

TENNESSEE AIR POLLUTION CONTROL BOARD  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
NASHVILLE, TENNESSEE 37243-1531

RECEIVED

NOV 22 2004  
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Columbia OK

COLUMBIA FIELD OFFICE  
DIV. OF AIR POLLUTION CONTROL

**MODIFICATION #1 TO:**

**OPERATING PERMIT (TITLE V)** Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-3-9-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Date Issued: **April 29, 2004**

Date of Minor Modification #1: **NOV 15 2004**

Date Expires: **April 1, 2009**

Permit Number:

**556316**

Issued To:

**Johnson Controls, Inc**

Installation Address:

**1890 Mines Road**

**Pulaski**

Installation Description:

**01 - Polyurethane Foam Manufacturing (3 Lines)**

Modification #1: Revise emission factor for DEOA

Emission Source Reference No.: **28-0076**

Renewal Application Due Date: **Between June 1, 2008 and October 1, 2008**

Primary SIC: **25**

Responsible Official:

Name: **Orlando Castano**

Title: **Plant Manager**

Facility Contact Person:

Name: **Randy Austin**

Title: **Environmental Coordinator**

Phone: **(931) 424-7872**

Information Relied Upon:

Letter Dated: **September 15, 2004**

(Continued on the next page)

  
TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

**POST OR FILE AT INSTALLATION ADDRESS**

CN-0827 (Rev.9-92)

**RDA-1298**

## SECTION E

## SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

28-0076	Facility Description:	Polyurethane Foam Manufacturing
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## E2(M1) (MODIFIED BECAUSE OF MODIFICATION #1)

Reporting requirements.

- (a) Semiannual reports. The first report shall cover the 6-month period from ~~October 1, 2004 to March 31, 2005~~ and shall be submitted within 60 days after the 6-month period ending March 31, 2005. Subsequent reports shall be submitted within 60 days after the end of each 6-month period following the first report.

Semiannual reports of this facility (28-0076) shall include:

- (1) Any monitoring and recordkeeping required by Conditions ~~B4-2(M1)~~ of this permit.
- (2) The visible emission evaluation readings from Condition ~~B3-1~~ of this permit if required. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (3) Identification of all instances of deviations from ALL PERMIT REQUIREMENTS.

These reports must be certified by a responsible official consistent with condition B4 of this permit and shall be submitted to The Technical Secretary at the address in Condition E2(b) of this permit.

TAPCR 1200-3-9-.02(11)(e)1.(iii)

- (b) Annual compliance certification. The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

- (1) The identification of each term or condition of the permit that is the basis of the certification;
- (2) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
- (3) Whether such method(s) or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
- (4) The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in E2(b)2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion\* or exceedance\*\* as defined below occurred; and
- (5) Such other facts as the Technical Secretary may require to determine the compliance status of the source.

\* "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

\*\* "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

The first certification shall cover the 12-month period from ~~October 1, 2004 to September 31, 2005~~ and shall be submitted within 60 days after the 12-month period ending ~~September 31, 2005~~. Subsequent certifications shall be submitted within 60 days after the end of each 12-month period following the first certification.

These certifications shall be submitted to:

The Technical Secretary  
Division of Air Pollution Control  
ATTN: West Tennessee Permit Program  
9th Floor, L & C Annex  
401 Church Street  
Nashville, Tennessee 37243-1531

and

Air and EPCRA Enforcement Branch  
US EPA Region IV  
61 Forsyth Street, SW  
Atlanta, Georgia 30303

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol.62, No.204, October 22, 1997, pages 54946 and 54947

**E3. General Permit Conditions.**

- E3-4(M1)** For purposes of compliance with Volatile Organic Compound (VOC) and Hazardous Air Pollutants (HAPs) emissions limits in this permit, the following logs (LOG 1 and LOG 2) shall be used. These logs shall contain all volatile emissions excluding water and/or exempt compounds and also shall contain all HAPs. Records shall also be retained to verify the HAP content of each material. This may include MSDS, formulation data, or other documentation to establish the HAP content. These logs and records must be retained for a period of not less than five years and shall be reported in accordance with condition **E2(M1)** of this permit.

[illegible]

**LOG 2 YEARLY LOG FOR {28-0076-01}**

MONTH/YEAR	VOC EMISSIONS (TONS per MONTH)	(*) VOC EMISSIONS (TONS per 12 MONTHS)	HAP-1 EMISSIONS (TONS per MONTH)	(*) HAP-1 EMISSIONS (TONS per 12 MONTHS)	HAP-2 EMISSIONS (TONS per MONTH)	(*) HAP-2 EMISSIONS (TONS per 12 MONTHS)	HAP-3 EMISSIONS (TONS per MONTH)	(*) HAP-3 EMISSIONS (TONS per 12 MONTHS)	TOTAL HAP EMISSIONS (TONS per MONTH)	(*) TOTAL HAP EMISSIONS (TONS per 12 MONTHS)
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										

(\*) The Tons per 12 Month value is the sum of the VOC (or HAP) emissions in the 11 months preceding the month just completed + the VOC (or HAP) emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 tons emitted in 2 months].

**E4. Source Specific Emission Standards.****Polyurethane Foam Production****28-0076-01**

Source consists of foam production lines where various mixtures of Polyol, Toluene Diisocyanate (TDI), and Diethanolamine (DEOA), are injected into molds to produce polyurethane foam for automotive seat cushions. Minor repairs are performed using Methylene Diphenyl Diisocyanate (MDI) as the foaming agent.  
MINOR MODIFICATION #1: Revise emission factor for DEOA

**M1-1** It has been determined that the revision of the DEOA emission factor qualifies as a minor permit modification as stated under 1200-3-9-.02(11) (f) 5 (ii) of the Tennessee Air Pollution Control Regulations. This is a minor permit modification to the Title V Permit #556316. This is not a modification under Title I of the Federal Act.

**E4-2(M1)** Volatile organic compounds (VOC) emitted from this source shall not exceed **248.0** tons during all intervals of twelve (12) consecutive months.

**Compliance Method:** The permittee shall calculate the actual quantities of VOC and HAPs emitted from this facility during each calendar month and during each twelve consecutive (12) month period. The permittee shall maintain records of these emissions in a form that readily shows compliance with this condition. (See **Logs 1 and 2** for an example) These logs must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. These logs must also be reported in accordance with condition **E2(M1)** of this permit and be retained for a period of not less than five (5) years.

- Toluene Diisocyanate (TDI) emissions shall be calculated using the emission factor of  $3.29 \times 10^{-5}$  lb TDI emitted per lb of TDI used. This emission factor is based on a source test performed on October 1, 1997.
- Diethanolamine (DEOA) emissions shall be calculated using the emission factor of  $7.94 \times 10^{-6}$  lb DEOA emitted per lb of DEOA used. This emission factor is based on calculations described in a letter dated September 15, 2004, signed by Orlando Castano, Plant Manager of the facility.
- Methylene Diphenyl Diisocyanate (MDI) emissions shall be calculated using the emission factor of  $9.39 \times 10^{-6}$  lb MDI emitted per lb of MDI used. This emission factor is based on a source test performed on October 1, 1997.

**M1-2** Conditions E2(M1), E3-4(M1), and E4-2(M1) of this Minor Modification #1 replace conditions E2, E3-4, and E4-2 of Title V permit #556316, respectively. With the exception of conditions E2, E3-4 and E4-2, the permittee shall comply with all requirements of the Title V permit #556316.

**End of Minor Modification #1**

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DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF AIR POLLUTION CONTROL  
NASHVILLE, TENNESSEE 37243-1531



NOTICE OF PERMIT UPDATE

COMPANY FILE  
NUMERIC FILE  
EAC - *Columbia*

FROM John Fuss  
DATE 11-12-04

STAPLE THE ATTACHED LETTER (TITLE V OR NON-TITLE V OPERATIONAL FLEXIBILITY LETTER) OR MINOR MODIFICATION (AS INDICATED) TO THE END OF PERMIT # 556316, COMPANY # 28 - 0076, SOURCE # 00.

CHECK THE APPROPRIATE BOX BELOW:

LETTER DATED _____
FROM _____
<input checked="" type="checkbox"/> MINOR MODIFICATION # <u>1</u>

CHECK THE APPROPRIATE BOX BELOW:

CONCERNING	<div>RECEIVED NOV 22 2004 BSH TRH COLUMBIA FIELD OFFICE DIV. OF AIR POLLUTION CONTROL</div>
OPERATIONAL FLEXIBILITY NON TITLE V	
OPERATIONAL FLEXIBILITY TITLE V	
<input checked="" type="checkbox"/> MINOR MODIFICATION TITLE V	

THE LETTER OR MINOR MODIFICATION MUST BE STAPLED  
TO THE BACK OF THE PERMIT