. The CTGs and ACTs are available on U.S. EPA's website at:

http://www.epa.gov/ttn/naaqs/ozone/ctg_act

U.S. EPA has also issued new CTGs for automobile and light duty truck assembly coatings, paper coating, metal furniture coating, large appliance coating, miscellaneous metal and plastic parts coatings, flat wood paneling, flexible package printing, lithographic and letterpress printing, industrial solvent cleaning operations, and miscellaneous industrial adhesives. IDEM is addressing these rulemakings in separate rulemaking notices.

Synthetic Organic Chemical Manufacturing Industry (SOCMI) (326 IAC 8-18)

This CTG applies to facilities that have potential VOC emissions greater than or equal to 100 tons per year from air oxidation, distillation, and air reactor operations in the SOCMI. SOCMI refers to those facilities that produce man-made organic compounds that are created through industrial synthesis. Byproducts of these processes include VOC emissions that can be released to ambient air as precursors to ozone formation. The draft rule would require VOC RACT measures to effectively reduce VOC emissions from any applicable SOCMI facility's air oxidation, distillation, and reactor operations in Lake and Porter counties. These control measures largely involve the destruction of VOC emissions by combustion devices such as boilers, incinerators, or flares. U.S. EPA has also issued New Source Performance Standards (NSPS) for VOC emission controls for SOCMI air oxidation, distillation, and reactor operations. Many of the VOC RACT requirements for SOCMI facilities that are contained in the CTG are the same as those requirements listed in the NSPS for SOCMI operations. These similar requirements include control requirements, recommended control and recovery devices, monitoring and test methods, reporting and record keeping, equations to calculate emission rates and heating values, as well as many of the exemptions. The CTGs and NSPS have essentially the same requirements for VOC controls for SOCMI facilities. Consequently, IDEM has draft rule language that references appropriate portions of the promulgated NSPS SOCMI requirements. Federal NSPS regulations have been incorporated by reference in Article 12. This rulemaking adds new rule 326 IAC 8-18 and is based on control recommendations in two CTGs: (1) "Control of Volatile Organic Compounds from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry" (EPA-450/3-84-015), December 1984; and (2) "Control of Volatile Organic Compounds from Reactor Processes and Distillation Processes in the Synthetic Organic Chemical Manufacturing Industry" (EPA-450/3-91-031), August 1993. The draft rule language is also based on Wisconsin's proposed new rule for SOCMI at NR 421.07, per U.S. EPA's recommendation.

Process Vents in Batch Operations (326 IAC 8-19)

U.S. EPA has not finalized a CTG for batch processing operations, but an ACT document was issued in 1994. The draft rule applies to process vents associated with batch operations at sources identified by specified standard industrial classification (SIC) codes at facilities that have the potential to emit greater than or equal to 100 tons per year of VOC from batch processing operations and any other non-CTG source category combined. This rulemaking adds new rule 326 IAC 8-19 and is based on control recommendations in the ACT (EPA-453/D-93-020), as well as Ohio's rule for batch operations at 3724-21-14, per U.S. EPA's recommendation.

Industrial Wastewater Operations (326 IAC 8-20)

U.S. EPA has not finalized a CTG for industrial wastewater collection and treatment (IWCT) operations, but an ACT document was issued in 1994. This ACT applies to facilities that have potential VOC emissions greater than or equal to 100 tons per year from industrial wastewater operations and any other source category without a final CTG, such as batch operations. Almost all of the VOC emissions from IWCT processes simply evaporate from the waste stream when exposed to the ambient air. Consequently, the VOC RACT requirements stated in the draft rule largely consist of implementing technologies and work practice standards that would combine to substantially suppress the exposure of the VOC-laden waste stream to the ambient air. The proposed requirements include the following:

(1) Sumps and wastewater separators shall be provided with either a floating cover equipped with seals or a fixed cover, equipped with a closed vent system vented to a pollution control device.

(2) All sewer lines shall be completely enclosed so that no liquid surface is exposed to the air.

(3) All process drains shall be equipped with water seal controls.

(4) All junction boxes shall be totally enclosed with a fixed cover with gasket or a manhole cover.

(5) Each pollution control device shall achieve a control efficiency of 95% by weight or greater for VOC emissions or emit VOC emissions measured at a concentration of less than 500 parts per million (ppm).

This rulemaking adds new rule 326 IAC 8-20 and is based on control recommendations in the ACT (EPA-453/D-93-056 1992 - draft CTG from 1992 finalized in 1994 as ACT). The draft rule language is also based on Ohio's recently adopted rule for industrial wastewater operations at Ohio Administrative Code 3745-21-16, per U.S. EPA's recommendation.

Aerospace (326 IAC 8-21)

This CTG applies to aerospace manufacturing and rework operations typically consisting of the following basic operations: materials receiving, machining and mechanical processing, coating application, chemical milling, heat treating, cleaning, metal processing and finishing, coating removal (depainting), composite processing, and testing. Of these operations, coating application and cleaning are the significant sources of VOC emissions and are the processes covered by the aerospace CTG. The CTG applies to facilities with potential to emit greater than or equal to 25 tons per year of VOC. A national emission standard for hazardous air pollutants (NESHAP) for aerospace manufacturing and rework operations was published on September 1, 1995 (40 CFR 63, Subpart GG). This NESHAP addresses both hazardous air pollutant (HAP) and VOC emissions. In addition, the control techniques required by the NESHAP are similar to those addressed by the CTG. The CTG includes requirements for specialty coatings, which are not covered by the NESHAP. This rulemaking adds new rule 326 IAC 8-21 and is based on control recommendations in the CTG (EPA-453/R-97/004).

The rulemaking policy alternatives are limited for this rulemaking. This rulemaking is based on the control recommendations contained in U.S. EPA's CTG and ACT documents. Some of the proposed rules are also based on other Region V state's rules per U.S. EPA's recommendation. Although state agencies developing RACT rules may elect control approaches that differ from those described in the CTG or otherwise recommended by U.S. EPA in practice it is difficult to establish alternative control approaches that are approvable by U.S. EPA. Thus options for varying from the control recommendations contained in the CTG or the ACT are limited.

IC 13-14-9-4 Identification of Restrictions and Requirements Not Imposed under Federal Law

No element of the draft rule imposes either a restriction or a requirement on persons to whom the draft rule applies that is not imposed under federal law. This VOC RACT rule is necessary for IDEM to meet a Clean Air Act requirement. The applicable CTGs presumptively define RACT under U.S. EPA regulations. When a state submits a RACT rule that is consistent with the presumptive RACT, the state does not need to submit additional support to demonstrate that the rule meets the Clean Air Act's RACT requirement. Section 182(b)(2) of the Clean Air Act requires IDEM to adopt VOC RACT for CTG and non-CTG RACT source categories where (as described herein) applicable sources are identified in nonattainment areas of a state in order to secure redesignation of such area.

Potential Fiscal Impact

Since this rulemaking addresses a Clean Air Act requirement, there are no additional costs beyond those already imposed under federal law. A summary of cost estimates when provided by U.S. EPA in a CTG document is provided below. The department is asking for information from affected sources on their ability to meet the requirements in these proposed amendments and to help estimate the cost of compliance. At this time IDEM anticipates that there will be one or two sources in Lake County and Porter County for each source category that is subject to the new rules. Some affected sources may be able to take an enforceable limit to keep VOC emissions below 100 tons per year to avoid being subject to control requirements.

Synthetic Organic Chemical Manufacturing Industry (SOCMI)

According to U.S. EPA's CTG for these SOCMI categories (reactor and distillation: published in 1993, air oxidation: published in 1984) the cost of installing, operating and maintaining control devices for VOC emissions (amortized over 10 years) would range between $800 and $4,000 per ton of VOC emissions reduced. These cost estimates have not been adjusted for inflation since their original guideline publication dates.

Industrial Wastewater

A concise summary of control costs was not provided in the ACT for this source category. IDEM anticipates that any sources subject to this rule may either be able to take an enforceable limit on VOC emissions to avoid applicability with control requirements in the rule or are well controlled and already meet the control requirements in the rule.

Process Vents in Batch Operations

A concise summary of control costs was not provided in the ACT for this source category. IDEM anticipates that any sources subject to this rule will be able to take an enforceable limit on VOC emissions to avoid applicability with control requirements in the rule.

Aerospace

U.S. EPA did not summarize in the CTG the emission reductions, costs, and environmental impact since they have already been determined for major HAP sources during the federal NESHAP rulemaking. No exiting aerospace facilities have been identified for Lake County and Porter County.

Public Participation and Workgroup Information

At this time, no workgroup is planned for the rulemaking. If you feel that a workgroup or other informal discussion on the rule is appropriate, please contact Susan Bem, Rules Development Branch, Office of Legal Counsel, (317) 233-5697 or (800) 451-6027 (in Indiana).

Small Business Assistance Information

IDEM established a compliance and technical assistance (CTAP) program under IC 13-28-3. The program provides assistance to small businesses and information regarding compliance with environmental regulations. In accordance with IC 13-28-3 and IC 13-28-5, there is a small business assistance program ombudsman to provide a point of contact for small businesses affected by environmental regulations. Information on the CTAP program, the monthly CTAP newsletter, and other resources available can be found at:

http://www.in.gov/idem/4108.htm

Small businesses affected by this rulemaking may contact the Small Business Regulatory Coordinator:

Alison Surface
IDEM Compliance and Technical Assistance Program - OPPTA
MC 60-04 IGCS W-041
100 North Senate Avenue
Indianapolis, IN 46204-2251
(317) 232-8172 or (800) 988-7901
ctap@idem.in.gov

The Small Business Assistance Program Ombudsman is:

Brad Baughn
IDEM Small Business Assistance Program Ombudsman
MC 50-01 - IGCN 1307
100 North Senate Avenue
Indianapolis, IN 46204-2251
(317) 234-3386
bbaughn@idem.in.gov

FINDINGS

The commissioner of IDEM has prepared written findings regarding rulemaking on SOCMI, aerospace manufacturing, industrial wastewater collection and treatment, and batch processes. These findings are prepared under IC 13-14-9-7 and are as follows:

(1) This rulemaking is based on the control recommendations contained in U.S. EPA's CTG and ACT documents, as well as rules from other Region V states as recommended by U.S. EPA for VOC RACT. CTGs presumptively define RACT for particular industries. Although state agencies developing RACT rules may elect control approaches that differ from those described in the CTG or ACT, in practice it is difficult to establish alternative control approaches that are approvable by U.S. EPA. Thus, options for varying from the control recommendations contained in the CTG are limited. The control requirements contained in this draft rule are equivalent to those contained in the CTG or the ACT that have already gone through public comment at the federal level. This notice will provide the opportunity to comment on how these control requirements will be implemented in Indiana.

(2) I have determined that under the specific circumstances pertaining to this rule, the rulemaking policy alternatives are so limited that the public notice and comment period provided in the notice of first public comment period would provide no substantial benefit to the environment or to persons to be regulated or otherwise affected by the rule.

(3) The draft rule is hereby incorporated into these findings.

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Thomas W. Easterly
Commissioner
Indiana Department of Environmental Management

REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for specific revisions to language to be contained in the rule. Mailed comments should be addressed to:

#09-222(APCB) VOC RACT - New Rules – Old CTGs
Susan Bem Mail Code 61-49
c/o Administrative Assistant
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management
100 North Senate Avenue

Indianapolis, Indiana 46204
Hand delivered comments will be accepted by the receptionist on duty at the thirteenth floor east reception desk, Indiana Department of Environmental Management, 100 North Senate Avenue, Indianapolis, Indiana.

Comments may be submitted by facsimile at the IDEM fax number: (317) 233-5517, Monday through Friday, between 8:15 a.m. and 4:45 p.m. Please confirm the timely receipt of faxed comments by calling the Rules Development Branch at (317) 233-8903.

COMMENT PERIOD DEADLINE

Comments must be postmarked, faxed, or hand delivered by May 29, 2009.

Additional information regarding this action may be obtained from Susan Bem, Rules Development Section, Office of Legal Counsel, (317) 233-5697 or (800) 451-6027 (in Indiana).

DRAFT RULE

SECTION 1. 326 IAC 8-18 IS ADDED TO READ AS FOLLOWS:

Rule 18. Synthetic Organic Chemical Manufacturing Industry Air Oxidation, Distillation, and Reactor Processes

326 IAC 8-18-1 Applicability

Authority: IC 13-14-18; 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 a 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 (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) 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.

***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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-18-1)

326 IAC 8-18-2 Air oxidation unit processes

Authority: IC 13-14-18; 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 facility with air oxidation unit processes subject to 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 facility shall be one that is described by the criteria in 40 CFR 60.610(b)* without consideration of the specific date of construction, modification, or reconstruction of the facility; and
(2) the owner or operator of an affected facility 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 facility 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) 40 CFR 60.616* does not apply.

***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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-18-2)

326 IAC 8-18-3 Distillation operations

Authority: IC 13-14-18; 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 facility with distillation operations subject to 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 facility shall be one that is described by the criteria in 40 CFR 60.660(b)* without consideration of the specific date of construction, modification, or reconstruction of the facility;
(2) an applicable chemical is one described in section 1(a)(2) of this rule; and
(3) the owner or operator of an affected facility 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 facility 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) 40 CFR 60.666* does not apply.

***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 Legal Counsel, Indiana**

Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; 326 IAC 8-18-3)

326 IAC 8-18-4 Reactor processes

Authority: IC 13-14-18; 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 facility with reactor processes subject to 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.
(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 60.700(c)(8)*.

(c) Notwithstanding 40 CFR 60.700*, for purposes of this rule:
(1) an affected facility shall be one that is described by the criteria in 40 CFR 60.700(b)* without consideration of the specific date of construction, modification, or reconstruction of the facility;
(2) an applicable chemical is one described in section 1(a)(2) of this rule; and
(3) the owner or operator of an affected facility 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 facility 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) 40 CFR 60.706* does not apply.

***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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-18-4)

326 IAC 8-18-5 Delayed compliance

Authority: IC 13-14-18; 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 facility 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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-18-5)

SECTION 2. 326 IAC 8-19 IS ADDED TO READ AS FOLLOWS:

Rule 19. Control of Volatile Organic Compound Emissions from Process Vents in Batch Operations

326 IAC 8-19-1 Applicability

Authority: IC 13-14-18; 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 facility 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 in batch operations.
(B) All noncontrol technique guideline (CTG) sources.

(b) If a facility 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 facility is not subject to the requirements of section 3 of this rule.

(c) The owner or operator of a batch process train at a facility that meets the applicability criteria of subsection (a) is subject to this rule with the following exceptions:
(1) Any facility subject to 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.
(i) A unit operation with uncontrolled total annual mass emissions of less than or equal to five hundred (500) pounds per year of VOC is also excluded from the calculation of the total annual mass emissions for a batch process train.
(ii) 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

(Air Pollution Control Board; 326 IAC 8-19-1)

326 IAC 8-19-2 Definitions

Authority: IC 13-14-18; 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 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 Board; 326 IAC 8-19-2)

326 IAC 8-19-3 Control requirements for VOC emissions from process vents

Authority: IC 13-14-18; 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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-19-3)

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 13-14-18; 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 Board; 326 IAC 8-19-4)

326 IAC 8-19-5 Compliance testing requirements

Authority: IC 13-14-18; 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 Part 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.
(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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-19-5)

326 IAC 8-19-6 Monitoring requirements

Authority: IC 13-14-18; 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 (1.8) 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 Board; 326 IAC 8-19-6)

326 IAC 8-19-7 Record keeping

Authority: IC 13-14-18; 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 facility for a minimum period of five (5) years; and
(2) make the records available to the commissioner upon request.

(Air Pollution Control Board; 326 IAC 8-19-7)

326 IAC 8-19-8 Reporting

Authority: IC 13-14-18; 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.

(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 Board; 326 IAC 8-19-8)

326 IAC 8-19-9 Compliance dates

Authority: IC 13-14-18; 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 facility 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 facility reduces its potential to emit under section 1(b) of this rule, the date on which the facility subsequently meets the applicability criteria of section 1(a) of this rule is the date the facility 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 Board; 326 IAC 8-19-9)

SECTION 3. 326 IAC 8-20 IS ADDED TO READ AS FOLLOWS:

Rule 20. Industrial Wastewater

326 IAC 8-20-1 Applicability

Authority: IC 13-14-18; 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 (waste management unit).

(B) All noncontrol technique guideline (CTG) sources.

(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, 2854, 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 facility is not subject to the emission control requirements of section 3 of this rule.

(Air Pollution Control Board; 326 IAC 8-20-1)

326 IAC 8-20-2 Definitions

Authority: IC 13-14-18; 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) vapor-mounted;

(B) liquid-mounted;

(C) metallic shoe seal; or

(D) 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:

(i) double deck;

(ii) pontoon single deck;

(iii) internal floating cover; or

(iv) covered floating roof;

(B) that rests upon and is supported by the liquid being contained; and

(C) 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 following:
(A) Off-site and on-site piping and control system that gathers gaseous stream or streams generated by on-site operations.
(B) May blend them with other sources of gas.
(C) 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 the following:
(A) An enclosed combustion device that is used for destroying organic compounds.
(B) Auxiliary fuel may be used to heat waste gas to combustion temperatures.
(C) 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.
(D) The energy recovery section limitation in clause (C) 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 facility, 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 the following:
(A) 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.
(B) Maintenance wastewater can be generated during planned and unplanned shutdowns and during periods not associated with a shutdown.
(C) Any generation of wastewater that is routine or is generated by designed manufacturing processes is not maintenance wastewater.
(D) Examples of activities that can generate maintenance wastewaters include the following:
(i) Descaling heat exchanger tubing bundles.
(ii) Cleaning of distillation column traps.
(iii) Draining of low legs and high point bleeds.
(iv) Draining of pumps into an individual drain system.
(v) 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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-20-2)

326 IAC 8-20-3 Overall requirements for industrial wastewater

Authority: IC 13-14-18; 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 facility 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 facility 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 Board; 326 IAC 8-20-3)

326 IAC 8-20-4 Control requirements for process wastewater

Authority: IC 13-14-18; 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 requirements of this subsection.
(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 requirements of this subsection.

(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 requirements of this subsection.

(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).

(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.

(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/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.
(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 Part 270* and complies with the requirements of 40 CFR Part 264, Subpart O*, or has certified compliance with the interim status requirements of 40 CFR Part 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 Part 270* and complies with the requirements of 40 CFR Part 266, Subpart H*; or
(ii) certified compliance with the interim status requirements of 40 CFR Part 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 Part 270* or 40 CFR Part 144* and complies with the requirements of 40 CFR Part 122*. The owner or operator shall comply with all applicable requirements of this subpart 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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-20-4)

326 IAC 8-20-5 Alternate methods of control

Authority: IC 13-14-18; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. The following 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:
(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 facility 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 facility 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 Part 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 Part 63, Subpart JJJ* (National Emission Standards for Hazardous Air Pollutants: Group IV Polymers and Resins), 40 CFR Part 63, Subpart FFFF* (National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing), or any other emission standard promulgated under 40 CFR Part 63 that references the wastewater control requirements set forth in 40 CFR Part 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 Part 63, Subpart G, Subpart JJJ, Subpart FFFF, and any other 40 CFR Part 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 Part 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 Part 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 subdivision (2), the owner or operator provides written notice of their intent to utilize this option to the department of the intention 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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-20-5)

326 IAC 8-20-6 Inspection and monitoring

Authority: IC 13-14-18; 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 (g). An owner and operator choosing to comply with a subpart in 40 CFR Part 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 in 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.

(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) Leaving open or ungasketed any access door or other opening when the door or opening is not in use.
(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 paragraph 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).
(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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-20-6)

326 IAC 8-20-7 Approved test methods

Authority: IC 13-14-18; 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 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 Method 18* is used for determining gaseous organic compound emissions by gas chromatography.
(B) U.S. EPA Method 25* is used for determining total gaseous nonmethane organic emissions as carbon.
(C) U.S. EPA 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 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 determination of 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 Part 261*.
(B) SW-846 Methods 3810, 5030B (followed by 8021B), 8260B, and 9060 as required by 40 CFR Part 261*.
(C) U.S. EPA Methods 602, 624, 1624, 625, 1625*.
(D) U.S. EPA Method 305*.
(E) U.S. EPA Method 25D*.

In the event of any conflict, U.S. EPA 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 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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 8-20-7)

326 IAC 8-20-8 Record keeping

Authority: IC 13-14-18; 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 Board; 326 IAC 8-20-8)

326 IAC 8-20-9 Determination of wastewater characteristics

Authority: IC 13-14-18; 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) 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. 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.

(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 Part 60, Appendix J, as proposed on December 9, 1998, in the Federal Register*.

(Air Pollution Control Board; 326 IAC 8-20-9)

326 IAC 8-20-10 Maintenance wastewater requirements

Authority: IC 13-14-18; 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 Board; 326 IAC 8-20-10)

326 IAC 8-20-11 Compliance

Authority: IC 13-14-18; 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 facility 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 facilities potential to emit under section 1(b) of this rule, the date on which the facility subsequently meets the applicability criteria of section 1(a) of this rule is the date the facility becomes subject to this rule.

(Air Pollution Control Board; 326 IAC 8-20-11)

SECTION 4. 326 IAC 8-21 IS ADDED TO READ AS FOLLOWS:

Rule 21. Aerospace Manufacturing and Rework Operations

326 IAC 8-21-1 Applicability

Authority: IC 13-14-18; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) Except as noted in subsections (b) and (c), this rule applies to the manufacture or rework of commercial, civil, or military aerospace vehicles or components facilities that meet the following criteria:
(1) Are located in Lake County or Porter County.
(2) Have the potential emissions of volatile organic compounds (VOC) of twenty-five (25) tons or more per year from all operations combined where aerospace components and vehicles are coated and cleaned. The activities, operations, and materials described in subsections (a) and (b) 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 Board; 326 IAC 8-21-1)

326 IAC 8-21-2 Definitions

Authority: IC 13-14-18; 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 any of the above types of maskants, for example, bonding, critical use and line sealer, and seal coat, 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) "Closed cycle depainting system" means a dust free, automated process that:
(A) removes permanent coating in small sections at a time; and
(B) maintains a continuous vacuum around the area or areas being depainted to capture emissions.
(20) "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.
(21) "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.
(22) "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.
(23) "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.
(24) "Commercial interior adhesive" means materials used in the bonding of passenger cabin interior components. These components must meet the United States Federal Aviation Administration (FAA) fireworthiness requirements.
(25) "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.
(26) "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.
(27) "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.
(28) "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.
(29) "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).
(30) "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.

(31) "Cyanoacrylate adhesive" or "super glue" means a fast setting, single component adhesive that cures at room temperature.

(32) "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.

(33) "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 United States Department of Defense are exempt.

(34) "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.

(35) "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.

(36) "Epoxy polyamide topcoat" means a coating used where harder films are required or in some areas where engraving is accomplished in camouflage colors.

(37) "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*.

(38) "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 United States 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.

(39) "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.

(40) "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.

(41) "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.

(42) "Fuel tank adhesive" means an adhesive used to bond components exposed to fuel and must be compatible with fuel tank coatings.

(43) "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.

(44) "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)

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

(45) "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.
(46) "High temperature coating" means a coating designed to withstand temperatures of more than three hundred fifty (350) degrees Fahrenheit.
(47) "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.
(48) "Insulation covering" means material that is applied to foam insulation to protect the insulation from mechanical or environmental damage.
(49) "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.
(50) "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.
(51) "Leak" means any visible leakage, including misting and clouding.
(52) "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.
(53) "Metalized epoxy coating" means a coating that contains relatively large quantities of metallic pigmentation for appearance or added protection, or both.
(54) "Mold release" means a coating applied to a mold surface to prevent the molded piece from sticking to the mold as it is removed.
(55) "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.
(56) "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.
(57) "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.
(58) "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.
(59) "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.
(60) "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.
(61) "Radome" means the nonmetallic protective housing for electromagnetic transmitters and receivers, for example, radar, electronic countermeasures, etc.
(62) "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.
(63) "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.
(64) "Rocket motor bonding adhesive" means an adhesive used in rocket motor bonding applications.
(65) "Rocket motor nozzle coating" means a catalyzed epoxy coating system used in elevated temperature applications on rocket motor nozzles.
(66) "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.
(67) "Scale inhibitor" means a coating that is applied to the surface of a part prior to thermal processing to inhibit the formation of scale.
(68) "Screen print ink" means an ink used in screen printing processes during fabrication of decorative laminates and decals.
(69) "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.
(70) "Seal coat maskant" means an overcoat applied over a maskant to improve abrasion and chemical resistance during production operations.
(71) "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.
(72) "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.
(73) "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.
(74) "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.
(75) "Solids" means the nonvolatile portion of the coating that after drying makes up the dry film.
(76) "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.
(77) "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.

(78) "Specialty coating" means a coating that, even though it meets the term 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.

(79) "Spray gun" means a device that:

(A) atomizes a coating or other material; and
(B) projects the particulates or other material onto a substrate.

(80) "Structural autoclavable adhesive" means an adhesive used to bond load carrying aerospace components that is cured by heat and pressure in an autoclave.

(81) "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.

(82) "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.

(83) "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.

(84) "Thermal control coating" means a coating formulated with specific thermal conductive or radiative properties to permit temperature control of the substrate.

(85) "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.

(86) "Touch-up and repair coating" means a coating used to cover minor coating imperfections appearing after the main coating operation.

(87) "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.

(88) "VOC composite vapor pressure" means the sum of the partial pressures of the compounds defined as VOCs and is determined by the following calculation:

$$PP_c = \sum_{i=1}^{n} \frac{\dfrac{(W_i)(VP_i)}{MW_i}}{\dfrac{W_w}{MW_w} + \sum_{e=1}^{n} \dfrac{W_e}{MW_e} + \sum_{i=1}^{n} \dfrac{W_i}{MW_i}}$$

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.

(89) "Waterborne (water reducible) coating" means a coating that contains more than five percent (5%) water by weight as applied in its volatile fraction.
(90) "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.
(91) "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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; 326 IAC 8-21-2)

326 IAC 8-21-3 VOC emissions control requirements

Authority: IC 13-14-18; 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 facility that is subject to this rule shall not apply to aerospace vehicles or components any specialty 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 facility	4.5
Exterior primer for large commercial aircraft (components or fully assembled)	5.4
Topcoat	3.5
Topcoat for general aviation rework facility	4.5
Self-priming topcoat	3.5
Self-priming topcoat for general aviation rework facility	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 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 Board; 326 IAC 8-21-3)

326 IAC 8-21-4 Application equipment

Authority: IC 13-14-18; 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 facility 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 Board; 326 IAC 8-21-4)

326 IAC 8-21-5 Solvent cleaning

Authority: IC 13-14-18; 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 facility 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.

***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 Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; 326 IAC 8-21-5)

326 IAC 8-21-6 Control equipment and monitoring

Authority: IC 13-14-18; 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 Board; 326 IAC 8-21-6)

326 IAC 8-21-7 Compliance schedule

Authority: IC 13-14-18; 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 facility 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 Board; 326 IAC 8-21-6)

326 IAC 8-21-8 Record keeping requirements

Authority: IC 13-14-18; 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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(Air Pollution Control Board, 326 IAC 8-21-8)

326 IAC 8-21-9 Test methods

Authority: IC 13-14-18; 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), determine the VOC content of each formulation (less water and less exempt solvents) as applied using manufacturer's supplied data or 40 CFR Part 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.

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(Air Pollution Control Board; 326 IAC 8-21-9)

Notice of Public Hearing

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