



State of Ohio Environmental Protection Agency

Street Address:

1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

P.O. Box 1049
Columbus, OH 43216-1049

02/19/98

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

05-36-01-0034
Johnson Controls Inc.
Bruce G. Jackson
1147 North Washington St.
P.O. Box 150
Greenfield, OH 45123

Dear Bruce G. Jackson:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Southwest District Office within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions or comments concerning this draft Title V permit, please contact Southwest District Office.

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA
Jim Orlemann, DAPC Engineering
Michael Ahern, DAPC PMU
Southwest District Office
Indiana
Kentucky



Ohio EPA

State of Ohio Environmental Protection Agency

TITLE V PERMIT

Issue Date: 02/19/98

DRAFT

Effective Date:

Expiration Date:

This document constitutes issuance to:

Johnson Controls Inc.
1147 North Washington St.
P.O. Box 150
Greenfield, OH 45123

of a Title V permit for Facility ID: 05-36-01-0034

Emissions Unit ID (Company ID)/
Emissions Unit Activity Description:

P005 (Foam Line 2)
Polyurethane Foam Molding Line.

P007 (Foam Line 1)
Polyurethane Foam Molding Line.

P008 (Foam Line 3)
Polyurethane Foam Molding Line.

P009 (Adhesive Repair L1&2)
Adhesive used to repair defects in parts manufactured on P005 & P007

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911
(513) 285-6357

OHIO ENVIRONMENTAL PROTECTION AGENCY

Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. 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 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written 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.) See B.8 below if no deviations occurred during the quarter.
 - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for 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 federally enforceable terms and conditions of this permit.

- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. 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.

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-07.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:

- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before March 15th of each year during the permit term.
- ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-02(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

16. Off Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

B. State Only Enforceable Section

1. Permit to Install Requirement

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

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. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. 40 CFR, Part 68 is an applicable requirement for this facility. The permittee shall submit a Risk Management Plan, pursuant to 40 CFR, Part 68, to the appropriate designated agency and comply with all appropriate subparts no later than June 20, 1999.

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility.

Z007-storage tank #7	Z030-storage tank #30
Z009-storage tank #9	Z031-storage tank #31
Z018-storage tank #18	Z032-storage tank #32
Z019-storage tank #19	Z033-storage tank #33
Z020-storage tank #20	Z034-storage tank #34
Z021-storage tank #21	Z035-storage tank #35
Z022-storage tank #22	Z037-storage tank #37
Z023-storage tank #23	Z038-dip tanks, drums, mix tanks
Z027-storage tank #27	

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

2. The owner/operator shall comply with any applicable State and federal requirements governing the storage, treatment, transport, and disposal of any waste material generated by the operation of the source(s).

Facility Name: Johnson Controls Inc.

Facility ID: 05-36-01-0034

Emissions Unit: Foam Line 2 (P005)

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Foam Line 2 (P005)

Activity Description: Polyurethane Foam Molding Line.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyurethane Foam Molding Line #2 with Regenerative Thermal Oxidizer	OAC rule 3745-21-07(G) See section A.VI.	See T&C A.II.1. below.
	OAC rule 3745-17-11 See section A.VI.	0.551 pound/hr particulate
	OAC rule 3745-31-05 See section A.VI.	218.5 pounds OC/day, based on a rolling, 365-day average

2. Additional Terms and Conditions

- 2.a This emissions unit (P005) shall be equipped with a capture and control system that reduces the OC emissions from the spray mold release agent by at least 61%, by weight.

II. Operational Restrictions

1. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Ohio EPA field office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

2. The total amount of spray mold release agent employed shall not exceed 454.8 pounds per day based on a rolling, 365-day average.
3. The total amount of paste mold release agent employed shall not exceed 41.1 pounds per day based on a rolling, 365-day average. The paste mold release agent emissions are not controlled.
4. The average combustion temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1400 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month:
 - a. the company identification of each spray and paste mold release agent employed in this emissions unit, and
 - b. whether or not each spray and paste mold release agent employed is a photochemically reactive material.

Facility Name: **Johnson Controls Inc.**

Facility ID: **05-36-01-0034**

Emissions Unit: **Foam Line 2 (P005)**

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall maintain daily records of the following information:
 - a. The company identification of each spray and paste mold release agent.
 - b. The amount of spray mold release agent employed, in pounds.
 - c. The amount of paste mold release agent employed, in pounds.
 - d. The OC content of each paste and spray mold release agent, in percent by weight.
 - e. The total daily OC emissions from the use of paste and spray mold release agents, in pounds*.
 - f. The rolling, 365-day average of the total OC emissions, in pounds**.
 - g. The rolling, 365-day average of the spray mold release agent usage, in pounds**.
 - h. The rolling, 365-day average of the paste mold release agent usage, in pounds**.

*For item e, the total OC emissions should be determined in accordance with the following equation:

$$E_t = [1 - OCE] [(\%OCs_1)(Us_1) + (\%OCs_2)(Us_2) \dots + (\%OCs_n)(Us_n)] + [(\%OCp_1)(Up_1) + (\%OCp_2)(Up_2) \dots + (\%OCp_n)(Up_n)]$$

where:

E_t = total daily OC emissions

OCE = 61% is the overall control efficiency, it equals the incinerator destruction efficiency of 95% times the capture efficiency of 65%. This was demonstrated during the latest emissions test of 3/4/96.

%OCs = OC content of the spray mold release agent

Us = spray mold release agent usage

%OCp = OC content of paste mold release agent

Up = paste mold release agent usage

n = total number of different types of agents employed

** For items f, g, and h, the rolling, 365-day averages should be determined in accordance with the following equation:

$$(\text{daily value} + \text{total of daily values from previous 364 days}) / 365$$

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the combustion chamber of the regenerative thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The continuous monitoring and recording devices shall be capable of accurately measuring the desired parameters, and the owner or operator shall properly operate and maintain the devices in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day for the control equipment:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1400 degrees Fahrenheit.
- b. A log of downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit deviation reports which identify the days during which any photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s), and the estimated total quantity of material(s) emitted during each such day, in pounds. Each report shall be submitted to the Director (appropriate DO or LAA) within 30 days of the deviation.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 365-day emission and usage limitations for spray mold release and paste mold release agents.
3. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified above.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A. I. 1. of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation-
218.5 pounds OC per day, based on a rolling, 365-day average

Applicable Compliance Method-

Compliance shall be based upon the record keeping specified in Section A.III.2.

V. Testing Requirements (continued)

1.b Emission Limitation-
0.551 lb PM/hr

Applicable Compliance Method-

If required, compliance shall be based on stack testing pursuant to OAC 3745-17-03(B)(10).

1.c Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the spray and paste mold release agents.

2.a The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

i. The emission testing shall be conducted within approximately 2.5 years after permit issuance and within 6 months prior to permit renewal.

ii. The following test methods shall be employed to determine the 61% overall control efficiency of the control equipment serving this emissions unit: 40 CFR Part 60, Appendix A, Method 25, and 40 CFR Part 51, Appendix M, Method 204..

iii. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

2.b The overall control efficiency of the control equipment serving this emissions unit shall be demonstrated based upon the results of the capture efficiency and control efficiency tests specified above. The capture efficiency shall be determined using Methods 204-204F, as specified in 40 CFR Part 51 Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures established in the mass balance protocol approved on 10/25/95. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

V. Testing Requirements (continued)

- 2.c** Not later than 30 days prior to the proposed test date(s), this facility shall submit an "Intent to Test" notification. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or Local Air Agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or Local Air Agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information regarding the emissions unit operating parameters. A comprehensive written report on the results of the emissions tests shall be submitted to the appropriate Ohio EPA District Office or Local Air Agency within 30 days following completion of the test(s).

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Southwest District Office.

VI. Miscellaneous Requirements

- 1.** The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install #05-6470, as issued on June 28, 1995: Part III, Sections A.I-IV., A.V.1.a., A.V.2., B.I.1., B.I.2.b and c., B.II-IV., B.V.1.a., B.V.2.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyurethane Foam Molding Line #2 with Regenerative Thermal Oxidizer (RTO)	OAC rule 3745-31-05 See section A.VI.	348.0 pounds OC/day; 40.5 tons of OC per year 1.0 pound particulates/day 0.25 tons per year of particulates Combustion Emissions from the RTO: 0.02 lb PM/hr, 0.08 TPY PM 0.002 lb SO ₂ /hr, 0.01 TPY SO ₂ 0.08 lb CO/hr, 0.37 TPY CO 0.03 lb OC/hr, 0.14 TPY OC 0.40 lb NO _x /hr, 1.75 TPY NO _x

2. Additional Terms and Conditions

- 2.a The 1.0 pound per day and 0.25 ton per year of particulates and all of the combustion emissions 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.
- 2.b The maximum amount of spray mold release agent employed in this emissions unit shall not exceed 700 pounds per day and 83 tons per year.

The maximum amount of paste mold release agent employed in this emissions unit shall not exceed 75 pounds per day and 7.5 tons per year.
- 2.c The total OC emissions from this emissions unit shall not exceed 40.5 tons per year, based upon a rolling, 365-day summation of the daily emissions.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Same as section A.III.2.a-e.

IV. Reporting Requirements

1. The permittee shall submit, in writing, an annual report to the Director (appropriate District Office or local air agency) which specifies the following from this emissions unit for the previous calendar year:
 - a. total OC emissions, in tons,
 - b. total amount of spray mold release employed, in tons,
 - c. total amount of paste mold release employed, in tons.

This report shall be submitted by January 31st each year.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the maximum daily usage limitations for spray mold release and paste mold release agents.
3. The permittee shall, on an ongoing basis, evaluate the availability of alternate spray mold release agents and application methods that will reduce the OC emissions and/or increase the capture and control efficiency. Should an alternate spray mold release agent and/or application/control system become available, based on a cost-effectiveness review, the permittee shall submit a schedule for implementation of the alternate agent and/or application/control system within 30 days of the availability.

The permittee shall submit semi-annual reports that summarize the evaluation of alternate mold release agents and/or application/control systems which detail the following information:

- a. The OC content of the alternate spray mold release.
- b. The acceptability of the alternate spray mold release and/or application/control system.
- c. The reason why the alternative meets or does not meet production specifications.
- d. The expected reduction in OC emissions.
- e. The cost of modifying the operations to utilize the alternative.

These reports shall be submitted to the Director (appropriate District Office or Local Air Agency) by February 15th and August 15th of each year and shall cover the evaluation and testing of the previous six months.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section B. I. 1. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
348 lbs OC/day

Applicable Compliance Method:
Compliance shall be based upon the recordkeeping specified in sections A.III.2 and A.V.2.a-c.

1.b Emission Limitation-
40.5 tons OC per year

Applicable Compliance Method-
Compliance shall be based upon the recordkeeping specified in Section A.III.2.e. and shall be the sum of the daily OC emission rates for the calendar year, divided by 2000 pounds per ton.

1.c Emission Limitation-
1.0 pound particulate per day
0.25 tons per year of particulate

Applicable Compliance Method-
If required, compliance shall be based on stack testing pursuant to OAC rule 3745-17-03(B)(10).

1.d Emission Limitations-
0.02 pound PM/hr
0.002 pound SO₂/hr
0.08 pound CO/hr
0.03 pound OC/hr
0.40 pound NO_x/hr

Applicable Compliance Method-
Compliance shall be determined by multiplying the AP-42 emission factors for natural gas by the maximum hourly gas burning capacity (4,000 cu. ft.) of the emissions unit.

1.e Emission Limitations-
0.08 TPY PM
0.01 TPY SO₂
0.37 TPY CO
0.14 TPY OC
1.75 TPY NO_x

Applicable Compliance Method-
The TPY limitations were developed by multiplying the lb/hr limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

Facility Name: **Johnson Controls Inc.**
Facility ID: **05-36-01-0034**
Emissions Unit: **Foam Line 2 (P005)**

VI. Miscellaneous Requirements

None

Facility Name: Johnson Controls Inc.

Facility ID: 05-36-01-0034

Emissions Unit: Foam Line 1 (P007)

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Foam Line 1 (P007)

Activity Description: Polyurethane Foam Molding Line.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyurethane Foam Molding Line #2 with Regenerative Thermal Oxidizer	OAC rule 3745-21-07(G) See section A.VI.	See T&C A.II.1. below.
	OAC rule 3745-17-11 See section A.VI.	0.551 pound/hr particulate
	OAC rule 3745-31-05 See section A.VI.	218.5 pounds OC/day, based on a rolling, 365-day average

2. Additional Terms and Conditions

- 2.a This emissions unit (P005) shall be equipped with a capture and control system that reduces the OC emissions from the spray mold release agent by at least 61%, by weight.

II. Operational Restrictions

1. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Ohio EPA field office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

2. The total amount of spray mold release agent employed shall not exceed 454.8 pounds per day based on a rolling, 365-day average.
3. The total amount of paste mold release agent employed shall not exceed 41.1 pounds per day based on a rolling, 365-day average. The paste mold release agent emissions are not controlled.
4. The average combustion temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1400 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month:
 - a. the company identification of each spray and paste mold release agent employed in this emissions unit, and
 - b. whether or not each spray and paste mold release agent employed is a photochemically reactive material.

Facility Name: Johnson Controls Inc.

Facility ID: 05-36-01-0034

Emissions Unit: Foam Line 1 (P007)

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall maintain daily records of the following information:
 - a. The company identification of each spray and paste mold release agent.
 - b. The amount of spray mold release agent employed, in pounds.
 - c. The amount of paste mold release agent employed, in pounds.
 - d. The OC content of each paste and spray mold release agent, in percent by weight.
 - e. The total daily OC emissions from the use of paste and spray mold release agents, in pounds*.
 - f. The rolling, 365-day average of the total OC emissions, in pounds**.
 - g. The rolling, 365-day average of the spray mold release agent usage, in pounds**.
 - h. The rolling, 365-day average of the paste mold release agent usage, in pounds**.

*For item e, the total OC emissions should be determined in accordance with the following equation:

$$E_t = [1 - OCE] [(\%OC_{s1})(U_{s1}) + (\%OC_{s2})(U_{s2}) \dots + (\%OC_{sn})(U_{sn})] + [(\%OC_{p1})(U_{p1}) + (\%OC_{p2})(U_{p2}) \dots + (\%OC_{pn})(U_{pn})]$$

where:

E_t = total daily OC emissions

OCE = 61% is the overall control efficiency, it equals the incinerator destruction efficiency of 95% times the capture efficiency of 65%. This was demonstrated during the latest emissions test of 3/4/96.

%OC_s = OC content of the spray mold release agent

U_s = spray mold release agent usage

%OC_p = OC content of paste mold release agent

U_p = paste mold release agent usage

n = total number of different types of agents employed

** For items f, g, and h, the rolling, 365-day averages should be determined in accordance with the following equation:

$$(\text{daily value} + \text{total of daily values from previous 364 days}) / 365$$

Facility Name: **Johnson Controls Inc.**

Facility ID: **05-36-01-0034**

Emissions Unit: **Foam Line 1 (P007)**

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the combustion chamber of the regenerative thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The continuous monitoring and recording devices shall be capable of accurately measuring the desired parameters, and the owner or operator shall properly operate and maintain the devices in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day for the control equipment:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1400 degrees Fahrenheit.
- b. A log of downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit deviation reports which identify the days during which any photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s), and the estimated total quantity of material(s) emitted during each such day, in pounds. Each report shall be submitted to the Director (appropriate DO or LAA) within 30 days of the deviation.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 365-day emission and usage limitations for spray mold release and paste mold release agents.
3. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified above.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A. I. 1. of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation-
218.5 pounds OC per day, based on a rolling, 365-day average

Applicable Compliance Method-

Compliance shall be based upon the record keeping specified in Section A.III.2.

V. Testing Requirements (continued)

1.b Emission Limitation-
0.551 lb PM/hr

Applicable Compliance Method-

If required, compliance shall be based on stack testing pursuant to OAC 3745-17-03(B)(10).

1.c Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the spray and paste mold release agents.

2.a The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

i. The emission testing shall be conducted within approximately 2.5 years after permit issuance and within 6 months prior to permit renewal.

ii. The following test methods shall be employed to determine the 61% overall control efficiency of the control equipment serving this emissions unit: 40 CFR Part 60, Appendix A, Method 25, and 40 CFR Part 51, Appendix M, Method 204..

iii. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

2.b The overall control efficiency of the control equipment serving this emissions unit shall be demonstrated based upon the results of the capture efficiency and control efficiency tests specified above. The capture efficiency shall be determined using Methods 204-204F, as specified in 40 CFR Part 51 Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures established in the mass balance protocol approved on 10/25/95. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Facility Name: **Johnson Controls Inc.**
Facility ID: **05-36-01-0034**
Emissions Unit: **Foam Line 1 (P007)**

V. Testing Requirements (continued)

- 2.c** Not later than 30 days prior to the proposed test date(s), this facility shall submit an "Intent to Test" notification. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or Local Air Agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or Local Air Agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information regarding the emissions unit operating parameters. A comprehensive written report on the results of the emissions tests shall be submitted to the appropriate Ohio EPA District Office or Local Air Agency within 30 days following completion of the test(s).

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Southwest District Office.

VI. Miscellaneous Requirements

- 1.** The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install #05-6470, as issued on June 28, 1995: Part III, Sections A.I-IV., A.V.1.a., A.V.2., B.I.1., B.I.2.b and c., B.II-IV., B.V.1.a., B.V.2.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyurethane Foam Molding Line #2 with Regenerative Thermal Oxidizer (RTO)	OAC rule 3745-31-05 See section A.VI.	348.0 pounds OC/day; 40.5 tons of OC per year 1.0 pound particulates/day 0.25 tons per year of particulates Combustion Emissions from the RTO: 0.02 lb PM/hr, 0.08 TPY PM 0.002 lb SO ₂ /hr, 0.01 TPY SO ₂ 0.08 lb CO/hr, 0.37 TPY CO 0.03 lb OC/hr, 0.14 TPY OC 0.40 lb NO _x /hr, 1.75 TPY NO _x

2. Additional Terms and Conditions

- 2.a The 1.0 pound per day and 0.25 ton per year of particulates and all of the combustion emissions 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.
- 2.b The maximum amount of spray mold release agent employed in this emissions unit shall not exceed 700 pounds per day and 83 tons per year.

The maximum amount of paste mold release agent employed in this emissions unit shall not exceed 75 pounds per day and 7.5 tons per year.
- 2.c The total OC emissions from this emissions unit shall not exceed 40.5 tons per year, based upon a rolling, 365-day summation of the daily emissions.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Same as section A.III.2.a-e.

IV. Reporting Requirements

1. The permittee shall submit, in writing, an annual report to the Director (appropriate District Office or local air agency) which specifies the following from this emissions unit for the previous calendar year:
 - a. total OC emissions, in tons,
 - b. total amount of spray mold release employed, in tons,
 - c. total amount of paste mold release employed, in tons.

This report shall be submitted by January 31st each year.

2. The permittee shall, on an ongoing basis, evaluate the availability of alternate spray mold release agents and application methods that will reduce the OC emissions and/or increase the capture and control efficiency. Should an alternate spray mold release agent and/or application/control system become available, based on a cost-effectiveness review, the permittee shall submit a schedule for implementation of the alternate agent and/or application/control system within 30 days of the availability.

The permittee shall submit semi-annual reports that summarize the evaluation of alternate mold release agents and/or application/control systems which detail the following information:

- a. The OC content of the alternate spray mold release.
- b. The acceptability of the alternate spray mold release and/or application/control system.
- c. The reason why the alternative meets or does not meet production specifications.
- d. The expected reduction in OC emissions.
- e. The cost of modifying the operations to utilize the alternative.

These reports shall be submitted to the Director (appropriate District Office or Local Air Agency) by February 15th and August 15th of each year and shall cover the evaluation and testing of the previous six months.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section B. I. 1. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
348 lbs OC/day

Applicable Compliance Method:
Compliance shall be based upon the recordkeeping specified in sections A.III.2 and A.V.2.a-c.

1.b Emission Limitation-
40.5 tons OC per year

Applicable Compliance Method-
Compliance shall be based upon the recordkeeping specified in Section A.III.2.e. and shall be the sum of the daily OC emission rates for the calendar year, divided by 2000 pounds per ton.

1.c Emission Limitation-
1.0 pound particulate per day
0.25 tons per year of particulate

Applicable Compliance Method-
If required, compliance shall be based on stack testing pursuant to OAC rule 3745-17-03(B)(10).

1.d Emission Limitations-
0.02 pound PM/hr
0.002 pound SO₂/hr
0.08 pound CO/hr
0.03 pound OC/hr
0.40 pound NO_x/hr

Applicable Compliance Method-
Compliance shall be determined by multiplying the AP-42 emission factors for natural gas by the maximum hourly gas burning capacity (4,000 cu. ft.) of the emissions unit.

1.e Emission Limitations-
0.08 TPY PM
0.01 TPY SO₂
0.37 TPY CO
0.14 TPY OC
1.75 TPY NO_x

Applicable Compliance Method-
The TPY limitations were developed by multiplying the lb/hr limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

Facility Name: **Johnson Controls Inc.**
Facility ID: **05-36-01-0034**
Emissions Unit: **Foam Line 1 (P007)**

VI. Miscellaneous Requirements

None

Facility Name: **Johnson Controls Inc.**

Facility ID: **05-36-01-0034**

Emissions Unit: **Foam Line 3 (P008)**

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Foam Line 3 (P008)

Activity Description: Polyurethane Foam Molding Line.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyurethane Foam Molding Line #3	OAC rule 3745-21-07(G) See section A.VI. OAC rule 3745-17-11 See section A.VI. OAC rule 3745-31-05 See section A.VI.	See T&C A.II.1. below. 0.551 pound/hr particulate 287.7 pounds OC/day, based on a rolling, 365-day average

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Ohio EPA field office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

2. The total amount of spray mold release agent employed shall not exceed 246.6 pounds per day based on a rolling, 365-day average.
3. The total amount of paste mold release agent employed shall not exceed 41.1 pounds per day based on a rolling, 365-day average.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month:
 - a. the company identification of each spray and paste mold release agent employed in this emissions unit, and
 - b. whether or not each spray and paste mold release agent employed is a photochemically reactive material.

Facility Name: **Johnson Controls Inc.**

Facility ID: **05-36-01-0034**

Emissions Unit: **Foam Line 3 (P008)**

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall maintain daily records of the following information:
 - a. The company identification of each spray and paste mold release agent.
 - b. The amount of spray mold release agent employed, in pounds.
 - c. The amount of paste mold release agent employed, in pounds.
 - d. The OC content of each paste and spray mold release agent, in percent by weight.
 - e. The total daily OC emissions from the use of paste and spray mold release agents, in pounds*.
 - f. The rolling, 365-day average of the total OC emissions, in pounds**.
 - g. The rolling, 365-day average of the spray mold release agent usage, in pounds**.
 - h. The rolling, 365-day average of the paste mold release agent usage, in pounds**.

*For item e, the total OC emissions should be determined in accordance with the following equation:

$$E_t = [(\%OCs_1)(Us_1) + (\%OCs_2)(Us_2) \dots + (\%OCs_n)(Us_n)] + [(\%OCp_1)(Up_1) + (\%OCp_2)(Up_2) \dots + (\%OCp_n)(Up_n)]$$

where:

E_t = total daily OC emissions

$\%OCs$ = OC content of the spray mold release agent

Us = spray mold release agent usage

$\%OCp$ = OC content of paste mold release agent

Up = paste mold release agent usage

n = total number of different types of agents employed

** For items f, g, and h, the rolling, 365-day averages should be determined in accordance with the following equation:

$$(\text{daily value} + \text{total of daily values from previous 364 days}) / 365$$

IV. Reporting Requirements

1. The permittee shall submit deviation reports which identify the days during which any photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s), and the estimated total quantity of material(s) emitted during each such day, in pounds. Each report shall be submitted to the Director (appropriate DO or LAA) within 30 days of the deviation.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 365-day emission and usage limitations for spray mold release and paste mold release agents.

Facility Name: **Johnson Controls Inc.**

Facility ID: **05-36-01-0034**

Emissions Unit: **Foam Line 3 (P008)**

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A. I. 1. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation-
287.7 pounds OC per day, based on a rolling, 365-day average

Applicable Compliance Method-
Compliance shall be based upon the record keeping specified in Section A.III.2.

1.b Emission Limitation-
0.551 lb PM/hr

Applicable Compliance Method-
If required, compliance shall be based on stack testing pursuant to OAC 3745-17-03(B)(10).

1.c Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the spray and paste mold release agents.

VI. Miscellaneous Requirements

1. The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install #05-6470, as issued on June 28, 1995: Part III, Sections A.I-IV., A.V.1.a., B.I.1., B.I.2.b and c., B.II-IV., B.V.1.a.

Facility Name: **Johnson Controls Inc.**

Facility ID: **05-36-01-0034**

Emissions Unit: **Foam Line 3 (P008)**

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyurethane Foam Molding Line #2 with Regenerative Thermal Oxidizer (RTO)	OAC rule 3745-31-05 See section A.VI.	445.0 pounds OC/day; 52.5 tons of OC per year 1.0 pound particulates/day 0.44 tons per year of particulates Combustion Emissions from the RTO: 0.02 lb PM/hr, 0.08 TPY PM 0.002 lb SO ₂ /hr, 0.01 TPY SO ₂ 0.08 lb CO/hr, 0.37 TPY CO 0.03 lb OC/hr, 0.14 TPY OC 0.40 lb NO _x /hr, 1.75 TPY NO _x

2. Additional Terms and Conditions

- 2.a The 1.0 pound per day and 0.44 ton per year of particulates 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.
- 2.b The maximum amount of spray mold release agent employed in this emissions unit shall not exceed 370 pounds per day and 83 tons per year.

The maximum amount of paste mold release agent employed in this emissions unit shall not exceed 75 pounds per day and 7.5 tons per year.
- 2.c The total OC emissions from this emissions unit shall not exceed 52.5 tons per year, based upon a rolling, 365-day summation of the daily emissions.

Facility Name: **Johnson Controls Inc.**

Facility ID: **05-36-01-0034**

Emissions Unit: **Foam Line 3 (P008)**

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Same as section A.III.2.a-e.

IV. Reporting Requirements

1. The permittee shall submit, in writing, an annual report to the Director (appropriate District Office or local air agency) which specifies the following from this emissions unit for the previous calendar year:
 - a. total OC emissions, in tons,
 - b. total amount of spray mold release employed, in tons,
 - c. total amount of paste mold release employed, in tons.

This report shall be submitted by January 31st each year.

2. The permittee shall, on an ongoing basis, evaluate the availability of alternate spray mold release agents and application methods that will reduce the OC emissions and/or increase the capture and control efficiency. Should an alternate spray mold release agent and/or application/control system become available, based on a cost-effectiveness review, the permittee shall submit a schedule for implementation of the alternate agent and/or application/control system within 30 days of the availability.

The permittee shall submit semi-annual reports that summarize the evaluation of alternate mold release agents and/or application/control systems which detail the following information:

- a. The OC content of the alternate spray mold release.
- b. The acceptability of the alternate spray mold release and/or application/control system.
- c. The reason why the alternative meets or does not meet production specifications.
- d. The expected reduction in OC emissions.
- e. The cost of modifying the operations to utilize the alternative.

These reports shall be submitted to the Director (appropriate District Office or Local Air Agency) by February 15th and August 15th of each year and shall cover the evaluation and testing of the previous six months.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section B. I. 1. of these terms and conditions shall be determined in accordance with the following method(s):

Facility Name: **Johnson Controls Inc.**

Facility ID: **05-36-01-0034**

Emissions Unit: **Foam Line 3 (P008)**

V. Testing Requirements (continued)

1.a Emission Limitation:
445 lbs OC/day

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in Section A.III.2.a-e.

1.b Emission Limitation-
52.5 tons OC per year

Applicable Compliance Method-
Compliance shall be based upon the recordkeeping specified in Section A.III.2.e. and shall be the sum of the daily OC emission rates for the calendar year, divided by 2000 pounds per ton.

1.c Emission Limitation-
1.0 pound particulate per day
0.44 tons per year of particulate

Applicable Compliance Method-
If required, compliance shall be based on stack testing pursuant to OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Adhesive Repair L1&2 (P009)

Activity Description: Adhesive used to repair defects in parts manufactured on P005 & P007

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyurethane Foam Seating Repair Line	OAC rule 3745-21-07(G) See section A.VI. OAC rule 3745-31-05 See section A.VI.	See T&C A.II.1 below. 63.84 pounds of OC per day, based on a rolling, 365-day average

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

Prior to employing any photochemically reactive materials, the permittee shall provide written notification to, and obtain approval from, the Ohio EPA field office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in materials will comply with the emission limits and/or control requirements as defined in OAC 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month:
 - a. the company identification of each repair material employed in this emissions unit, and
 - b. whether or not each repair material employed is a photochemically reactive material.
2. The permittee shall collect and record the following information, each day, for this emissions unit:
 - a. The company identification of the repair materials.
 - b. The amount of repair material employed, in pounds.
 - c. The OC content of each repair material, in percent by weight.
 - d. The calculated OC emissions from the repair materials, in pounds per day, i.e., the summation of (b) x (c) for all repair materials.
 - e. The rolling, 365-day OC average for this emissions unit, in pounds, i.e., [(d) + total organic emissions from the previous 364 days]/365.

IV. Reporting Requirements

1. The permittee shall submit deviation reports which identify the days during which photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s), and the estimated total quantity of material(s) emitted during each such day, in pounds. Each report shall be submitted to the Director (appropriate DO or LAA) within 30 days of the deviation.

V. Testing Requirements

1. Formulation data for USEPA Method 24 shall be used to determine the organic compound contents of the repair materials.

VI. Miscellaneous Requirements

1. The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 05-8336, as issued on June 2, 1997: Part III, Sections: A.I-II., A.III.2., B.I., B.III.-IV.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
Polyurethane Foam Seating Repair Line	OAC rule 3745-31-05 See section A.VI.	115 pounds of OC per day; 11.65 tons of OC per year

2. Additional Terms and Conditions

- 2.a The maximum OC emissions from this emissions unit shall not exceed 115 pounds per day.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Same as A.III.2.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify any exceedances of the maximum daily limit for organic compounds.
2. The permittee shall submit, in writing, an annual report to the Director (appropriate District Office or local air agency) which specifies the total OC emissions, in tons, from this emissions unit for the previous calendar year. This report shall be submitted by January 31st each year.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section B. I. 1. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation-
115.0 pounds OC per day:

Applicable Compliance Method-
Compliance shall be based upon the record keeping specified in section A.III.2.

1.b Emission Limitation-
11.65 tons OC per year

Applicable Compliance Method-
Compliance shall be based upon the record-keeping specified in section A.III.2.e and shall be the sum of the daily OC emission rates for the calendar year, divided by 2000 pounds per ton.

VI. Miscellaneous Requirements

None

Facility Name: **Johnson Controls Inc.**
Facility ID: **05-36-01-0034**

THIS IS THE LAST PAGE OF THE PERMIT
