



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mitchell E. Daniels, Jr.
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Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: September 19, 2007

RE: Johnson Controls, Inc. / 039-25099-00018

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot 03/23/06



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September 19, 2007

Mr. David Troup
Johnson Controls, Inc.
1302 E. Monroe Street
Goshen, IN 46528

Dear Mr. Troup:

Re: Exempt Construction and Operation Status,
039-25099-00018

Johnson Controls, Inc., (JCI) was issued a Minor Source Operating Permit (MSOP) No. 039-17604-00018 on January 30, 2004, for a stationary source that manufactures controls for heating, refrigeration, air conditioning and pump devices, located at 1302 East Monroe Street, Goshen, Indiana 46528. On August 1, 2007, the Office Of Air Quality received a letter from JCI notifying OAQ that the plant (consisting of 2 boilers) is no longer owned by JCI. However, JCI still owns the six (6) air strippers associated with groundwater remediation system at the source. JCI provided information indicating the source-wide potential emissions are less than the exemption thresholds in 326 IAC 2-1.1-3.

The application for Johnson Controls, Inc., received on August 01, 2007, has been reviewed. Based on the data provided and the provisions in 326 IAC 2-1.1-3, it has been determined that the following groundwater remediation system, located at 1302 E. Monroe Street, Goshen, IN 46528 is classified as exempt from air pollution permit requirements:

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

- (1) Six (6) low-level air strippers, installed in 1999, each rated at 200 gallons per hour and each equipped with an air blower operating at a maximum of 1400 actual cubic feet per minute (acfm).
- (2) One (1) flow distribution water tank, with pumps and associated equipment.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:
 - (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.

- (2) Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

This is a transition from MSOP No.039-17604-00018 for this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

If you have any questions on this matter, please contact Swarna Prabha, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, at 317-234-5376 or at 1-800-451-6027 (ext 45376).

Sincerely,

Original document signed by

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

sp

cc: File - Elkhart County
Elkhart County Health Department
Air Compliance – D. North
IDEM Northern Regional Office
Compliance Data Section
Permit Administration & Development Section
Billing, Licensing and Training Section –Dan Stamatkin

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: Johnson Controls, Inc.
Source Location: 1302 East Monroe Street, Goshen Indiana 46528
County: Elkhart County
SIC Code: 4959 (Environmental remediation services)
Exemption No.: 039-25099-00018
Permit Reviewer: Swarna Prabha

The Office of Air Quality (OAQ) has reviewed an application from Johnson Controls, Inc., relating to the operation of a stationary groundwater remediation system.

History

Johnson Controls, Inc., (JCI) was issued a Minor Source Operating Permit (MSOP) No. 039-17604-00018 on January 30, 2004, for a stationary source that manufactures controls for heating, refrigeration, air conditioning and pump devices, located at 1302 East Monroe Street, Goshen, Indiana 46528. On August 1, 2007, the Office Of Air Quality received a letter from JCI notifying OAQ that the plant (consisting of 2 boilers) is no longer owned by JCI. However, JCI still owns the six (6) air strippers associated with groundwater remediation system at the source. JCI provided information indicating that the air strippers have potential emissions that are less than the exemption thresholds in 326 IAC 2-1.1-3.

Permitted Emission Units and Pollution Control Equipment

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

- (1) Six (6) low-level air strippers, installed in 1999, each rated at 200 gallons per hour and each equipped with an air blower operating at a maximum of 1400 actual cubic feet per minute (acfm).
- (2) One (1) flow distribution water tank, with pumps and associated equipment.

Permitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units and pollution control devices.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

A complete application for the purposes of this review was received August 1, 2007.

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

Emission Calculations

See Appendix A of this TSD for detailed emissions calculations (Appendix A, pages 1).

Air Stripper:

Groundwater pump-and-treat (air-stripper) involves the extraction of groundwater contaminated with dissolved and non-aqueous phase VOCs from pumping wells and the subsequent ex-situ treatment through an aerated tank or column, which allows VOCs in the contaminated water to diffuse from the liquid phase to the gaseous phase.

For the Potential to Emit (PTE) Calculation of this TSD, it will be assumed that the VOCs removed from the groundwater will then be exhausted to the atmosphere with no pollution controls.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit (PTE) is defined as, "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	Negligible
PM-10	Negligible
SO ₂	Negligible
VOC	1.48
CO	Negligible
NO _x	Negligible

HAPs	Potential To Emit (tons/year)
Vinyl chloride	0.010
Trichloroethylene	1.450
Single HAP	1.450
TOTAL HAPs	1.46

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	Unclassifiable/Attainment
PM-2.5	Unclassifiable/Attainment
SO ₂	Unclassifiable/Attainment
NO ₂	Unclassifiable/Attainment
8-hour Ozone	Attainment
CO	Unclassifiable/Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standard. Elkhart County has been designated as attainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention Of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Elkhart County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as surrogate for PM_{2.5} emissions. See the State Rule Applicability – Entire Source section.
- (c) Elkhart County has been classified as attainment or unclassifiable for all the other regulated criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (d) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 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 and Emission Offset applicability.
- (e) On October 25, 2007, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

Source Status

New Source Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	Negligible
PM-10	Negligible
SO ₂	Negligible
VOC	1.48
CO	Negligible
NO _x	Negligible
Single HAP	1.45
Combination HAPs	1.46

- (a) This source is not a major stationary source under PSD (326 IAC 2-2), 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, the PSD requirements do not apply.
- (b) This source is not a major stationary source under Emission Offset (326 IAC 2-3), because no regulated nonattainment pollutant is emitted at a rate of 100 tons per year or more. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the PTE of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is a transition from MSOP No. 039-17604-00018 for this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the exemption for this source.
- (b) The requirements of 40 CFR 63, Subpart GGGGG, (63.7880 through 63.7957), National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Site Remediation are not included for this stationary soil and/or groundwater remediation system, because the remediation is conducted at a gasoline service station in order to clean up remediation material from a leaking underground storage tank (40 CFR 63.7881(b)(4)).
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in the exemption for this source.

State Rule Applicability - Entire Source

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

This source was constructed after the applicability date of August 7, 1977, and it is not in one of the 28 listed source categories defined in 326 IAC 2-2-1(gg)(1) and the uncontrolled potential to emit of all attainment regulated pollutants is less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The requirements of 326 IAC 2-4.1 are not applicable to this source, since the potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is located in Elkhart County, it is not required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, and it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year.

326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of forty percent (40%) 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.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

State Rule Applicability - Individual Facilities

326 IAC 8-1-6 (VOC rules: General Reduction Requirements for New Facilities)

The requirements of 326 IAC 8-1-6 are not applicable, since the groundwater remediation system does not have the potential to emit greater than twenty-five (25) tons of VOCs per year.

Conclusion

The construction and operation of this groundwater remediation system shall be subject to the conditions of the attached proposed Exemption No. 039-25099-00018

**Appendix A: VOC and HAP Emission Calculations
Six (6) Low Level Air Strippers**

Company Name: Johnson Controls, Inc.
Address City IN Zip: 1302 East Monroe Street, Goshen, IN 46528
Exemption No.: 039-25099-00018
Reviewer: S. Prabha

Potential to Emit for Six (6) Low Level Air Strippers (tons per year)

	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum *
Contaminant	Concentration	Water Flow Rate	Water Flow Rate	Emission Rate	Emission Rate	Emission Rate
	(ug/l)	(gpm)	(l/min)	(ug/min)	(lb/hr)	(tons/yr)
trans-1,2-dichloroethene (VOC)	9	1140	4315.276200	38837.485800	0.005137	0.023
trichloroethene (VOC & HAP)	580	1140	4315.276200	2502860.196000	0.331078	1.450
vinyl chloride (VOC & HAP)	4	1140	4315.276200	17261.104800	0.002283	0.010
Total PTE VOC (tons/year) =						1.483
Total PTE HAPs (tons/year)						1.460

* Based on maximum concentrations for calendar year 2000, determined through laboratory analysis of wastewater.