



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
LUCAS COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 04-01323

DATE: 1/23/2003

Johnson Controls battery Group, Inc.
Chris Schlachter
10300 Industrial Road
Holland, OH 43528

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

TDES



**Permit To Install
Terms and Conditions**

**Issue Date: 1/23/2003
Effective Date: 1/23/2003**

FINAL PERMIT TO INSTALL 04-01323

Application Number: 04-01323
APS Premise Number: 0448002011
Permit Fee: **\$200**
Name of Facility: Johnson Controls battery Group, Inc.
Person to Contact: Chris Schlachter
Address: 10300 Industrial Road
Holland, OH 43528

Location of proposed air contaminant source(s) [emissions unit(s)]:
**10300 Industrial Road
Holland, Ohio**

Description of proposed emissions unit(s):
Grid caster bank.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions

and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

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14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only) **TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	0.145 (grid caster stack)
Lead	0.018 (grid caster stack)
CO	0.252 (furnace stack)
NOx	0.300 (furnace stack)
PE	0.006 (furnace stack)
SO2	0.002 (furnace stack)
VOC	0.017 (furnace stack)

Johnson Controls battery Group, Inc.

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Facility ID: 0448002011

Emissions Unit ID: P056

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P056 - 1000 lb/hr grid caster melting pot, uncontrolled (stack 225)	OAC rule 3745-31-05(A)(3)	0.033 pound of particulate emissions (PE) per hour; 0.004 pound of lead (Pb) per hour; and
		0.145 ton of PE per year; 0.018 ton of lead per year; and
		see A.I.2.d.
	40 CFR Part 60, Subpart KK	0.000175 gr/dscf of lead; and
		0 percent opacity.
	OAC rule 3745-17-07(A)(1)	see A.I.2.b.
	OAC rule 3745-17-07(A)(1)	See section A.I.2.a.
	OAC rule 3745-17-10(B)(1)	See section A.I.2.b.
0.63 mmBtu indirect-fired natural gas furnace heating the grid caster P056 (stack 62)	OAC rule 3745-17-11(B)(1)	See section A.I.2.b.
	OAC rule 3745-18-06(A)	See section A.I.2.c.
	OAC rule 3745-21-07(B)	0.004 pound of volatile organic compounds (VOC) per hour.
	OAC rule 3745-23-06(B)	0.069 pound of nitrogen oxides (NOx) per hour.
	OAC rule 3745-31-05(A)(3)	

0.058 pound of CO per hour; 0.252 ton of CO per year,
0.300 ton of NO_x per year,
0.001 pound of particulate emissions (PE) per hour,
0.006 ton of PE per year,
0.0004 pound of sulfur dioxide (SO₂) per hour,
0.002 ton of SO₂ per year,
0.017 ton of VOC per year, and
see section A.I.2.d.

2. Additional Terms and Conditions

- 2.a** Visible particulate emissions, from the stack serving this emissions unit, shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.c** Fuel burning equipment is exempt from OAC 3745-18-06 sulfur dioxide regulations during any calendar day in which natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pounds per million standard cubic feet is the only fuel burned.
- 2.d** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-07(B), and OAC rule 3745-23-06(B).
- 2.e** The hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

B. Operational Restrictions

- 1. The permittee shall burn only natural gas in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

- 1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.000175 gr/dscf of lead (grid caster stack).

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60 Sections 60.8 and 60.374 using methods and procedures specified in Method 12 of 40 CFR Part 60, Appendix A. The sampling time and sample volume for each run shall be at least 60 minutes and 30 dscf.

- b. Emission Limitation:

0 percent opacity (grid caster stack).

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60 Section 60.374 using methods and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and Section 60.11.

The opacity numbers shall be rounded of to the nearest whole percentage.

- c. Emission Limitation:

0.033 pound of PE per hour (grid caster stack).

Applicable Compliance Method:

Compliance may be demonstrated based upon the maximum production of 0.5 ton/hr and emission factor of 0.0655 lb PE/ton (A-42, Chapter 12.15(1/95), background document, Table 2.3-1).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR

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Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(9).

d. Emission Limitation:

0.145 ton of PE per year (grid caster stack).

Applicable Compliance Method:

The 0.145 tpy emission limitation was developed by multiplying the 0.033 lb/hour emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

0.004 pound of lead per hour (grid caster stack).

Applicable Compliance Method:

Compliance may be demonstrated based upon the maximum production of 0.5 ton/hr and emission factor of 0.0081 lb Pb/ton (from a stack test conducted in 1992, increased to ensure conservative calculations).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 12 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:

0.018 ton of lead per year (grid caster stack).

Applicable Compliance Method:

The 0.018 tpy emission limitation was developed by multiplying the 0.004 lb/hour emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

g. Emission Limitation:

20% opacity, as a six-minute average.

Applicable Compliance Method;

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

h. Emission Limitation:

0.058 pound of CO per hour (furnace stack).

Applicable Compliance Method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98, as follows: divide the emission factor of 84 pounds of CO emissions per million standard cubic feet by a heating value of 1,020 Btu per standard cubic foot and multiply the result by the maximum heat input capacity of 0.7 mmBtu per hour.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

i. Emission Limitation:

0.252 ton of CO per year (furnace stack).

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emission unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.058 pound of CO per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

j. Emission Limitation:

0.069 pound of NO_x per hour (furnace stack).

Applicable Compliance Method:

Compliance may be determined through calculations based on emission factors specified in

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USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98, as follows: divide the emission factor of 100 pounds of NOx emissions per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot and multiply by the maximum heat input capacity of 0.7 mmBtu per hour.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7 of 40 CFR Part 60 Appendix A.

k. Emission Limitation:

0.300 ton of NOx per year (furnace stack).

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emission unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.069 pound of NOx per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

l. Emission Limitation:

0.001 pound of PE per hour (furnace stack).

Applicable Compliance Method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 1.9 pounds of PE per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot and multiply by the maximum heat input capacity of 0.7 mmBtu per hour.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

m. Emission Limitation:

0.006 ton of PE per year (furnace stack).

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emission unit. Compliance may be demonstrated through calculations performed as follows:

multiply the short term emission rate of 0.001 pound of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

n. Emission Limitation:

0.0004 pound of SO₂ per hour (furnace stack).

Applicable Compliance Method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 0.6 pound of SO₂ emissions per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot and multiply by the maximum heat input capacity of 0.7 mmBtu per hour.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-18-04.

o. Emission Limitation:

0.002 ton of SO₂ per year (furnace stack).

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emission unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.0004 pound of SO₂ per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

p. Emission Limitation:

0.004 pound of VOC per hour (furnace stack).

Applicable Compliance Method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98, as follows: divide the emission factor of 5.5 pounds of VOC emissions per million standard cubic feet by a heating value of 1020 Btu per standard cubic foot and multiply by the maximum heat input capacity of 0.7 mmBtu per hour.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-21-10.

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- q. Emission Limitation:
0.017 ton of VOC per year (furnace stack).

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emission unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.004 pound of VOC per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

2. To demonstrate compliance with emission limitations for lead and opacity, performance testing shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup of the unit in accordance with 40 CFR 60.8. Emission tests shall be conducted in accordance with the following test methods and procedures:

Method 12 of 40 CFR Part 60, Appendix A. for lead;
Method 9 and the procedures in 40 CFR 60.11 for opacity;

The test(s) shall be conducted while the emissions unit is operating at its maximum rated capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Any variation from the above testing methods must be pre approved by the Toledo Division of Environmental Services (TDOES) not later than 30 days prior to the proposed test date(s).

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the TDOES. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the source operating parameters, the time(s) and date(s) of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the field office's refusal to accept the results of the emission test.

Personnel from the TDOES shall be permitted to witness the test, examine the testing equipment and acquire data and information regarding the emissions unit operating parameters.

A comprehensive written report on the results of the emission test shall be submitted within 30 days following completion of the test.

F. Miscellaneous Requirements

None