

**PART 70 OPERATING PERMIT
and ENHANCED NEW SOURCE REVIEW
OFFICE OF AIR MANAGEMENT**

**Johnson Controls, Inc.
1302 East Monroe Street
Goshen, Indiana 46528**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-7201-00018	
Issued by: Felicia R. George, Assistant Commissioner Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary source that manufactures controls for heating, refrigeration, air conditioning and pump devices.

Responsible Official: Larry Coburn
Source Address: 1302 East Monroe Street, Goshen, Indiana, 46528
Mailing Address: 1302 East Monroe Street, Goshen, Indiana, 46528
SIC Code: 3822
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD Rules;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Two (2) Nissei plastic parts molding presses operating in a total enclosure and cumulatively identified as Unit #1, with each press rated at 12 pounds of phenolic molding compound per hour.
- (b) Fourteen (14) auto mold plastic parts molding presses cumulatively identified as Unit #2, consisting of six (6) 75-ton presses each rated at 8.2 pounds of phenolic molding compound per hour and eight (8) 25-ton presses each rated at 1.9 pounds of phenolic molding compound per hour, all exhausting to one (1) baghouse for particulate matter (PM) emissions control, with the baghouse exhausting at one (1) stack identified as S2.
- (c) One (1) paint spray booth identified as Unit #3 and rated at 9.4 gallons of coating per hour, equipped with a high volume low pressure (HVLV) spray application system and a dry filter for particulate matter overspray control, exhausting at two (2) stacks identified as S3a and S3b.
- (d) One (1) pneumatic bead blasting machine identified as Unit #6 and rated at 40 pounds of metallic parts per hour, with one (1) cyclone for particulate matter (PM) emissions control, exhausting at one (1) stack identified as S6.
- (e) One (1) powder paint booth identified as Unit #7 and rated at 120 pounds of powder paint per hour, operating in a total enclosure equipped with a powder paint recirculation and reclamation system.

- (f) Two (2) natural gas fired boilers identified as Boiler 1 (Unit #9) and Boiler 2 (Unit #10) and individually rated at 11.7 million British thermal units (MMBtu) heat input per hour, with each boiler exhausting to one (1) stack respectively identified as S7 and S8. Boilers 1 and 2 were respectively constructed in 1969 and 1977.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. This includes the Wheelabrator-Frye Tumbblast plastic parts deflashing machine identified as Unit #5 and rated at 400 pounds of plastic parts per hour, with one (1) baghouse for particulate matter (PM) emissions control, exhausting at one (1) stack identified as S5.
- (c) Gas refrigerant charge area.
- (d) Liquid refrigerant charge areas A and B.
- (e) One (1) spray can paint booth for touch-up of metal and plastic parts.
- (f) Baking soda blaster.
- (g) Tool room and screw machine grinders.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B

GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17.

If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

- (c) The annual compliance certification report shall include the following:
- (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was based on continuous or intermittent data;
 - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
 - (5) Any insignificant activity that has been added without a permit revision;
 - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.13 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
 - (1) The applicable requirements are included and specifically identified in this permit; or
 - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.

- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due. [326 IAC 2-5-3]
 - (2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

(a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

- (2) Any approval required by 326 IAC 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-7-6(6)]
 - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
 - (2) The Permittee and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM, the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of volatile organic compounds (VOC), particulate matter (PM), PM with an aerodynamic diameter less than or equal to 10 microns (PM-10), oxides of nitrogen (NO_x), and sulfur dioxide (SO₂) are each less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.

C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.12 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.14 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
 - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
 - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
 - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;

- (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM, reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

C.19 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
- (1) The date, place, and time of sampling or measurements;

- (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) Two (2) Nissei plastic parts molding presses operating in a total enclosure and cumulatively identified as Unit #1, with each press rated at 12 pounds of phenolic molding compound per hour.
- (b) Fourteen (14) auto mold plastic parts molding presses cumulatively identified as Unit #2, consisting of six (6) 75-ton presses each rated at 8.2 pounds of phenolic molding compound per hour and eight (8) 25-ton presses each rated at 1.9 pounds of phenolic molding compound per hour, all exhausting to one (1) baghouse for particulate matter (PM) emissions control, with the baghouse exhausting at one (1) stack identified as S2.
- (c) One (1) paint spray booth identified as Unit #3 and rated at 9.4 gallons of coating per hour, equipped with a high volume low pressure (HVLP) spray application system and a dry filter for particulate matter overspray control, exhausting at two (2) stacks identified as S3a and S3b.
- (d) One (1) pneumatic bead blasting machine identified as Unit #6 and rated at 40 pounds of metallic parts per hour, with one (1) cyclone for particulate matter (PM) emissions control, exhausting at one (1) stack identified as S6.
- (e) One (1) powder paint booth identified as Unit #7 and rated at 120 pounds of powder paint per hour, operating in a total enclosure equipped with a powder paint recirculation and reclamation system.

The following insignificant activity which is specifically regulated, as defined in 326 IAC 2-7-1(21):

One (1) spray can paint booth for touch-up of metal and plastic parts.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

The total volatile organic compounds (VOC) input to Unit #3 (paint spray booth), including VOC solvent usage, minus the VOC solvent shipped out, shall be limited to less than 25 tons per twelve (12) consecutive month period. The total amount of VOC input each month shall not equal or exceed the difference between the annual limit minus the sum of actual VOC input during the previous eleven (11) months. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) shall not apply to the facility.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate for Unit #2 (cumulatively as fourteen (14) auto mold plastic parts molding presses) shall not exceed 0.551 pounds per hour when operating at a process weight rate of less than 100 pounds per hour.
- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate for Unit #6 (pneumatic bead blasting machine) shall not exceed 0.674 pounds per hour when operating at a process weight rate of 135 pounds per hour.

- (c) The pounds per hour allowable PM emission rates were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), particulate matter emissions from Unit #3 (paint spray booth) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Unit #3 and its control device.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the volatile organic compound (VOC) limits specified in Condition D.1.1, and the particulate matter (PM) limits specified in Conditions D.1.2 and D.1.3, shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.7 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.8 Particulate Matter (PM)

- (a) The baghouse for PM control shall be in operation at all times when Unit #2 (cumulatively as fourteen (14) auto mold plastic parts molding presses) is in operation and exhausting to the outside atmosphere.
- (b) The cyclone for PM control shall be in operation at all times when Unit #6 (pneumatic bead blasting machine) is in operation and exhausting to the outside atmosphere.

- (c) The dry filter for PM control shall be in operation at all times when Unit #3 (paint spray booth) is in operation.

D.1.9 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the Unit #3 paint spray booth stack(s) (S3a and S3b) while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.10 Visible Emissions Notations

- (a) Visible emission notations of the Unit #2 baghouse stack exhaust and the Unit #6 cyclone stack exhaust shall be performed weekly and daily, respectively, during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.11 Parametric Monitoring

- (a) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with Unit #2, at least once daily when any of the fourteen (14) plastic parts molding presses are in operation and venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

- (b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.12 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.13 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.8(c) and D.1.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (d) To document compliance with Conditions D.1.8(a)-(b) and D.1.10, the Permittee shall maintain records of daily visible emission notations of the Unit #2 baghouse exhaust and the Unit #6 cyclone exhaust.

- (e) To document compliance with Condition D.1.11, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure.
 - (2) Documentation of all response steps implemented, per event.
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.14 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(g) Two (2) natural gas fired boilers identified as Boiler 1 (Unit #9) and Boiler 2 (Unit #10) and individually rated at 11.7 million British thermal units (MMBtu) heat input per hour, with each boiler exhausting to one (1) stack respectively identified as S7 and S8. Boilers 1 and 2 were respectively constructed in 1969 and 1977.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-2]

Pursuant to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from each boiler shall not exceed eight tenths (0.8) pounds per MMBtu heat input, determined as the lesser of the value P_t computed with the following formula:

$$P_t = (C \cdot a \cdot h) / (76.5 \cdot Q^{0.75} \cdot N^{0.25})$$

where: P_t = pounds of PM emitted per MMBtu heat input (lb/MMBtu)

C = maximum ground level concentration at critical wind speed ($50 \mu\text{g}/\text{m}^3$)

a = plume rise factor

h = stack height (ft)

Q = total source operating capacity (MMBtu/hr)

N = number of stacks

or eight tenths (0.8) pounds per MMBtu heat input.

D.2.2 Natural Gas Usage [326 IAC 2-1]

Any change or modification resulting in a fuel other than natural gas combusted at Boiler 1 (Unit #9) or Boiler 2 (Unit #10) shall require OAM's prior approval before such change can take place.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no applicable compliance monitoring conditions for these facilities.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

There are no applicable record keeping or reporting requirements for these facilities.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Descriptions [326 IAC 2-7-5(15)]: The following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. This includes the Wheelabrator-Frye Tumblast plastic parts deflashing machine identified as Unit #5 and rated at 400 pounds of plastic parts per hour, with one (1) baghouse for particulate matter (PM) emissions control, exhausting at one (1) stack identified as S5.
- (e) One (1) spray can paint booth for touch-up of metal and plastic parts.

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

(a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate for Unit #5 (Wheelabrator-Frye Tumblast plastic parts deflashing machine) shall not exceed 1.39 pounds per hour when operating at a process weight rate of 400 pounds per hour.

(b) The pounds per hour allowable PM emission rate was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Any change or modification which may increase actual VOC usage at the spray can paint booth to greater than 15 pounds per day before any add-on controls, shall require OAM's prior approval before such change can take place.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no applicable compliance monitoring conditions for this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.3 Record Keeping Requirements

To document compliance with Condition D.3.2, the Permittee shall maintain records of monthly VOC usage at the paint booth.

D.3.4 Reporting Requirements

There are no specific reporting requirements for these facilities.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Johnson Controls, Inc.
Source Address: 1302 East Monroe Street, Goshen, Indiana 46528
Mailing Address: 1302 East Monroe Street, Goshen, Indiana 46528
Part 70 Permit No.: T039-7201-00018

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Johnson Controls, Inc.
Source Address: 1302 East Monroe Street, Goshen, Indiana 46528
Mailing Address: 1302 East Monroe Street, Goshen, Indiana 46528
Part 70 Permit No.: T039-7201-00018

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2
9 1. This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
9 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) C The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Johnson Controls, Inc.
Source Address: 1302 East Monroe Street, Goshen, Indiana 46528
Mailing Address: 1302 East Monroe Street, Goshen, Indiana 46528
Part 70 Permit No.: T039-7201-00018

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Report period

Beginning: _____

Ending: _____

Boiler Affected

Alternate Fuel

Days burning alternate fuel

From

To

(can omit boiler affected if only one gas boiler at this plant)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR MANAGEMENT
 COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Johnson Controls, Inc.
 Source Address: 1302 East Monroe Street, Goshen, Indiana 46528
 Mailing Address: 1302 East Monroe Street, Goshen, Indiana 46528
 Part 70 Permit No.: T039-7201-00018
 Facility: Paint spray booth (Unit #3)
 Parameter: volatile organic compounds (VOC)
 Limit: The total volatile organic compounds (VOC) input to Unit #3 (paint spray booth), including VOC solvent usage, minus the VOC solvent shipped out, shall be limited to less than 25 tons per twelve (12) consecutive month period. The total amount of VOC input each month shall not equal or exceed the difference between the annual limit minus the sum of actual VOC input during the previous eleven (11) months.

YEAR: _____

Month	Total VOC Input (tons)	Total VOC Input (tons)	Total VOC Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Johnson Controls, Inc.
Source Address: 1302 East Monroe Street, Goshen, Indiana 46528
Mailing Address: 1302 East Monroe Street, Goshen, Indiana 46528
Part 70 Permit No.: T039-7201-00018

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.9)	Number of Deviations	Date of each Deviation

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)

Source Background and Description

Source Name:	Johnson Controls, Inc.
Source Location:	1302 East Monroe Street, Goshen, Indiana 46528
County:	Elkhart
SIC Code:	3822
Operation Permit No.:	T039-7201-00018
Permit Reviewer:	Michael Hirtler/EVP

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Johnson Controls, Inc. relating to the operation of a source that manufactures controls for heating, refrigeration, air conditioning and pump devices.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) Fourteen (14) auto mold plastic parts molding presses cumulatively identified as Unit #2, consisting of six (6) 75-ton presses each rated at 8.2 pounds of phenolic molding compound per hour and eight (8) 25-ton presses each rated at 1.9 pounds of phenolic molding compound per hour, all exhausting to one (1) baghouse for particulate matter (PM) emissions control, with the baghouse exhausting at one (1) stack identified as S2.
- (b) One (1) pneumatic bead blasting machine identified as Unit #6 and rated at 40 pounds of metallic parts per hour, with one (1) cyclone for particulate matter (PM) emissions control, exhausting at one (1) stack identified as S6.
- (c) Two (2) natural gas fired boilers identified as Boiler 1 (Unit #9) and Boiler 2 (Unit #10) and individually rated at 11.7 million British thermal units (MMBtu) heat input per hour, with each boiler exhausting to one (1) stack respectively identified as S7 and S8. Boilers 1 and 2 were respectively constructed in 1969 and 1977.

Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR

The source also consists of the following unpermitted facilities/units:

- (a) Two (2) Nissei plastic parts molding presses operating in a total enclosure and cumulatively identified as Unit #1, with each press rated at 12 pounds of phenolic molding compound per hour.

- (b) One (1) paint spray booth identified as Unit #3 and rated at 9.4 gallons of coating per hour, equipped with a high volume low pressure (HVLP) spray application system and a dry filter for particulate matter overspray control, exhausting at two (2) stacks identified as S3a and S3b.
- (c) One (1) powder paint booth identified as Unit #7 and rated at 120 pounds of powder paint per hour, operating in a total enclosure equipped with a powder paint recirculation and reclamation system.

New Emission Units and Pollution Control Equipment Requiring ENSR

There are no new facilities to be reviewed under the ENSR process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.
- (b) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids as VOC and HAP storage containers.
- (c) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (e) Closed loop heating and cooling systems.
- (f) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (h) Heat exchanger cleaning and repair.
- (i) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (j) Emergency generators as natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.

- (k) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. This includes the Wheelabrator-Frye Tumbblast plastic parts deflashing machine identified as Unit #5 and rated at 400 pounds of plastic parts per hour, with one (1) baghouse for particulate matter (PM) emissions control, exhausting at one (1) stack identified as S5.
- (l) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).
- (m) Gas refrigerant charge area.
- (n) Liquid refrigerant charge areas A and B.
- (o) One (1) spray can paint booth for touch-up of metal and plastic parts.
- (p) Ransohoff immersojet.
- (q) Baking soda blaster.
- (r) Tool room and screw machine grinders.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Operation Permit No. 20-04-90-0640, issued November 5, 1986.

Equipment removed from source covered under Operation Permit No. 20-04-90-0640, issued November 5, 1986:

- (a) Conveyorized degreaser using trichloroethylene.
- (b) Three (3) surface coating booths with particulate matter emissions controlled by fabric filters.
- (c) Conveyorized dip painting operation.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

- (a) OP 20-04-90-0640, issued on November 5, 1986.

Condition 7: That volatile organic compound emissions from the facility shall be limited to 73 tons per year.

Reason not incorporated: On March 13, 1981 OAM performed an inspection of the source. Calculations of the source's potential to emit (PTE) were contained in the 1981 inspection report, including a determination that the source's PTE VOC was 73 tons per year. These calculations served as the basis for OAM's subsequent issuance of the operating permit cited in (a) above.

At the time of permit issuance Elkhart County was designated as a non-attainment area for ozone, and the major source threshold of 100 tons per year of VOC (as the criteria and precursor pollutant for ozone) was used to determine applicability to 326 IAC 2-3 (Emission Offset). In order to establish the source as minor for emission offset purposes, Condition 7 was included in the state operating permit to limit the allowable PTE VOC to the amount computed in the 1981 inspection report (i.e., 73 tons per year).

Of the facilities that contributed to the 73 ton per year PTE, none remain in service. This includes the trichloroethylene degreaser, removed from service in May 1998, and the three surface coating booths, removed from service during May 1990. Additionally, Elkhart County is no longer a non-attainment area for ozone, as it was reclassified to a maintenance county in November 1994. This change in attainment status has caused the major source threshold for ozone (as VOC) to increase from 100 to 250 tons per year, and the relevant rule for potential applicability is now 326 IAC 2-2 (Prevention of Significant Deterioration, PSD). Because of the removal of the four (4) facilities, the county re-designation, and the fact the new PTE VOC at the source is less than 250 tons per year (i.e., the source is a minor PSD source), Condition 7 of the state operating permit has not been incorporated into the Part70 permit.

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on November 18, 1996. Additional information was received on March 26, 1998, June 1, 1998 and June 5, 1998.

A notice of completeness letter was mailed to the source on December 26, 1996.

Emission Calculations

The total potential and allowable emissions for unpermitted emission units and pollution control equipment requiring Enhanced New Source Review (ENSR) are as follows:

- (1) Powder paint booth identified as Unit #7 and paint spray booth identified as Unit #3:

Indiana Permit Allowable Emissions Definition for the powder paint booth identified as Unit #7 and the paint spray booth identified as Unit #3 (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity), both installed in May 1990:

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	-	173.0
Particulate Matter (PM10)	-	173.0
Sulfur Dioxide (SO ₂)	-	0.0
Volatile Organic Compounds (VOC)	-	206.7
Carbon Monoxide (CO)	-	0.0
Nitrogen Oxides (NO _x)	-	0.0
Single Hazardous Air Pollutant (HAP)	-	7.6
Combination of HAPs	-	7.6

- (a) Allowable emissions (as defined in the Indiana Rule) of PM, PM10 and VOC are equal to the potential emissions before control, therefore, the potential emissions before control are used for the permitting determination.
- (b) Allowable emissions (as defined in the Indiana Rule) of VOC, PM and PM10 are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

See Appendix A of this document for detailed emissions calculations (six (6) pages).

- (2) Two (2) Nissei presses for plastic parts molding identified as Unit #1:

Indiana Permit Allowable Emissions Definition for the two (2) Nissei presses identified as Unit #1 and installed in March 1994 (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions	Potential Emissions
	(lb/day)	(ton/yr)
PM	---	0
SO ₂	---	0
VOC	---	31.2
CO	---	0
NO _x	---	0
Single HAP	---	24.7
Combination of HAPs	---	31.2

- (a) Allowable emissions (as defined in the Indiana Rule) of VOC are equal to the potential emissions before control, therefore, the potential emissions before control are used for the permitting determination.
- (b) Allowable emissions (as defined in the Indiana Rule) of VOC are less than 25 tons per year, but greater than 15 pounds per day. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 2, a registration is required.

See Appendix A of this document for detailed emissions calculations (six (6) pages).

Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as “emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility.”

	Potential Emissions (tons/year)
PM	greater than 100, less than 250
PM-10	greater than 100, less than 250
SO ₂	less than 100
VOC	greater than 100, less than 250
CO	less than 100
NO _x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
phenol	greater than 10
formaldehyde	less than 10
glycol ethers	less than 10
methyl ethyl ketone (MEK)	less than 10
TOTAL	less than 25

- (a) The potential emissions (as defined in 326 IAC 1-2-55) of PM, PM10 and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential emissions (as defined in 326 IAC 1-2-55) of any single HAP is equal to or greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1996 OAM emission data, except as noted.

Pollutant	Actual Emissions (tons/year)
PM	0.01
PM-10	0.01
SO ₂	0.002
VOC*	1.0
CO	0.08
NO _x	0.4
phenol**	3.36
formaldehyde**	0.87
glycol ethers	0.0
methyl ethyl ketone (MEK)	0.0
Total HAPs**	4.23

* Does not include 1996 trichloroethylene emissions from conveyORIZED degreaser as this facility has since been removed from service.

** 1995 actual emissions.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment (maintenance) for ozone.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) 40 CFR Part 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units)

Boiler 1 (Unit #9), constructed in 1969 and rated at 11.7 MMBtu per hour heat input, and Boiler 2 (Unit #10), constructed in 1977 and rated at 11.7 MMBtu per hour, are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.40c through 60.48c, Subpart Dc) because each facility was constructed prior to the rule applicability date of June 9, 1989.

- (b) 40 CFR Part 63, Subpart T (National Emission Standards for Halogenated Solvent Cleaning)

Pursuant to 40 CFR 63, Subpart T, and 326 IAC 20-6-1, each batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses a solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform in a total concentration greater than five (5) percent by weight shall comply with the requirements of the subpart. The Subpart T compliance date has been established as December 2, 1997 for existing machines, and initial compliance reporting has been required by May 1, 1998.

Under Operation Permit 20-04-90-0640 (issued November 11, 1986), this source was permitted to operate a conveyORIZED (in-line) cold cleaning trichloroethylene (TCE) degreaser with a cold ring and cover for VOC emissions control. While initially subject to Subpart T for this facility; the source indicated it removed this facility from service during May 1998 and no initial compliance reporting (or testing) has been done. Due to the facility's removal, the requirements of Subpart T have not been included in the Part 70 permit as they no longer apply to this source.

- (c) There are currently no National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-1 and 40 CFR Part 63, applicable to this source. It is noted, however, that the U. S. Environmental Protection Agency (USEPA) is planning to issue a maximum achievable control technology (MACT) standard pursuant to Part 63 for sources of phenolic resin production. According to the April 19, 1998 issue of the Federal Register, USEPA plans to issue the MACT standard as a final rule by May 1999. Since issuance of a proposed rule is also pending, the potentially affected units cannot be determined. Nonetheless, if subject to the pending regulation for their phenolic molding presses (i.e., Units #1 and #2), this source will comply with the rule requirements by the future compliance date.

State Rule Applicability - Entire Source

326 IAC 2-1-3.4 (New Source Toxics Control)

Pursuant to 326 IAC 2-1-3.4 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). The source was constructed during the 1950s with the latest addition of equipment in 1990 and 1994. Both dates are prior to the July 27, 1997 rule applicability date, and neither installation resulted in a PTE single or total HAPs in excess of the respective thresholds. Therefore, the requirements of this rule do not apply to this source.

326 IAC 2-2 (Prevention of Significant Deterioration, PSD)

This source that manufactures controls for heating, refrigeration, air conditioning and pump devices is not a major stationary source (i.e., it is a minor stationary source) because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Elkhart County and the potential to emit VOC and NO_x is greater than ten (10) tons per year. The source will be required to annually submit a statement of the actual emissions of all federally regulated pollutants from the source, for the purpose of fee assessment. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2 (1), (2), or (3).

State Rule Applicability - Individual Facilities

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

Boiler 1 (Unit #9), constructed in 1969 and rated at 11.7 million Btu per hour (MMBtu/hr) heat input, and Boiler 2 (Unit #10), constructed in 1977 and rated at 11.7 MMBtu/hr heat input, are each subject 326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating). Both indirect heating units fire only natural gas fuel. Pursuant to 326 IAC 6-2-1, indirect heating facilities not in a specified county and existing and operating prior to September 21, 1983, shall limit particulate matter (PM) emissions according to the equation at 326 IAC 6-2-3 as follows:

$$Pt = (C*a*h) / (76.5 * Q^{0.75} * N^{0.25})$$

where: Pt = pounds of PM emitted per MMBtu heat input (lb/MMBtu)
C = maximum ground level concentration at critical wind speed (50 µg/m³)
a = plume rise factor
h = stack height (ft)
Q = total source operating capacity (MMBtu/hr)
N = number of stacks

For Boiler 1 (Unit #9), which was constructed in 1969:

$$Pt = (50*0.67*30) / (76.5 * 11.7^{0.75} * 1^{0.25}) = 2.08 \text{ lb/MMBtu}; \text{ however, pursuant to 326 IAC 6-2-3(d), Pt shall not exceed 0.8 lb/MMBtu.}$$

For Boiler 2, which was constructed in 1977:

$$Pt = (50 \times 0.67 \times 30) / (76.5 \times (11.7 + 11.7)^{0.75} \times 2^{0.25}) = 1.04 \text{ lb/MMBtu}; \text{ however, pursuant to } 326 \text{ IAC } 6-2-3(d), \text{ Pt shall not exceed } 0.8 \text{ lb/MMBtu}.$$

Boilers 1 and 2 shall comply with the allowable PM emission limit of 0.8 lb/MMBtu (see TSD Appendix A , page 5 of 6, for detailed calculations).

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from plastic parts molding at 14 auto mold presses (Unit #2), plastic parts deflashing (Unit #5), and pneumatic bead blasting of metallic parts (Unit #6) shall be limited according to the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Each process operation will comply with the allowable emission limit of 326 IAC 6-3-2 as follows:

Process/Facility	326 IAC 6-3-2 Allowable Limit (pounds/hour)	Potential Controlled Emission Rate (pounds/hour)
Auto mold presses (Unit #2)	0.41	0.03
Wheelabrator-Frye Tumbblast deflashing machine (Unit #5) *	1.39	0.09
Pneumatic bead blasting machine (Unit #6)	0.67	0.05

* Insignificant Activity

The two (2) Nissei plastic parts molding presses (Unit #1) and powder paint booth (Unit #7) each operate in a total enclosure with no PM emissions exhausting to the atmosphere. Therefore, these facilities are not subject to 326 IAC 6-3-2. See page 3 of 6, TSD Appendix A, for allowable emission and compliance calculations.

326 IAC 8-1-6 (New Facilities; General VOC Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have a PTE VOC at 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8. Although the paint spray booth (Unit #3), the powder paint booth (Unit #7) and the two (2) Nissei presses (Unit #1) were installed after the January 1, 1980 applicability date, only the paint spray booth has a PTE VOC at 25 tons per year or more. The source will limit VOC input usage at the paint spray booth to 24 tons per year. Compliance with this limitation shall make the requirements of 326 IAC 8-1-6 not applicable to this source.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-1 (Applicability) and 326 IAC 8-2-9, facilities existing of July 1, 1990 that are located in Elkhart County (as well as other specified counties), and with actual VOC emissions of greater than fifteen (15) pounds per day before add-on controls, shall limit the VOC content of the applied coating to 3.5 pounds of VOCs per gallon of coating less water, for air dried coatings. The spray paint touch-up booth for metal and plastic parts, which is an insignificant activity, has actual VOC emissions of less than 15 pounds per day. Therefore, the requirements of 326 IAC 8-2-9 do not apply to the source and records will be kept to verify this status. No other coating facility is used to coat metal parts at this source.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The paint spray booth (Unit #3) has applicable compliance monitoring conditions as specified below:
 - (a) VOC Usage:
 - (1) The total volatile organic compounds (VOC) input to Unit #3 (spray paint booth), including VOC solvent usage, minus the VOC solvent shipped out, shall be limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) shall not apply to the facility.
 - (2) Quarterly reports shall be submitted to OAM Compliance Section. These reports shall include the total VOC input usage, minus the VOC solvent shipped out, for each month during the calendar quarter reported.

(b) Monitoring:

- (1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filter. To monitor the performance of the dry filter, daily observations shall be made of the overspray from the Unit #3 surface coating booth stack(s) (S3a and S3b) while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (2) Weekly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

These monitoring conditions are necessary because the paint spray booth (Unit #3) must operate properly to ensure compliance with 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) and 326 IAC 2-7 (Part 70).

2. The fourteen (14) auto mold presses (Unit #2) and pneumatic bead blasting machine (Unit #6) have applicable compliance monitoring conditions as specified below:

(a) Visible Emissions Notations:

- (1) Daily visible emission notations of the Unit #2 baghouse stack exhaust, and the Unit #6 cyclone stack exhaust shall be performed during normal daylight operations when each facility is exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (2) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (3) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (4) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(5) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(b) Parametric Monitoring:

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with Unit #2, at least once daily when any of the fourteen (14) plastic parts molding presses are in operation and venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the fourteen (14) auto mold presses (Unit #2) and pneumatic bead blasting machine (Unit #6) must operate properly to ensure compliance with 326 IAC 5 (Visibility), 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations (see Appendix A, six (6) pages).

Conclusion

The operation of this source that manufactures controls for heating, refrigeration, air conditioning and pump devices shall be subject to the conditions of the attached proposed **Part 70 Permit No. T039-7201-00018**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)

Source Name: Johnson Controls, Inc.
 Source Location: 1302 East Monroe Street, Goshen, Indiana 46528
 County: Elkhart
 SIC Code: 3822
 Operation Permit No.: T039-7201-00018
 Permit Reviewer: Michael Hirtler/EVP

On August 4, 1998, the Office of Air Management (OAM) had a notice published in the Goshen News, Goshen, Indiana, stating that Johnson Controls, Inc. had applied for a Part 70 permit and Enhanced New Source Review (ENSR) for the operation of a source that manufactures controls for heating, refrigeration, air conditioning and pump devices. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted).

Section C:

1. The IDEM now believes that this condition is not necessary and has removed it from the permit. The issues regarding credible evidence can be adequately addressed during a showing of compliance or noncompliance. Indiana's statutes, and the rules adopted under their authority, govern the admissibility of evidence in any proceeding. Indiana law contains no provisions that limit the use of any credible evidence and an explicit statement is not required in the permit.

~~B.28 Credible Evidence [326 IAC 2-7-5(3)] [62 Federal Register 8313] [326 IAC 2-7-6]~~

~~Notwithstanding the conditions of this permit that state specific methods that may be used to assess compliance or noncompliance with applicable requirements, other credible evidence may be used to demonstrate compliance or non-compliance.~~

Section C:

1. Condition C.1 (b) (page 20 of 41) has been inserted to clarify permitting requirements relating to any future modification(s) made at the source.

~~C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]~~

- (a)** The total source potential to emit of volatile organic compounds (VOC), particulate matter (PM), PM with an aerodynamic diameter less than or equal to 10 microns (PM-10), oxides of nitrogen (NO_x), and sulfur dioxide (SO₂) are each less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

- (b) **Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change**

2. Condition C.3, has been revised to reflect current rule language. The condition has been changed to:

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (~~Visible Emissions~~ **Opacity** Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), ~~visible emissions opacity~~ shall meet the following, unless otherwise stated in this permit:

- (a) ~~Visible emissions Opacity~~ shall not exceed an average of forty percent (40%) ~~opacity~~ in ~~twenty four (24) consecutive readings~~, **any one (1) six (6) minute averaging period** as determined in 326 IAC 5-1-4.
- (b) ~~Visible emissions Opacity~~ shall not exceed sixty percent (60%) ~~opacity~~ for more than a cumulative total of fifteen (15) minutes (sixty (60) readings **as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor**) in a six (6) hour period.

Section D:

1. Condition D.1.1 (page 28 of 41) is revised to provide better clarity relating to the facility's emission limit.

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

The total volatile organic compounds (VOC) input to Unit #3 (paint spray booth), including VOC solvent usage, minus the VOC solvent shipped out, shall be limited to less than 25 tons per twelve (12) consecutive month period. The total amount of VOC input each month shall not **equal or** exceed the difference between the annual limit minus the sum of actual VOC input during the previous eleven (11) months. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) shall not apply to the facility.

2. Condition D.1.9 (page 30 of 41) is revised to provide better clarity relating to the facility's emission limit.

D.1.9 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, ~~daily~~ **weekly** observations shall be made of the overspray from the Unit #3 paint spray booth stack(s) (S3a and S3b) while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) ~~Weekly~~ **Monthly** inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
 - (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
3. Condition D.1.10 (a) (page 31 of 41) is changed to require that visible emission notations for the Unit #2 (i.e., fourteen (14) auto mold plastic parts molding presses) baghouse stack exhaust be made on a weekly basis rather than a daily basis. Since Condition D.1.11 requires pressure drop measurements and recordings daily, a weekly frequency of visible emission notations is acceptable for the facility's control device.

D.1.10 Visible Emissions Notations

- (a) ~~Daily~~ Visible emission notations of the Unit #2 baghouse stack exhaust and the Unit #6 cyclone stack exhaust shall be performed **weekly and daily, respectively**, during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
4. Condition D.1.11 (page 31 of 41) is revised to provide better clarity relating to the facility's emission limit.

D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.8(c) and D.1.9, the Permittee shall maintain a log of ~~daily~~ **weekly** overspray observations, daily and ~~weekly~~ **monthly** inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

5. Condition D.1.12 (page 31 of 41) is revised to provide better clarity relating to the facility's emission limit.

D.1.12 Broken or Failed Bag or Failure Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~ **Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**
- (b) ~~Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.~~ **For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**
6. Conditions D.2.3 and D.2.4 (page 34 of 41) have been deleted from the permit since they are unnecessary. The boilers are listed as only natural gas fuel fired combustion units. To account for any potential change of fuel in the future, new Condition D.2.2 has been added to the permit and existing Condition D.2.2 has been renumbered to Condition D.2.3.

D.2.2 Natural Gas Usage [326 IAC 2-1]

Any change or modification resulting in a fuel other than natural gas combusted at Boiler 1 (Unit #9) or Boiler 2 (Unit #10) shall require OAM's prior approval before such change can take place.

~~D.2.3 Record Keeping Requirements~~

~~Records shall be kept using the form provided to certify that natural gas was fired in Boiler 1 and Boiler 2 at all times. All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~

~~D.2.4 Reporting Requirements~~

~~Using the form provided the Permittee shall certify that natural gas was fired in Boiler 1 and Boiler 2 at all times during the reporting period. This form shall be submitted with the Quarterly Compliance Report required by Section C - General Reporting Requirements of this permit.~~

There are no applicable record keeping or reporting requirements for these facilities.

7) Upon further review, the OAM has decided to make the following revisions to the TSD (**bolded** language has been added, the language with a ~~line~~ through it has been deleted). The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

(1) (b) Monitoring:

(1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, ~~daily~~ **weekly** observations shall be made of the overspray from the Unit #3 paint spray booth stack(s) (S3a and S3b) while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(2) ~~Weekly~~ **Monthly** inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

These monitoring conditions are necessary because the paint spray booth (Unit #3) must operate properly to ensure compliance with 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) and 326 IAC 2-7 (Part 70).

2. The fourteen (14) auto mold presses (Unit #2) and pneumatic bead blasting machine (Unit #6) have applicable compliance monitoring conditions as specified below:

(a) Visible Emissions Notations:

(1) ~~Daily~~ Visible emission notations of the Unit #2 baghouse stack exhaust and the Unit #6 cyclone stack exhaust shall be performed **weekly and daily, respectively**, during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

Appendix A: Emissions Summary

Company Name: Johnson Controls, Inc.
Address City IN Zip: 1302 East Monroe Street, Goshen, IN 46528
Part 70 No.: T039-7201
Plant ID: 039-00018
Reviewer: Michael Hirtler
Date: June 5, 1998

Potential Uncontrolled Emissions (tons per year)

Process/facility	Potential Uncontrolled Emissions (tons/year)							
	PM	PM10	SO2	VOC	CO	NOx	Single HAP	Total HAPs
Plastic Parts Molding at 2 Nissei Presses	0.0	0.0	0.0	5.7	0.0	0.0	4.5	5.7
Plastic Parts Molding at 14 Auto Mold Presses	7.4	7.4	0.0	11.3	0.0	0.0	8.5	11.3
Plastic Parts Deflashing	39.3	39.3	0.0	0.0	0.0	0.0	0.0	0.0
Pneumatic Bead Blasting	22.1	22.1	0.0	0.0	0.0	0.0	0.0	0.0
Powder Paint Booth	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0
Spray Paint Booth	173.0	173.0	0.0	201.4	0.0	0.0	7.6	7.6
Natural Gas Fired Boiler 1	0.7	0.7	0.0	0.1	1.8	7.2	0.0	0.0
Natural Gas Fired Boiler 2	0.7	0.7	0.0	0.1	1.8	7.2	0.0	0.0
Total Emissions (tons/year)	243.2	243.2	0.0	223.9	3.6	14.4	20.6	24.6

Potential Controlled/Limited Emissions (tons per year)

Process/facility	Potential Controlled/Limited Emissions (tons/year)							
	PM	PM10	SO2	VOC	CO	NOx	Single HAP	Total HAPs
Plastic Parts Molding at 2 Nissei Presses	0.0	0.0	0.0	5.7	0.0	0.0	4.5	5.7
Plastic Parts Molding at 14 Auto Mold Presses	0.2	0.2	0.0	11.3	0.0	0.0	8.5	11.3
Plastic Parts Deflashing	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Pneumatic Bead Blasting	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Powder Paint Booth	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0
Spray Paint Booth	0.4	0.4	0.0	24.0	0.0	0.0	0.9	0.9
Natural Gas Fired Boiler 1	0.7	0.7	0.0	0.1	1.8	7.2	0.0	0.0
Natural Gas Fired Boiler 2	0.7	0.7	0.0	0.1	1.8	7.2	0.0	0.0
Total Emissions (tons/year)	2.6	2.6	0.0	46.5	3.6	14.4	13.9	17.9

**Appendix A: Process Emission Calculations
(Page 1 of 2)**

Company Name: Johnson Controls, Inc.
Address City IN Zip: 1302 East Monroe Street, Goshen, IN 46528
Part 70 No.: T039-7201
Plant ID: 039-00018
Reviewer: Michael Hirtler
Date: June 5, 1998

*****Potential Uncontrolled Emissions*****

Plastic Parts Molding at Two (2) Nissei Molding Units (Unit #1):

The following calculations determine emissions from the two (2) molding units which are situated in a total enclosure. Each unit is rated at 12 pounds of phenolic molding per hour. Based on 8,760 hours per year of production and engineering judgement (mass balance):

VOC:	24 lb plastic pellets/hr x	5.40% (wt. % VOC) x	8760 hr/yr /	2000 lb / ton =	5.68 tons/yr
Phenol:	24 lb plastic pellets/hr x	4.30% (wt. % phenol) x	8760 hr/yr /	2000 lb / ton =	4.52 tons/yr
Formaldehyde:	24 lb plastic pellets/hr x	1.10% (wt. % formaldehyde) x	8760 hr/yr /	2000 lb / ton =	1.16 tons/yr

Plastic Parts Molding at Six (6) 75 Ton Auto Mold Presses and Eight (8) 25 Ton Auto Mold Presses (Unit #2):

The following calculations determine emissions from the six (6) 75 ton auto mold presses with each unit rated at 8.2 pounds of phenolic molding compound per hour, and the eight (8) 25 ton auto mold presses with each rated at 1.9 pounds of phenolic molding compound, based on 8,760 hours per year of production and engineering judgement (mass balance).

VOC:	64.4 lb plastic pellets/hr x	4.00% (wt. % VOC) x	8760 hr/yr /	2000 lb / ton =	11.28 tons/yr
Phenol:	64.4 lb plastic pellets/hr x	3.00% (wt. % phenol) x	8760 hr/yr /	2000 lb / ton =	8.46 tons/yr
Formaldehyde:	64.4 lb plastic pellets/hr x	1.00% (wt. % formaldehyde) x	8760 hr/yr /	2000 lb / ton =	2.82 tons/yr

PM/PM10: The Unit #2 baghouse collects an average of 10 gallons PM per week, based on an actual weekly operating schedule of 80 hours (2 shifts). At a control device efficiency of 98 percent, uncontrolled emissions are computed as follows:

10 gal PM collected at baghouse/week (actual) x 13.3 lb PM / gal / 98% x (wk/ 80 hrs) x 4.38 tons/yr / lb/hr= 7.43 tons/yr

Wheelabrator Frye Tumbblast Machine (Unit #5):

The following calculations determine emissions from the molded plastic parts deflashing machine which is rated at 400 pounds of plastic parts per hour. Based on a baghouse collection efficiency of 98%, an average of 732 pounds of PM collected per month, and actual unit operating hours and operating capacity of 2,000 hours per year and 50%, respectively:

PM/PM10:	732 lb PM/month /	98% x 8760/2000 (pot/act hrs) x	12 months/yr /	0.50 unit capacity /	2000 lb / ton =	39.26 tons/yr
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Pneumatic Bead Blaster (Unit #6):

The following calculations determine emissions from the pneumatic bead blaster which is rated at 40 pounds of metallic parts per hour and utilizes up to 94.74 pounds of glass beads per hour. Based on a cyclone collection efficiency of 99 percent, and an average of 200 pounds PM collected during 40 hours of unit operation:

PM/PM10:	200 lb PM / 40 hr /	99% x	8760 hr/yr /	2000 lb / ton =	22.12 tons/yr
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Nordson Powder Paint Booth (Unit #7):

The following calculations determine emissions from the powder paint booth rated at 120 pounds of powdered paints per hour, based on 8,760 hours per year of operation. This operation is situated in a total enclosure utilizing a recirculation system to capture and recycle powdered paint for its re-use.

$$\text{VOC:} \quad 120 \text{ lb paint/hr} \times 1\% \text{ (wt. \% VOC)} \times 8760 \text{ hr/yr} / 2000 \text{ lb / ton} = 5.26 \text{ tons/yr}$$

*****Potential Controlled Emissions and 326 IAC 6-3-2 Compliance Determination*****

The allowable PM emission rate pursuant to 326 IAC 6-3-2(c), Process Operations, for weight rates up to 60,000 lb/hr is determined using the following formula:

$$E = 4.1 * P^{0.67} \quad \text{where:} \quad E = \text{allowable PM emission rate (lb/hr)}$$

$$P = \text{process weight rate (tons/hr)}$$

Plastic Parts Molding at Six (6) 75 Ton Auto Mold Presses and Eight (8) 25 Ton Auto Mold Presses (Unit #2):

This facility is controlled by a bag type dust collector; therefore, the potential controlled PM emissions are used to determine 326 IAC 6-3-2(c) compliance:

$$E = 4.1 * (64.4/2000)^{0.67}$$

$$E = 0.41 \text{ lb PM/hr (allowable)}$$

$$\text{Potential controlled PM:} \quad 7.43 \text{ tons/yr} * (1 - 0.98) = 0.15 \text{ tons/yr} / 4.38 = 0.03 \text{ lb PM/hr (will comply)}$$

Wheelabrator Frye Tumbblast Machine (Unit #5):

This facility is controlled by a bag type dust collector; therefore, the potential controlled PM emissions are used to determine 326 IAC 6-3-2(c) compliance:

$$E = 4.1 * (400/2000)^{0.67}$$

$$E = 1.39 \text{ lb PM/hr (allowable)}$$

$$\text{Potential controlled PM:} \quad 39.26 \text{ tons/yr} * (1 - 0.98) = 0.79 \text{ tons/yr} / 4.38 = 0.18 \text{ lb PM/hr (will comply)}$$

Pneumatic Bead Blaster (Unit #6):

This facility is controlled by a cyclone; therefore, the potential controlled PM emissions are used to determine 326 IAC 6-3-2(c) compliance:

$$E = 4.1 * ((40+95)/2000)^{0.67} \text{ (bead blasting media input rate is 95 pounds per hour)}$$

$$E = 0.67 \text{ lb PM/hr (allowable)}$$

$$\text{Potential controlled PM:} \quad 22.12 \text{ tons/yr} * (1 - 0.99) = 0.22 \text{ tons/yr} / 4.38 = 0.05 \text{ lb PM/hr (will comply)}$$

**Appendix A: Emission Calculations
VOC and Particulate
From Surface Coating Operations at Paint Spray Booth (Unit #3)**

Company Name: Johnson Controls, Inc.
Address City IN Zip: 1302 East Monroe Street, Goshen, IN 46528
Part 70 No.: T039-7201
Plant ID: 039-00018
Reviewer: Michael Hirtler
Date: June 5, 1998

Potential Uncontrolled Emissions:																		
Coating Material (as applied)	Product Being Coated	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	Ib VOC /gal solids	Transfer Efficiency	
Bake Enamel - Ivory	Plastic Thermostat Parts	10.03	16.05%	0.00%	16.05%	0.00%	26.50%	9.38	gallons/hour	1.61	1.61	15.10	362.40	66.14	172.97	6.07	50%	
Bake Enamel - Black		8.61	29.15%	0.00%	29.15%	0.00%	22.00%	9.38	gallons/hour	2.51	2.51	23.54	565.01	103.11	125.31	11.41	50%	
Bake Enamel - Silver		8.64	29.05%	0.00%	29.05%	0.00%	23.90%	9.38	gallons/hour	2.51	2.51	23.54	565.03	103.12	125.93	10.50	50%	
Varnish Clear Gloss & Mineral Spirits		6.87	71.35%	0.00%	71.35%	0.00%	21.00%	9.38	gallons/hour	4.90	4.90	45.98	1103.48	201.39	40.43	23.34	50%	
Total Uncontrolled Potential Emissions:												45.98	1103.48	201.39	172.97			
Controlled Potential Emissions:																		
										VOC Input Usage Limitation	Control Efficiency	Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr			
										VOC	PM							
Total Controlled Potential Emissions:										11.92%	98.00%	5.48	131.50	24.00	0.41			

Methodology:

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1-Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids) * Transfer Efficiency
Total Uncontrolled Potential Emissions = Worst Case Coating Applied + Sum of all Solvents Used (Note: All coatings are applied on a mutually exclusive basis).
Controlled VOC Emission Rate = Uncontrolled Emission Rate * VOC Input Limitation
Controlled PM Emission Rate = Uncontrolled Emission Rate * VOC Input Limitation * (1 - Control Efficiency)
VOC input usage to the paint applicator will be limited to 11.92% of potential input usage based on 8,760 hours per year operation in order to limit VOC from the painting facility to 24.0 tons per year.
Therefore, the requirements pursuant to 326 IAC 8-1-6 will not apply to this facility.

Appendix A: Emissions Calculations
Industrial Boilers 10 < MM BTU/HR <100
Natural Gas

Company Name: Johnson Controls, Inc.
Address City IN Zip: 1302 East Monroe Street, Goshen, IN 46528
Part 70 No.: T039-7201
Plant ID: 039-00018
Reviewer: Michael Hirtler
Date: June 5, 1998

Combustion Unit	Capacity MMBtu/hr	Potential Thruput MMcf/yr	Emission Factor in lb/MMcf						Potential Emission Rate in tons/year					
			PM	PM10	SO2	NOx	VOC	CO	PM	PM10	SO2	NOx	VOC	CO
Boiler 1 (Unit #9)	11.7	102.49	14.0	14.0	0.6	140.0	2.78	35.0	0.72	0.72	0.03	7.17	0.14	1.79
Boiler 2 (Unit #10)	11.7	102.49	14.0	14.0	0.6	140.0	2.78	35.0	0.72	0.72	0.03	7.17	0.14	1.79
Total Potential Emission (tons/yr)									1.43	1.43	0.06	14.35	0.28	3.59

Methodology

MMBtu = 1,000,000 Btu

MMcf = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMcf/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMcf/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02

Emission (tons/yr) = Throughput (MMcf/yr) x Emission Factor (lb/MMcf)/2,000 lb/ton

Compliance with 326 IAC 6-2-4

Pursuant to 326 IAC 6-2-1, indirect heating facilities not in a specified county, existing and operating prior to September 21, 1983, shall be limited by the formula established at 326 IAC 6-2-3 as follows:

$$Pt = (C * a * h) / (76.5 * Q^{0.75} * N^{0.25}) \quad \text{where:}$$

Pt = allowable emission limit (lb PM /MMBtu)
 C = max. groundlevel concentration for critical wind speed (50 ug/m³)
 a = plume rise factor (0.67 for Q <= 1,000 MMBtu/hr)
 h = stack height (ft--both stacks are 30 feet)
 Q = total source maximum heat input (MMBtu/hr)
 N = number of stacks in fuel burning operation

For Boiler 1 (installed 1969):

$$Pt = (50 * 0.67 * 30) / (76.5 * 11.7^{0.75} * 1^{0.25})$$

Pt = 2.08 lb/MMBtu. By 326 IAC 6-2-3(d) default, however, the allowable cannot exceed **0.8 lb/MMBtu (allowable)**
 9.36 lb PM / hour (equivalent allowable emissions)
 41.00 ton PM / year (equivalent allowable emissions) **will comply**

For Boiler 2 (installed 1977):

$$Pt = (50 * 0.67 * 30) / (76.5 * (11.7+11.7)^{0.75} * 2^{0.25})$$

Pt = 1.04 lb/MMBtu. By 326 IAC 6-2-3(d) default, however, the allowable cannot exceed **0.8 lb/MMBtu (allowable)**
 9.36 lb PM / hour (equivalent allowable emissions)
 41.00 ton PM / year (equivalent allowable emissions) **will comply**

**Appendix A: HAP Emission Calculations
From Surface Coating Operations at Paint Spray Booth (Unit #3)**

Company Name: Johnson Controls, Inc.
Address City IN Zip: 1302 East Monroe Street, Goshen, IN 46528
Part 70 No.: T039-7201
Plant ID: 039-00018
Reviewer: Michael Hirtler
Date: June 5, 1998

Material (as applied)	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Glycol Ethers	Weight % MEK	Weight %	HAP EMISSION RATES (TONS PER YEAR)																								
												Glycol Ethers	MEK								Total All HAPs										
Paint Spray Booth, Unit #3																															
Bake Enamel - Ivory	10.03	9.38	gallons/hour	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.12								
Bake Enamel - Black	8.61	9.38	gallons/hour	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.54								
Bake Enamel - Silver	8.64	9.38	gallons/hour	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.55								
Varnish Clear Gloss	7.40	4.69	gallons/hour	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60								
Mineral Spirits	6.34	4.69	gallons/hour	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
Total Uncontrolled Potential Emissions:												4.12	7.60	0.00	0.00	7.60															
Total Controlled Emissions:												0.49	0.91	0.00	0.00	0.91															

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs
 Total Uncontrolled Potential Emissions (tons/year) = Worst Case Coating Applied + Sum of all Solvents Used (Note: All coatings are applied on a mutually exclusive basis).
 Total Controlled Emissions (tons/year) = Uncontrolled Emission Rate * HAP (or VOC) Input Usage Limitation
 VOC input usage to the paint applicator will be limited to 11.92% of potential input usage based on 8,760 hours per year operation in order to limit VOC from the painting facility to 24.0 tons per year.
 Therefore, the requirements pursuant to 326 IAC 8-1-6 will not apply to this facility.