



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

«Date»

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(317) 232-8603
(800) 451-6027
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TO: Interested Parties / Applicant
RE: «ApplicantName» / «PermitNumber»
FROM: Paul Dubenetzky
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 9/16/03



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

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Commissioner

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April 1, 2004

Mr. Scott Johnson
L.E. Johnson Products, Inc.
2100 Sterling Ave.,
P.O. Box 1126
Elkhart, IN 46516

Dear Mr. Johnson:

Re: Exempt Construction and Operation Status,
039-17466-00278

The application from L.E. Johnson Products, Inc., received on July 9, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following metal stamping plant located at 2100 Sterling Ave., Elkhart, Indiana, is classified as exempt from air pollution permit requirements:

- (a) One (1) Natural Gas Steam Pak Generator with a capacity of 5.2 MMBtu per hour with seven (7) exhaust stacks with gas flow rates of 5,234 actual cubic foot per hour;
- (b) One (1) surface coating booth, identified as H, installed in 1994, equipped with high volume low pressure (HVLP) spray application, with a maximum capacity of 7.5 wood display units per hour, using dry filters as control;
- (c) Woodworking process, equipped with a polyester baghouse, which includes the following machines:
 - (1) Two (2) Weinig Moulders
 - (2) One (1) Oliver Cut-Off Saw
 - (3) One (1) Gang Saw
 - (4) One (1) Northfield Saw
 - (5) One (1) Whirlwing Cut-Off Saw
- (d) One (1) natural gas-fired thermo-cycler furnace, identified as 5-1, with a maximum heat input capacity of 0.2 MMBtu/hr;
- (e) One (1) natural gas-fired vantage gas tube heater, identified as 5-2, with a maximum heat input capacity of 0.1 million British thermal units per hour (MMBtu/hr); and
- (f) One (1) natural gas-fired thermo-cycler furnace, identified as 6-1, with a maximum heat input capacity of 0.4 million British thermal units per hour (MMBtu/hr).

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 Exemptions), 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 15 minutes (60 readings) in a 6-hour period 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 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the woodworking operation shall be limited the following:

Interpolation 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:

$$E = 4.10 P^{0.67} \quad P = \text{process weight rate in tons per hour} = 1.68 \text{ tons per hour}$$
$$E = 4.1(1.68)^{0.67} = 5.79 \text{ lb/hr}$$

- (3) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) the particulate matter (PM) from the surface coating booth shall be controlled by dry filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (4) Pursuant to 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 (Fugitive Dust Emissions).
- (5) Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), any change or modification which may increase the actual emissions before add-on control to more than fifteen (15) pounds per day of volatile organic compounds from the surface coating booth must be approved by the Office of Air Quality before such change can occur.

This existing source was issued a Registered Construction and Operation Status CP039-4024-00278, issued October 11, 1994. However, due to the changes at the source, L.E. Johnson Products, Inc. will no longer maintain the Registered source status and will be converted to an Exempt 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.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

AB/EVP

cc: File - Elkhart County
Elkhart County Health Department
Air Compliance – Greg Wingstrom
Northern Regional Office
Permit Tracking
Compliance Data Section

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: L.E. Johnson Products, Inc.
Source Location: 2100 Sterling Ave., Elkhart, Indiana 46516
County: Elkhart
SIC Code: 3429
Operation Permit No.: 039-17466-00278
Permit Reviewer: Alic Bent/EVP

The Office of Air Quality (OAQ) has reviewed an application from L.E. Johnson Products, Inc. relating to the operation of a metal stamping plant.

History

L.E. Johnson Products, Inc. has been operating under Registered Construction and Operation Status CP039-4024-00278, issued October 11, 1994. On July 9, 2003, L.E. Johnson Products, Inc. submitted an application to the OAQ requesting that their permit level be changed from a Registration to an Exemption based on the changes requested below:

The replacement of the solvent based paint with water based paint. The replacement of the solvent based paint with water based paint will result in a decrease in VOC emissions from 11.169 tons per year to 0.01 tons per year.

The dust collector at the source was considered an integral part of the woodworking operation in the Registered Construction and Operation Status CP039-4024-00278, issued October 11, 1994. Since L.E. Johnson Products requested a change in permit level the emissions at the source are now re-evaluated based on current IDEM policies. IDEM now requires the source to provide justification that a control equipment is an integral part of the process. The company decided not to submit the justification opting instead to conduct PM/PM10 testing in order to determine the emissions from the woodworking operation. Based on testing completed on December 16, 2003 the PM10 emissions from the woodworking operations were determined to be 0.328 pounds per hour, which is equivalent to 1.44 tons per year when extrapolated to 8,760 hours per year of operation.

The source is also requesting the addition of the following:

- (a) One (1) natural gas-fired thermo-cycler furnace, identified as 5-1, with a maximum heat input capacity of 0.2 MMBtu/hr;
- (b) One (1) natural gas-fired vantage gas tube heater, identified as 5-2, with a maximum heat input capacity of 0.1 million British thermal units per hour (MMBtu/hr); and
- (c) One (1) natural gas-fired thermo-cycler furnace, identified as 6-1, with a maximum heat input capacity of 0.4 million British thermal units per hour (MMBtu/hr).

Permitted Emission Units and Pollution Control Equipment

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

- (a) One (1) Natural Gas Steam Pak Generator with a capacity of 5.2 MMBtu per hour with seven (7) exhaust stacks with gas flow rates of 5,234 actual cubic foot per hour;
- (b) One (1) surface coating booth, identified as H, installed in 1994, equipped with high volume low pressure (HVLP) spray application, with a maximum capacity of 7.5 wood display units per hour, using dry filters as control;
- (c) Woodworking process, equipped with a polyester baghouse, which includes the following machines:
 - (1) Two (2) Weinig Moulders
 - (2) One (1) Oliver Cut-Off Saw
 - (3) One (1) Gang Saw
 - (4) One (1) Northfield Saw
 - (5) One (1) Whirlwing Cut-Off Saw

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Existing Approvals

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

- (a) CP 039-4024-00278, issued on October 11, 1994.

The emissions from the source were re-evaluated using PM-10 test data. This test was completed on December 16, 2003. Based on the re-calculated emissions, and pursuant to 2-1.1-3, the source is determined to be exempt of the permitting requirements. This exemption shall supersede the existing CP 039-4024-00278.

Enforcement Issue

There are no enforcement actions pending because the potential to emit of all regulated air pollutants is of exemption level for all unpermitted facilities, and they are therefore not subject to enforcement actions.

Recommendation

The staff recommends to the Commissioner that the operation 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.

A complete application for the purposes of this review was received on July 9, 2003. Additional information was received on January 21, 2004.

Emission Calculations

See Appendix A: pages 1 through 4 of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit 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	4.66
PM-10	3.01
SO ₂	0.02
VOC	0.11
CO	2.20
NO _x	2.6

HAP's	Potential To Emit (tons/year)
Glycol Ethers	0.26
Hexane	0.05
TOTAL	0.31

- (a) The potential to emit of all the regulated pollutants for this modification at the source is lower than the registration applicability thresholds stated in 326 IAC 2-7-10.5(d)(4). Therefore, pursuant to 326 IAC 2-1.1-3(d)(3), this is an exempt unit.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NOx	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Elkhart County has been classified as attainment or unclassifiable for PM-10, SO₂, Ozone, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 .

- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, or 326 IAC 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.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

The total emissions indicated in this Exemption 039-17466-00278, is still not subject to the Part 70 Permit requirements because the potential to emit (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 status is based on all the air approvals issued to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

State Rule Applicability - Entire Source

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

The operation of this source will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Elkhart County, which is one of the specifically listed counties, but the potential to emit VOC is less than ten (10) per year and the potential to emit CO, VOC, NO_x, PM10 (including fugitive emissions), and SO₂ is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

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)

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).

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The particulate from the woodworking operation shall be limited the following:

Interpolation 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:

$$E = 4.10 P^{0.67} \quad P = \text{process weight rate in tons per hour} = 1.68 \text{ tons per hour}$$

$$E = 4.1(1.68)^{0.67} = 5.79 \text{ lb/hr}$$

Controlled Compliance calculation:

$$(0.05 \text{ tons PM/yr}) * (\text{yr}/8,760 \text{ hrs}) * (2,000 \text{ lbs/ton}) = 0.011 \text{ lbs PM/hr} < 5.79 \text{ lbs PM/hr}$$

The baghouse shall be in operation at all times the woodworking process is in operation, in order to comply with this limit.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) the particulate matter (PM) from the surface coating booth shall be controlled by dry filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

The surface coating operation is not subject to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating). This rule applies to surface coated wood furnishings facilities located in any county which commenced construction after July 1, 1990, and which have actual emissions of greater than fifteen (15) pounds per day before add-on controls. The surface coating operations was constructed after July 1, 1990, but the uncontrolled potential to emit of the facility is less than fifteen (15) pounds per day. Therefore, 326 IAC 8-2-12 does not apply.

Any change or modification which may increase the actual emissions before add-on control to more than fifteen (15) pounds per day of volatile organic compounds from the surface coating booth must be approved by the Office of Air Quality before such change can occur.

Conclusion

The operation of this metal stamping plant shall be subject to the conditions of the attached proposed Exemption 039-17466-00278.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Steam Pak Generator, Thermocyclers and Tube Heater

Company Name: L.E. Johnson Products, Inc.

Address City IN Zip: 2100 Sterling Ave., Elkhart, IN 46516

Permit No.: 039-17466-00278

Reviewer: AB/EVP

Date: 18-Feb-04

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

5.9

51.7

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.05	0.2	0.02	2.6	0.1	2.2

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = 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, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Steam Pak Generator, Thermocyclers and Tube Heater

HAPs Emissions

Company Name: L.E. Johnson Products, Inc.

Address City IN Zip: 2100 Sterling Ave., Elkhart, IN 46516

Permit No.: 039-17466-00278

Reviewer: AB/EVP

Date: 18-Feb-04

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	5.427E-05	3.101E-05	1.938E-03	4.652E-02	8.786E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.292E-05	2.843E-05	3.618E-05	9.820E-06	5.427E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Process Particulate Emissions

Company Name: L.E. Johnson Products, Inc.
Address City IN Zip: 2100 Sterling Ave., Elkhart IN 46516
Exemption No.: 039-17466-00278
Reviewer: Alic Bent/EVP
Date: 4-Feb-04

Particulate Emissions Before Control (tons/year)				
Emission Unit	PM Emission Rate (lb/hr)	PM-10 Emission Rate (lb/hr)	PM emissions (tons/yr)	PM-10 emissions (tons/yr)
Woodworking Process	0.72	0.33	3.15	1.45

Particulate Emissions After Control (tons/year)					
Emission Unit	PM Emission Rate (lb/hr)	PM-10 Emission Rate (lb/hr)	PM emissions (tons/yr)	PM-10 emissions (tons/yr)	Control Efficiency
Woodworking Process	0.001	0.0003	0.004	0.001	99.90%

Methodology:**Uncontrolled Emissions:**

Uncontrolled Emissions (tons/yr) = Particulate Emission Rate (lb/hr) * 8760 hr/yr * 1 ton/2,000 lbs
Emission rates based on particulate testing conducted on the material at the baghouse inlet in December 2003.

Controlled Emissions :

Controlled Emissions (tons/yr) = Particulate Emission Rate (lb/hr) * 8760 hr/yr * 1 ton/2,000 lbs * 1/(1-Control Efficiency)