INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: April 17, 2012

RE: Freudenberg – NOK General Partnership / 145-31681-00028

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

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

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-AM.dot12/3/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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April 17, 2012

Robert Sams
Freudenberg - NOK General Partnership
555 Marathon Blvd.
Findlay, OH 45840

Re: F145-31681-00028
First Administrative Amendment to
F145-30383-00028

Dear Mr. Sams:

Freudenberg - NOK General Partnership was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F145-30383-00028 on December 14, 2011 for a stationary rubber product manufacturing process located at 487 West Main Street, Morristown, Indiana 46161. On March 29, 2012 the Office of Air Quality (OAQ) received an application from the source relating to construction and operation of a new automated coating booth (TUMB4), coating metal and rubber parts, of the same type and will comply with the same applicable requirements and permit terms and conditions as the existing three (3) automated coating booths (TUMB1, TUMB2, and TUMB3). The new automate coating booth (TUMB4) will have the same controls as the existing three automated coating booths: overspray is controlled by dry filters, while VOC and HAPs are controlled by one (1) thermal oxidizer.

Pursuant to 326 IAC 8-1-6, the thermal oxidizer for VOC control shall be in operation at all times when any of the four (4) automated coating booths, identified as TUMB1, TUMB2, TUMB3, and TUMB4, are in operation and maintain a minimum of 98% destruction and 90% capture efficiency for a period of one (1) year from the start of operation of any one (1) automated booth. Pursuant to 326 IAC 8-1-6, no later than one (1) year from the start of operation of any one (1) automated coatings booth (TUMB1, TUMB2, TUMB3, and TUMB4), or completion of permanent total enclosure, whichever is first, the thermal oxidizer for VOC control shall achieve a minimum of 98% destruction and 100% capture efficiency thereafter. These limits (Section D.1 of the Permit) and the FESOP 2-8-4 limits (Section D.2 of the Permit) render the requirements of 326 IAC 2-2 not applicable for VOCs. The TUMB4 unit will also comply with the same worst case single HAP limitation and total HAPs limitation as specified for the other three automated coating booths. Further, compliance monitoring currently required for the existing three automated coating booths will also be required for the new TUMB4 unit. Lastly, pursuant to 326 IAC 6-3-2(d), particulate from the new TUBM4 automated coating booth shall be controlled by particulate dry filters, and the Permittee shall operate the control devices in accordance with manufacturer's specifications

The addition the new TUMB4 unit to the permit is considered an administrative amendment pursuant to 326 IAC 2-8-10(a)(14). The entire source will continue to limit PM10, PM2.5, and VOC emissions to less than 100 tons per twelve (12) consecutive month period, rendering the requirements of 326 IAC 2-7 not applicable. The addition of these units will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-3 for PM, PM10, or PM2.5.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Administrative (tons/year)									
	PM	PM_{10}*	$PM_{2.5}$**	NOx	SO_2	VOC	CO	GHGs	Total HAPs	Worst Single HAP
Tumbler #1 (TUMB1)	0.15	0.15	0.15			0.85			0.88	0.78 (MIKB)
Tumbler #2 (TUMB2)	0.15	0.15	0.15			0.85			0.88	0.78 (MIKB)
Tumbler #3 (TUMB3)	0.15	0.15	0.15			0.85			0.88	0.78 (MIKB)
Tumbler #4 (TUMB4)	0.15	0.15	0.15			0.85				
Manual Coat Booth (MAN 1)	0.0039	0.0039	0.0039			1.00			1.05	0.99 (MIKB)
Rubber Presses (Rubber)						44.45			9.05	8.78 (Carbon Disulfide)
Rubber Presses (Mold Release)						10.00			5.0	1.0 (Carbon Disulfide)
Rubber Curing Ovens	0.55	0.55	0.55			15.30			2.82	2.27 (Hexane)
Universal Mold Cleaning Blaster (plastic bead)	1.72	1.72	1.72							
Wheelabrator Casing Gritblaster (metal bead)	1.03	1.03	1.03							
Mold Cleaning Gritblaster (Aluminum Oxide)	3.44	3.44	3.44							
Mold Cleaning Blaster (Baking Soda)***	31.38	85.95	85.95							
Empire Blaster (Aluminum Oxide)	1.72	1.72	1.72							
Natural Gas Fired Heating Units	0.15	0.59	0.44	7.71	0.05	0.42	6.48	9,306.86	0.14	0.14 (Hexane)
Hydraulic Oil Storage Tanks						0.01				
Phosphating Line						1.24			0.31	0.31 (Glycol)
Fugitive Dust (paved roads)	0.14	0.03	0.01							
Total PTE of Entire Source	**40.71**	**95.61**	**95.44**	**7.71**	**0.05**	**75.82**	**6.48**	**9,306.86**	**18.95**	**<10**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO_2e	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO_2e	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

negl. = negligible
*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
**$PM_{2.5}$ listed is direct $PM_{2.5}$.
*** The PM emissions from the mold cleaning blaster (Baking Soda) shall not exceed the allowable PM emissions pursuant to 326 IAC 6-3-2.

Pursuant to the provisions of 326 IAC 2-8-10, the permit is hereby administratively amended as follows with the deleted language as ~~strikeouts~~ and new language **bolded**:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

Coating Booths

(a) ~~Three (3)~~ **Four (4)** automated coating booths, identified as TUMB1, TUMB2**,** ~~and~~ TUMB3, **and TUMB4,** coating metal and rubber parts, installed in 2005, with overspray controlled by dry filters, VOC and HAPs controlled by one (1) thermal oxidizer, identified as RT01, ~~installed in 2005~~, which exhausts to one (1) stack, identified as RT01. **TUMB1, TUMB2 and TUMB3 are installed in 2005 and TUMB4 is approved for construction in 2012.**

...

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Coating Booths

(a) ~~Three (3)~~ **Four (4)** automated coating booths, identified as TUMB1, TUMB2**,** ~~and~~ TUMB3, **and TUMB4,** coating metal and rubber parts, installed in 2005, with overspray controlled by dry filters, VOC and HAPs controlled by one (1) thermal oxidizer, identified as RT01, ~~installed in 2005~~, which exhausts to one (1) stack, identified as RT01. **TUMB1, TUMB2 and TUMB3 are installed in 2005, and TUMB4 is approved for construction in 2012.**

(b) One (1) manual coating booth, identified as MAN1, coating metal and rubber parts, installed in 2005, with overspray controlled by dry filters, exhausting to one (1) stack, identified as RT01.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 VOC Limits [326 IAC 8-1-6]

(a) Pursuant to 326 IAC 8-1-6, the thermal oxidizer for VOC control shall be in operation at all times when any of the **four (4)** automated coating booths, identified as TUMB1, TUMB2**,** ~~and~~ TUMB3, **and TUMB4**, are in operation and maintain a minimum of 98% destruction and 90% capture efficiency for a period of one (1) year from the start of operation of any one (1) automated booth.

(b) Pursuant to 326 IAC 8-1-6, no later than one (1) year from the start of operation of any one (1) automated coatings booth (TUMB1, TUMB2**,** ~~and~~ TUMB3, **and TUMB4**), or completion of permanent total enclosure, whichever is first, the thermal oxidizer for VOC control shall achieve a minimum of 98% destruction and 100% capture efficiency thereafter.

(c) Pursuant to 326 IAC 8-1-6, the total amount of VOC delivered to the coating applicators, including VOC solvent and diluent usage, of the automated booths (TUMB1, TUMB2**,** ~~and~~ TUMB3, **and TUMB4**) shall be limited to less than 127.20 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month.

(d) In order to render the requirements of 326 IAC 8-1-6 not applicable, the total input usage of volatile organic compounds (VOC) at the one (1) manual coating booth, identified as MAN1, including VOC solvent and diluent usage, shall be less than one (1) ton per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this condition shall limit the manual coating booth potential to emit VOC to less than 15 tons per twelve (12) consecutive month period.

Compliance with Condition D.1.1(d) shall limit the VOC emissions from the manual coating booth (MAN1) to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, and in order to render the requirements of 326 IAC 2-2 not applicable,

the Permittee shall comply with the following requirements:

(a) The thermal oxidizer for VOC control shall achieve a minimum of 98% destruction and 100% capture efficiency.

(b) The total input usage of volatile organic compounds (VOC) at the ~~three (3)~~ **four (4)** automated surface coating booths (TUMB1, TUMB2**,** ~~and~~ TUMB3, **and TUMB4**), including solvent and diluent usage, shall be limited to less than 127.20 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The total input usage of volatile organic compounds (VOC) at the one (1) manual coating booth, identified as MAN1, including VOC solvent and diluent usage, shall be less than one (1) ton per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit VOC from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than 100 tons per 12 consecutive month period and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.3 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4] [40 CFR Part 63.2]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following requirements:

(a) The thermal oxidizer for HAP control shall be in operation at all times when any of the **four (4)** automated coating booths, identified as TUMB1, TUMB2**,** ~~and~~ TUMB3, **and TUMB4**, are in operation and maintain a minimum of 98% destruction and 100% capture efficiency.

(b) Total usage of any single HAP delivered to the coating applicators of the automated coating booths (TUMB1, TUMB2**,** ~~and~~ TUMB3, **and TUMB4**) shall be limited to less than 123.6 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) Total usage of any combination of HAPs delivered to the coating applicators of the automated coating booths (TUMB1, TUMB2**,** ~~and~~ TUMB3, **and TUMB4**) shall be limited to less than 132.3 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) Total usage of any single HAP at the manual coating booth (MAN1), including solvent used for clean-up, shall be limited to less than one (1) ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

(e) Total usage of the combination of HAPs at the manual coating booth (MAN1), including solvent used for clean-up, shall be limited to less than 1.05 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of any single HAP to less than ten (10) tons per 12 consecutive month period and total HAPs to less than twenty-five (25) tons per 12 consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) and 40 CFR Part 63, Subpart MMMM (National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products) not applicable.

D.1.4 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the ~~three (3)~~ **four (4)** spray tumblers and one (1)

manual spray booth, shall be controlled by particulate dry filters, and the Permittee shall operate the control devices in accordance with manufacturer's specifications

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.6 Emissions Control

(a) In order to comply with Conditions D.1.1, D.1.2, and D.1.3 the thermal oxidizer shall be in operation at all times when any of the ~~three (3)~~ **four (4)** automated surface coating booths are in operation

(b) In order to comply with Condition D.1.4 the dry filters for particulate control shall be in operation at all times when any of the ~~three (3)~~ **four (4)** automated surface coating booths and the one (1) manual coating booth are in operation.

D.1.7 Testing Requirements [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform VOC efficiency testing (capture and destruction) of the thermal oxidizer utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition

(b) In order to demonstrate compliance with Condition D.1.3, the Permittee shall perform HAP efficiency testing (capture and destruction) of the thermal oxidizer utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.8 VOCs and HAPs [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

(a) Compliance with the VOC and HAP content and usage limitations contained in Conditions D.1.1, D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4

(b) Compliance with the VOC emission limitation contained in Conditions D.1.1(a), D.1.1(b), D.1.1(c) and D.1.1(d) and the HAP emission limitations contained in Condition D.1.3 shall be determined using the following equations:

Equation (1)

VOC emissions = (VOC input to TUMB1, TUMB2**,** ~~and~~ TUMB3**, and TUMB4**) *
(100 -% overall control efficiency) + VOC input to MAN1

Equation (2)

HAP emissions = (HAP input to TUMB1, TUMB2**,** ~~and~~ TUMB3**, and TUMB4**)
*(100 -% overall control efficiency) + HAP input to MAN1

Where:

Overall control efficiency (including capture and destruction) is equal to the control efficiency determined by the most recent IDEM approved stack test.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

Facility: ~~Three (3)~~ **Four (4)** automated surface coating booths (TUMB1, TUMB2**,** ~~and~~ TUMB3**, and TUMB4**)

Parameter: VOC usage

Limit: The total amount of VOC delivered to the coating applicators of the automated booths shall be limited to less than 127.20 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month.

...

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

Facility: ~~Three (3)~~ **Four (4)** automated surface coating booths (TUMB1, TUMB2**,** ~~and~~ TUMB3**, and TUMB4**)

Parameter: Worst case single HAP and combined HAP usage

...

Additional Changes

Upon further review, IDEM OAQ has decided to make the following changes to the permit:

(1) On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlining provisions. The change is only to site of these rules in Section B - Operational Flexibility. IDEM, OAQ has clarified the rule sites for the Preventive Maintenance Plan.

B.11 Preventative Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][~~326 IAC 2-8-5(a)(1)~~]

...

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) **and (c)** ~~through (d)~~ without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15~~(b)(2), (c)(1), and (d)~~ **(b)(1) and (c)**. The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15~~(b)(2), (c)(1), and (d)~~ **(b)(1) and (c).**

(b) Emission Trades [326 IAC 2-8-15 ~~(c)~~ **(b)**]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15 ~~(c)~~ **(b)**.

(c) Alternative Operating Scenarios [326 IAC 2-8-15 ~~(d)~~ **(c)**]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

...

(2) IDEM, OAQ has clarified the Permittee's responsibility with regards to record keeping.

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. **Support information includes the following:**

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

...

(3) IDEM, OAQ has clarified the interaction of the Quarterly Deviation and Compliance Monitoring Report and the Emergency Provisions.

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. **Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph**. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the

response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

...

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

...

This report shall be submitted quarterly based on a calendar year. **Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting.** Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

...

All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Sarah Street, of my staff, at 317-232-8427 or 1-800-451-6027, and ask for extension 2-8427.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit
Appendix A - Emissions Calculations

IC/ss

cc: File - Shelby County
Shelby County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Billing, Licensing and Training Section

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Federally Enforceable State Operating Permit Renewal
OFFICE OF AIR QUALITY

Freudenberg - NOK General Partnership
487 West Main Street
Morristown, Indiana 46161

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. 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 conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F145-30383-00028	
Original signed by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 14, 2011 Expiration Date: December 14, 2021

Administrative Amendment No.: F145-31681-00028	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: April 17, 2012 Expiration Date: December 14, 2021

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary rubber product manufacturing process.

Source Address:	487 West Main Street, Morristown, Indiana 46161
General Source Phone Number:	765-763-7246
SIC Code:	3053 (Gasket, Packing, and Sealing Devices) and 3069 (Fabricated Rubber Products, Not Elsewhere Classified)
County Location:	Shelby
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

Coating Booths

(a) Four (4) automated coating booths, identified as TUMB1, TUMB2, TUMB3, and TUMB4, coating metal and rubber parts, installed in 2005, with overspray controlled by dry filters, VOC and HAPs controlled by one (1) thermal oxidizer, identified as RT01, which exhausts to one (1) stack, identified as RT01. TUMB1, TUMB2 and TUMB3 are installed in 2005 and TUMB4 is approved for construction in 2012.

(b) One (1) manual coating booth, identified as MAN1, coating metal and rubber parts, installed in 2005, with overspray controlled by dry filters, exhausting to one (1) stack, identified as RT01.

Rubber Presses

(c) Ten (10) STA Presses, identified as Nos. 63, 64, 67, 68, 70, 71, 72, 73, 74 and 75, all installed in 1993, each with a maximum throughput rate of 1.5 pounds rubber per hour;

(d) Six (6) Small Lot Presses, identified as Nos. 120-123, installed in 2000 and 126, installed in 1993, each with a maximum throughput rate of 8.05 pounds rubber per hour;

(e) Eleven (11) Desma Presses, identified as Nos. 300, 301, 305, 307-309, and 312-316, installed in 2000, each with a maximum throughput rate of 13 pounds rubber per hour;

(f) One (1) REP Press, identified as Engel 100TL, installed in 2006, with a maximum throughput rate of 20.30 pounds rubber per hour;

(g) Thirteen (13) 20-P Presses, identified as Nos. 8-19, installed in 1993, each with a maximum throughput rate of 33 pounds rubber per hour;

(h) Eleven (11) 24-T Presses, identified as Nos. 6, and 50-59, installed in 1994, each with a maximum throughput rate of 33 pounds rubber per hour;

(i) Three (3) Misc. 16/20/24" Presses, identified as Nos. 5, 7 and 31, installed in 1973, each with a maximum throughput rate of 33 pounds rubber per hour;

(j) Ten (10) Desma presses, identified as 317-322, installed in 2008, and 324-327, installed in 2010, each with a maximum throughput of 13.0 pounds of rubber per hour.

(k) Seven (7) Miscellaneous 16/24" presses, identified as 929 (16"), 905-907, 914, 915, and 917, installed in 2010, each with a maximum throughput of 33 pounds of rubber per hour.

(l) Two (2) Panstone presses, identified as 910 and 911, installed in 2010, each with a maximum throughput of 13 pounds of rubber per hour.

(m) One (1) Grimco double deck press, identified as 912/913, installed in 2010, with a maximum throughput of 13 pounds of rubber per hour.

(n) Two (2) Hannifin Air presses, identified as 909 and 916, installed in 2010, each with a maximum throughput of 33 pounds of rubber per hour.

Cure Ovens

(o) Nine (9) electric post cure ovens, identified as Nos. 3805-3809, 3812, 3814, 3816 and 3817, installed in 1998, each with a maximum throughput rate of 20 pounds rubber per hour;

(p) One (1) electric post cure oven, identified as No. 3820, installed in 2002, with a maximum throughput rate of 6.9 pounds rubber per hour.

(q) One (1) phosphating line.

Blasters

(r) One (1) Universal Mold Cleaning Blaster, installed in 2001, utilizing plastic bead blast media, with a capacity of 1,000 pounds and maximum throughput capacity of 3,600 pounds of blast material per hour, with particulate emissions controlled by a dust collector which exhausts inside the building.

(s) One (1) Wheelabrator Metal Case Blaster, installed in 2002, utilizing metal bead blast media, with a capacity of 1,000 pounds and maximum throughput capacity of 333 pounds of blast material per hour, with particulate emissions controlled by a dust collector which exhausts inside the building.

(t) One (1) Gritblaster, utilizing aluminum oxide blast media, installed in 2010, with a capacity of 1, 000 pounds and a maximum throughput capacity of 3,600 pounds of blast material per hour, with particulate emissions controlled by a dust collector which exhausts inside the building.

(u) One (1) Universal Mold Cleaning Gritblaster, utilizing baking soda blast media, installed in 2008, with a capacity of 1, 000 pounds and a maximum throughput capacity of 3,600 pounds of blast material per hour, with particulate emissions controlled by a dust collector which exhausts inside the building.

(v) One Case Treat Blaster, utilizing aluminum oxide blast media, installed in 2009, with a with a capacity of 1, 000 pounds and a maximum throughput capacity of 3,600 pounds of blast material per hour, with particulate emissions controlled by a dust collector which exhausts inside the building.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour; including:

(1) thirty-seven (37) roof top units, makeup air units and heaters;

(2) one (1) evaporator;

(b) One (1) natural gas-fired 800 watt emergency generator with a 14 hp engine, constructed in 1996.

This is an affected source under 40 CFR 63, Subpart ZZZZ.

(c) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids, including two (2) hydraulic oil tanks.

(d) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(f) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(g) Paved and unpaved roads and parking lots with public access.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, F145-30383-00028, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

(1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F145-30383-00028 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.16 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1 (21) and 326 IAC 2-7-1 (40). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the

document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (c) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)

77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(1) and (c).

(b) Emission Trades [326 IAC 2-8-15(b)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.19 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM) and greenhouse gases (GHGs), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Coating Booths

(a) Four (4) automated coating booths, identified as TUMB1, TUMB2, TUMB3, and TUMB4, coating metal and rubber parts, installed in 2005, with overspray controlled by dry filters, VOC and HAPs controlled by one (1) thermal oxidizer, identified as RT01, which exhausts to one (1) stack, identified as RT01. TUMB1, TUMB2 and TUMB3 are installed in 2005 and TUMB4 is approved for construction in 2012.

(b) One (1) manual coating booth, identified as MAN1, coating metal and rubber parts, installed in 2005, with overspray controlled by dry filters, exhausting to one (1) stack, identified as RT01.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 VOC Limits [326 IAC 8-1-6]

(a) Pursuant to 326 IAC 8-1-6, the thermal oxidizer for VOC control shall be in operation at all times when any of the four (4) automated coating booths, identified as TUMB1, TUMB2, TUMB3, and TUMB4, are in operation and maintain a minimum of 98% destruction and 90% capture efficiency for a period of one (1) year from the start of operation of any one (1) automated booth.

(b) Pursuant to 326 IAC 8-1-6, no later than one (1) year from the start of operation of any one (1) automated coatings booth (TUMB1, TUMB2, TUMB3, and TUMB4), or completion of permanent total enclosure, whichever is first, the thermal oxidizer for VOC control shall achieve a minimum of 98% destruction and 100% capture efficiency thereafter.

(c) Pursuant to 326 IAC 8-1-6, the total amount of VOC delivered to the coating applicators, including VOC solvent and diluent usage, of the automated booths (TUMB1, TUMB2, TUMB3, and TUMB4) shall be limited to less than 127.20 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month.

(d) In order to render the requirements of 326 IAC 8-1-6 not applicable, the total input usage of volatile organic compounds (VOC) at the one (1) manual coating booth, identified as MAN1, including VOC solvent and diluent usage, shall be less than one (1) ton per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this condition shall limit the manual coating booth potential to emit VOC to less than 15 tons per twelve (12) consecutive month period.

Compliance with Condition D.1.1(d) shall limit the VOC emissions from the manual coating booth (MAN1) to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, and in order to render the requirements of 326 IAC 2-2 not applicable, the Permittee shall comply with the following requirements:

(a) The thermal oxidizer for VOC control shall achieve a minimum of 98% destruction and

100% capture efficiency.

(b) The total input usage of volatile organic compounds (VOC) at the four (4) automated surface coating booths (TUMB1, TUMB2, TUMB3, and TUMB4), including solvent and diluent usage**,** shall be limited to less than 127.20 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The total input usage of volatile organic compounds (VOC) at the one (1) manual coating booth, identified as MAN1, including VOC solvent and diluent usage, shall be less than one (1) ton per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit VOC from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than 100 tons per 12 consecutive month period and shall render the requirements of of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.3 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4] [40 CFR Part 63.2]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following requirements:

(a) The thermal oxidizer for HAP control shall be in operation at all times when any of the four (4) automated coating booths, identified as TUMB1, TUMB2, TUMB3, and TUMB4, are in operation and maintain a minimum of 98% destruction and 100% capture efficiency.

(b) Total usage of any single HAP delivered to the coating applicators of the automated coating booths (TUMB1, TUMB2, TUMB3, and TUMB4) shall be limited to less than 123.6 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) Total usage of any combination of HAPs delivered to the coating applicators of the automated coating booths (TUMB1, TUMB2, TUMB3, and TUMB4) shall be limited to less than 132.3 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) Total usage of any single HAP at the manual coating booth (MAN1), including solvent used for clean-up, shall be limited to less than one (1) ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

(e) Total usage of the combination of HAPs at the manual coating booth (MAN1), including solvent used for clean-up, shall be limited to less than 1.05 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of any single HAP to less than ten (10) tons per 12 consecutive month period and total HAPs to less than twenty-five (25) tons per 12 consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) and 40 CFR Part 63, Subpart MMMM (National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products) not applicable.

D.1.4 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the four (4) spray tumblers and one (1) manual spray booth, shall be controlled by particulate dry filters, and the Permittee shall operate the control devices in accordance with manufacturer's specifications

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and their control devices . Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.6 Emissions Control

(a) In order to comply with Conditions D.1.1, D.1.2, and D.1.3 the thermal oxidizer shall be in operation at all times when any of the four (4) automated surface coating booths are in operation

(b) In order to comply with Condition D.1.4 the dry filters for particulate control shall be in operation at all times when any of the four (4) automated surface coating booths and the one (1) manual coating booth are in operation.

D.1.7 Testing Requirements [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform VOC efficiency testing (capture and destruction) of the thermal oxidizer utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition

(b) In order to demonstrate compliance with Condition D.1.3, the Permittee shall perform HAP efficiency testing (capture and destruction) of the thermal oxidizer utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.8 VOCs and HAPs [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

(a) Compliance with the VOC and HAP content and usage limitations contained in Conditions D.1.1, D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4

(b) Compliance with the VOC emission limitation contained in Conditions D.1.1(a), D.1.1(b), D.1.1(c) and D.1.1(d) and the HAP emission limitations contained in Condition D.1.3 shall be determined using the following equations:

Equation (1)

VOC emissions = (VOC input to TUMB1, TUMB2, TUMB3, and TUMB4) * (100 - % overall control efficiency) + VOC input to MAN1

Equation (2)

HAP emissions = (HAP input to TUMB1, TUMB2, TUMB3, and TUMB4) *(100 - % overall control efficiency) + HAP input to MAN1

Where:

Overall control efficiency (including capture and destruction) is equal to the

control efficiency determined by the most recent IDEM approved stack test.

D.1.9 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for the three automated paint booths for measuring operating temperature. For the purpose of this condition, continuous means no less than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the stack test results are available, the Permittee shall operate the thermal oxidizers at or above the 3-hour average temperature of 1,400°F.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in Conditions D.1.1 (a), D.1.1 (b) and D.1.2 (a).

(c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizers at or above the hourly average temperature as observed during the compliant stack test.

(d) Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A temperature reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.10 Parametric Monitoring

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in Conditions D.1.1 (a), D.1.1 (b) and D.1.2 (a).

(b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizers are in operation. On and after the date the stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

(c) Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.11 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1, D.1.2 and D.1.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAP usage limits and/or the VOC and HAP emission limits established in Conditions D.1.1, D.1.2 and D.1.3. Records necessary to demonstrate compliance shall be available no later than 30 days of the end of each compliance period.

(1) The VOC and HAP content of each coating material and solvent used.

(2) The amount of coating material and solvent less water used on monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(3) The total VOC and HAP usage for each month;

(4) The weight of VOCs and HAPs emitted for each compliance period;

(b) To document the compliance status with Condition D.1.9, the Permittee shall maintain continuous temperature records for the thermal oxidizers and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test. The Permittee shall include in its daily record when a temperature reading is not taken and the reason for the lack of temperature reading (e.g., the process did not operate that day).

(c) To document the compliance status with Condition D.1.10, the Permittee shall maintain daily records of the duct pressure or fan amperage for the thermal oxidizers. The Permittee shall include in its daily record when a pressure or fan amperage reading is not taken and the reason for the lack of pressure or fan amperage reading (e.g., the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.12 Reporting Requirements

A quarterly report of the information to document the compliance status with Conditions D.1.1(c), D.1.1(d), D.1.2 and D.1.3 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Rubber Presses

(c) Ten (10) STA Presses, identified as Nos. 63, 64, 67, 68, 70, 71, 72, 73, 74 and 75, all installed in 1993, each with a maximum throughput rate of 1.5 pounds rubber per hour;

(d) Six (6) Small Lot Presses, identified as Nos. 120-123, installed in 2000 and 126, installed in 1993, each with a maximum throughput rate of 8.05 pounds rubber per hour;

(e) Eleven (11) Desma Presses, identified as Nos. 300, 301, 305, 307-309, and 312-316, installed in 2000, each with a maximum throughput rate of 13 pounds rubber per hour;

(f) One (1) REP Press, identified as Engel 100TL, installed in 2006, with a maximum throughput rate of 20.30 pounds rubber per hour;

(g) Thirteen (13) 20-P Presses, identified as Nos. 8-19, installed in 1993, each with a maximum throughput rate of 33 pounds rubber per hour;

(h) Eleven (11) 24-T Presses, identified as Nos. 6, and 50-59, installed in 1994, each with a maximum throughput rate of 33 pounds rubber per hour;

(i) Three (3) Misc. 16/20/24” Presses, identified as Nos. 5, 7 and 31, installed in 1973, each with a maximum throughput rate of 33 pounds rubber per hour;

(j) Ten (10) Desma presses, identified as 317-322, installed in 2008, and 324-327, installed in 2010, each with a maximum throughput of 13.0 pounds of rubber per hour.

(k) Seven (7) Miscellaneous 16/24" presses, identified as 929 (16"), 905-907, 914, 915, and 917, installed in 2010, each with a maximum throughput of 33 pounds of rubber per hour.

(l) Two (2) Panstone presses, identified as 910 and 911, installed in 2010, each with a maximum throughput of 13 pounds of rubber per hour.

(m) One (1) Grimco double deck press, identified as 912/913, installed in 2010, with a maximum throughput of 13 pounds of rubber per hour.

(n) Two (2) Hannifin Air presses, identified as 909 and 916, installed in 2010, each with a maximum throughput of 33 pounds of rubber per hour.

Cure Ovens

(o) Nine (9) electric post cure ovens, identified as Nos. 3805-3809, 3812, 3814, 3816 and 3817, installed in 1998, each with a maximum throughput rate of 20 pounds rubber per hour;

(p) One (1) electric post cure oven, identified as No. 3820, installed in 2002, with a maximum throughput rate of 6.9 pounds rubber per hour.

(q) One (1) phosphating line.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Process), the particulate emission rate from the facilities listed below, as insignificant activities, shall be limited as specified when operating at the respective process weight rate:

Emission Unit/Activity	Process Weight Rate (lbs/hr)	Allowable Particulate Emission Rate (326 IAC 6-3-2) (lb/hr)
Rubber Post Curing (9 Units)	20(each)	0.551(each)
Rubber Post-Curing (1 Units)	6.9	0.551

The pounds per hour allowable particulate emission rates were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following requirements:

The total input usage of volatile organic compounds (VOC) from mold release usage at the rubber presses, shall be less than ten (10) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit VOC from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than 100 tons per 12 consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) not applicable.

D.2.3 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4] [40 CFR Part 63.2]

Pursuant to 326 IAC 2-8-4, the Permittee shall comply with the following requirements:

(a) Total usage of any single HAP from mold release usage at the rubber presses, shall be limited to less than one (1) ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) Total usage of the combination of HAPs from mold release usage at the rubber presses, shall be limited to less than five (5) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) The combined rubber usage in the rubber presses shall not exceed 13,303,030 pounds per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) The carbon disulfide emissions shall not exceed 0.00132 pounds per pound of rubber processed.

Compliance with these limits, combined with the potential to emit HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of any single HAP to less than ten (10) tons per 12 consecutive month period and total HAPs to less than twenty-five (25) tons per 12 consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) and 40 CFR Part 63, Subpart MMMM (National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products) not applicable.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.2.4 Record Keeping Requirements

(a) To document the compliance status with Conditions D.2.2 and D.2.3, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAP usage limits and/or the VOC and HAP emission limits established in Conditions D.2.2 and D.2.3. Records necessary to demonstrate compliance shall be available no later than 30 days of the end of each compliance period.

(1) The VOC and HAP content of each mold release used.

(2) The amount of mold release used on monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(3) The total VOC and HAP usage for each month;

(4) The weight of VOCs and HAPs emitted for each compliance period;

(b) To document the compliance status with Condition D.2.2(c) the Permittee shall maintain monthly records of the amount of rubber processed through the rubber presses.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.2.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.2 and D.2.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Blasters

(r) One (1) Universal Mold Cleaning Blaster, installed in 2001, utilizing plastic bead blast media, with a capacity of 1,000 pounds and maximum throughput capacity of 3,600 pounds of blast material per hour, with particulate emissions controlled by a dust collector which exhausts inside the building.

(s) One (1) Wheelabrator Metal Case Blaster, installed in 2002, utilizing metal bead blast media, with a capacity of 1,000 pounds and maximum throughput capacity of 333 pounds of blast material per hour, with particulate emissions controlled by a dust collector which exhausts inside the building.

(t) One (1) Gritblaster, utilizing aluminum oxide blast media, installed in 2010, with a capacity of 1, 000 pounds and a maximum throughput capacity of 3,600 pounds of blast material per hour, with particulate emissions controlled by a dust collector which exhausts inside the building.

(u) One (1) Universal Mold Cleaning Gritblaster, utilizing baking soda blast media, installed in 2008, with a capacity of 1, 000 pounds and a maximum throughput capacity of 3,600 pounds of blast material per hour, with particulate emissions controlled by a dust collector which exhausts inside the building.

(v) One Case Treat Blaster, utilizing aluminum oxide blast media, installed in 2009, with a with a capacity of 1, 000 pounds and a maximum throughput capacity of 3,600 pounds of blast material per hour, with particulate emissions controlled by a dust collector which exhausts inside the building.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Process), the particulate emission rate from the facilities listed below, as insignificant activities, shall be limited as specified when operating at the respective process weight rate:

Emission Unit/Activity	Process Weight Rate (lbs/hr)	Allowable Particulate Emission Rate (326 IAC 6-3-2) (lb/hr)
Universal Mold Cleaning Blaster	4,600	7.16
Wheelabrator Metal Case Blaster	1,333	3.12
Gritblaster (aluminum oxide)	4,600	7.16
Universal Mold Cleaning Gritblaster (baking soda)	4,600	7.16
Case Treat Blaster (aluminum oxide)	4,600	7.16

The pounds per hour allowable particulate emission rates were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall

be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.3.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.3.3 Particulate Control

In order to comply with condition D.3.1, the dust collectors for particulate control shall be in operation and control emissions from the abrasive blasters at all times that these facilities are in operation.

SECTION E.1 FACILITY OPERATION CONDITIONS

Emissions Unit Description:

(y) One (1) natural gas fired emergency generator, construction in 1996, rated at 14 horsepower (hp), at a maximum of 500 hours per year of operations, using no controls, and exhausting to the indoors. This is an affected source under 40 CFR 63, Subpart ZZZZ.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

National Emissions Standards for Hazardous Air Pollutants [326 IAC 2-8-4(1)]

E.1.1 General Provisions Relating to NESHAP ZZZZ [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.6590, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1 for the emergency generator, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

E.1.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20]

Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee shall comply with the provisions of Standards of Performance for National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, which are incorporated by reference as 326 IAC 20, for the emergency generator as follows. The full text of Subpart ZZZZ may be found in Attachment A to this permit.

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585
(3) 40 CFR 63.6590(a)(1)(iii)
(4) 40 CFR 63.6595(a)(1), (b), and (c)
(5) 40 CFR 63.6603
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625(e)(3), (f), (h), and (j)
(8) 40 CFR 63.6635
(9) 40 CFR 63.6640
(10) 40 CFR 63.6645(a)(5)
(11) 40 CFR 63.6650
(12) 40 CFR 63.6655
(13) 40 CFR 63.6660
(14) 40 CFR 63.6665
(15) 40 CFR 63.6670
(16) 40 CFR 63.6675
(17) Table 2d (item 5)
(18) Table 6 (item 9)
(19) Table 8

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

Facility: Four (4) automated surface coating booths (TUMB1, TUMB2, TUMB3, and TUMB4)

Parameter: VOC usage

Limit: The total amount of VOC delivered to the coating applicators of the automated booths shall be limited to less than 127.20 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month.

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

Facility: One (1) manual surface coating booth (MAN1)

Parameter: VOC usage

Limit: The total input usage of volatile organic compounds (VOC) at the one (1) manual coating booth, identified as MAN1, including VOC solvent and diluent usage, shall be less than 1 ton per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

Facility: Four (4) automated surface coating booths (TUMB1, TUMB2, TUMB3, and TUMB4)

Parameter: Worst case single HAP and combined HAP usage

Limit:
(a) Total usage of any single HAP delivered to the coating applicators of the automated booths shall be limited to less than 123.6 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
(b) Total usage of any combination of HAPs delivered to the coating applicators of the automated booths shall be limited to less than 132.3 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on :_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

Facility: One (1) manual surface coating booth (MAN1)

Parameter: Worst case single HAP and combined HAP usage

Limit: (a) Total usage of any single HAP at the manual coating booth, including solvent used for clean-up, shall be limited to less than one (1) ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) Total usage of the combination of HAPs at the manual coating booth, including solvent used for clean-up, shall be limited to less than 1.05 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on : _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

Facility: Rubber Presses including the following:
STA Presses, Small Lot Presses, Desma Presses, REP Press
20-P Presses, 24-T Presses, 16/20/24 Presses,16/24" Presses, Panstone Presses, Grimco Double Deck Press, Hannifin Air Presses

Parameter: VOC usage

Limit: The total input usage of volatile organic compounds (VOC) from mold release usage at the rubber presses shall be less than 10.00 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on : _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

Facility: Rubber Presses including the following:
STA Presses, Small Lot Presses, Desma Presses, REP Press
20-P Presses, 24-T Presses, 16/20/24 Presses,16/24" Presses, Panstone Presses, Grimco Double Deck Press, Hannifin Air Presses

Parameter: Worst case single HAP and combined HAP usage

Limit:

(a) Total usage of any single HAP from mold release usage at the rubber presses, shall be limited to less than one (1) ton per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) Total usage of the combination of HAPs from mold release usage at the rubber presses, shall be limited to less than five (5) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on : _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

Facility: Rubber Presses including the following:
STA Presses, Small Lot Presses, Desma Presses, REP Press
20-P Presses,,24-T Presses, 16/20/24" Presses,16/24" Presses, Panstone Presses, Grimco Double Deck Press, Hannifin Air Presses

Parameter: Rubber Usage Limit

Limit: The combined rubber usage in the rubber presses shall not exceed 13,303,030 lbs per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on :_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Freudenberg - NOK General Partnership
Source Address: 487 West Main Street, Morristown, Indiana 46161
FESOP Permit No.: F145-30383-00028

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

Appendix A: Emission Calculations
Emissions Summary

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Unlimited Potential to Emit

Emissions Unit	Criteria Pollutants, tons																					
	PM	PM10	PM 2.5	NOx	SO2	VOC	CO	GHGs as CO2e	Total HAPs	Glycol Ethers	HCOH	Ethyl Benzene	MEK	MIBK	Xylene	Tetrachloro-ethylene	MeOH	Aniline	Carbon Disulfide	Carbon Tetrachloride	Hexane	Methylene Chloride
									HAPs		50-00-0	100-41-4	78-93-3	108-10-1	1330-20-7	127-18-4	67-56-1	62-53-3	75-15-0	56-23-5	110-54-3	75-09-2
Tumbler #1 (TUMB1) (3)	7.29	7.29	7.29			**127.20**			0.88		0.00	0.03	0.01	0.78	0.82	0.04	0.77					
Tumbler #2 (TUMB 2) (3)	7.29	7.29	7.29																			
Tumbler #3 (TUMB 3) (3)	7.29	7.29	7.29																			
Tumbler #4 (TUMB 4) (3)	**7.29**	**7.29**	**7.29**																			
Manual Coat Booth (MAN1) (3)	2.92	2.92	2.92			14.99			15.71		0.04	0.52	0.21	14.99	14.56	0.70	14.97					
Rubber Presses - Rubber						46.36			9.44			0.04	0.37	4.15	0.25	0.09		7.04	9.17	6.35	2.08	0.34
Rubber Presses - Mold Release						53.54			26.32	26.32												
Rubber Curing Ovens	0.55	0.55	0.55			15.30			2.82			0.09	0.12	0.16	0.44	0.08		0.01	1.12	0.19	2.27	0.78
Universal Mold Cleaning Blaster (plastic bead)	1.72	1.72	1.72																			
Wheelabrator Casing Gritblaster (metal bead)	1.03	1.03	1.03																			
Gritblaster (AlOx)	3.44	3.44	3.44																			
Universal Mold Cleaning Blaster (Baking Soda)	85.95	85.95	85.95																			
Case Treat Blaster (AlOx)	1.72	1.72	1.72																			
Natural Gas Fired Heating Units	0.15	0.59	0.44	7.71	0.05	0.42	6.48	9,306.86	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00
New Hydraulic Oil Stg. Tank						0.00																
Used Hydraulic Oil Stg. Tank						0.01																
Phosphating Line						1.24			0.31	0.31												
Fugitive Emissions (Paved Roads)	0.14	0.03	0.01																			
TOTAL EMISSIONS, TPY	**126.78**	**127.11**	**126.95**	**7.71**	**0.05**	**259.05**	**6.48**	**9,306.86**	**55.31**	**26.32**	**0.04**	**0.68**	**0.71**	**20.08**	**16.07**	**0.91**	**15.74**	**7.05**	**10.29**	**6.54**	**4.49**	**1.11**

(1) Other regulated pollutants does not include those pollutants regulated only under CAA Section 112(r)
(2) For rubber processing operations, only the HAPs with the greatest actual and potential emissions are listed here. See attachments for a complete listing of HAP emissions.
(3) Emissions reflect federally enforceable conditions- TUMB1-4 must maintain 100% capture efficiency and 98% control efficiency;
Total VOC delivered to TUMB1-4 shall not exceed 127.2 tons/12 months; Total input of VOC to MAN1 shall not exceed 14.99 tons/12 months
TUMB4 added with FESOP Administrative Amendment No. F145-31681-00028

Appendix A: Emission Calculations
Emissions Summary

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Controlled / Limited Potential to Emit

Emissions Unit	Criteria Pollutants, tons								Hazardous Air Pollutants, tons (2)													
	PM	PM10	PM2.5	NOx	SO2	VOC	CO	GHG	Total HAPs	Glycol Ethers	HCOH	Ethyl Benzene	MEK	MIBK	Xylene	Tetrachloro-ethylene	MeOH	Aniline	Carbon Disulfide	Carbon Tetrachloride	Hexane	Methylene Chloride
Tumbler #1 (TUMB1) (3)	0.15	0.15	0.15			0.85			0.88		0.00	0.03	0.01	0.78	0.82	0.04	0.77					
Tumbler #2 (TUMB 2) (3)	0.15	0.15	0.15			0.85																
Tumbler #3 (TUMB 3) (3)	0.15	0.15	0.15			0.85																
Tumbler #4 (TUMB 4) (3)	**0.15**	**0.15**	**0.15**			**0.85**																
Manual Coat Booth (MAN1) (4)	0.0039	0.0039	0.0039			1.00			1.05		0.00	0.03	0.01	0.99	0.97	0.05	0.99					
Rubber Presses - Rubber						44.45			9.05			0.04	0.36	3.98	0.24	0.09		6.75	8.79	6.08	1.99	0.32
Rubber Presses - Mold Release (4)						10.00			5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Rubber Curing Ovens	0.55	0.55	0.55			15.30			2.82			0.09	0.12	0.16	0.44	0.08		0.01	1.12	0.19	2.27	0.78
Universal Mold Cleaning Blaster (plastic bead)	1.72	1.72	1.72																			
Wheelabrator Casing Gritblaster (metal bead)	1.03	1.03	1.03																			
Gritblaster (AlOx)	3.44	3.44	3.44																			
Universal Mold Cleaning Blaster (Baking Soda) (5)	31.38	85.95	85.95																			
Case Treat Blaster (AlOx)	1.72	1.72	1.72																			
Natural Gas Fired Heating Units	0.15	0.59	0.44	7.71	0.05	0.42	6.48	9,306.86	0.15												0.14	
New Hydraulic Oil Stg. Tank						0.00																
Used Hydraulic Oil Stg. Tank						0.01																
Phosphating Line						1.24			0.31	0.31												
Fugitive Emissions (Paved Roads)	0.14	0.03	0.01																			
TOTAL EMISSIONS, TPY	**40.71**	**95.61**	**95.44**	**7.71**	**0.05**	**75.82**	**6.48**	**9,306.86**	**19.25**	**1.31**	**1.00**	**1.19**	**1.50**	**6.92**	**3.48**	**1.26**	**2.76**	**7.76**	**9.91**	**7.28**	**5.40**	**2.10**

(1) Other regulated pollutants does not include those pollutants regulated only under CAA Section 112(r)
(2) For rubber processing operations, only the HAPs with the greatest actual and potential emissions are listed here. See attachments for a complete listing of HAP emissions.
(3) Emissions reflect federally enforceable conditions requested to be carried over from the current Part 70 Operating Permit T145-7643-00028: D.3.6(b) TUMB1-3 must maintain 100% capture efficiency and 98% control efficiency
(4) Proposed Limitations:
a. VOC in coating and cleaning material delivered to the manual coating booth will not exceed 1 ton per rolling 12 month period.
b. Emissions from mold releases shall not exceed 10 tpy VOC, 5.0 tpy total HAPs, and 1.0
(5) The PM emissions from the baking soda blaster are limited to the 326 IAC 6-3-2 allowable emissions

TUMB4 added with FESOP Administrative Amendment No. F145-31681-00028

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

PUBLIC As Applied Coating Compositions

Formulation	Material	Gallons per Batch (a) gal	Pounds per Batch lbs	Material Density (b) lbs/gal	Material Compositional Breakdown (b) VOC Wt. %	Solids Wt. %	Pb Salt Wt. %	HCOH Wt. %	Ethyl Wt. %	MEK Wt. %	MIBK Wt. %	Xylene Wt. %	Tetrachloro- Wt. %	MeOH Wt. %
C1		:	:	:	:	:	:	:	:	:	:	:	:	:
C1		:	:	:	:	:	:	:	:	:	:	:	:	:
	MIBK	:	:	:	:	:	:	:	:	:	:	:	:	:
C2		:	:	:	:	:	:	:	:	:	:	:	:	:
C2		:	:	:	:	:	:	:	:	:	:	:	:	:
	MIBK	:	:	:	:	:	:	:	:	:	:	:	:	:
C3		:	:	:	:	:	:	:	:	:	:	:	:	:
C3		:	:	:	:	:	:	:	:	:	:	:	:	:
	Xylene	:	:	:	:	:	:	:	:	:	:	:	:	:
C4		:	:	:	:	:	:	:	:	:	:	:	:	:
C4		:	:	:	:	:	:	:	:	:	:	:	:	:
	Methanol	:	:	:	:	:	:	:	:	:	:	:	:	:
C5		:	:	:	:	:	:	:	:	:	:	:	:	:
C5		:	:	:	:	:	:	:	:	:	:	:	:	:
	Methanol	:	:	:	:	:	:	:	:	:	:	:	:	:
C6		:	:	:	:	:	:	:	:	:	:	:	:	:
C6		:	:	:	:	:	:	:	:	:	:	:	:	:
	Methanol	:	:	:	:	:	:	:	:	:	:	:	:	:
C7		:	:	:	:	:	:	:	:	:	:	:	:	:
C7		:	:	:	:	:	:	:	:	:	:	:	:	:
	Xylene	:	:	:	:	:	:	:	:	:	:	:	:	:
C8		:	:	:	:	:	:	:	:	:	:	:	:	:
C8		:	:	:	:	:	:	:	:	:	:	:	:	:
	Methanol	:	:	:	:	:	:	:	:	:	:	:	:	:
C9		:	:	:	:	:	:	:	:	:	:	:	:	:
C9		:	:	:	:	:	:	:	:	:	:	:	:	:
	Methanol	:	:	:	:	:	:	:	:	:	:	:	:	:
C10		:	:	:	:	:	:	:	:	:	:	:	:	:
C10		:	:	:	:	:	:	:	:	:	:	:	:	:
	Methanol	:	:	:	:	:	:	:	:	:	:	:	:	:
				#DIV/0!										

(a) Batch "recipes" were provided by Freudenberg-NOK
(b) See "As Supplied Coatings and Thinners" table
(c) Example calculation (average VOC content of Chemlok 205): ((7.90 x 74.7) + (19.95 x 100)) / 27.85 = 92.8%

Appendix A: Emission Calculations

Company Name: **Freudenberg - NOK General Partnership**
Address City IN Zip: **487 West Main Street, Morristown, IN 46161**
FESOP Renewal No.: **F145-30383-00028**
Permit Reviewer: **Deborah Cole**
Issuance: **December 14, 2011**
FESOP AA No.: **F145-31681-00028**
Permit Reviewer: **Sarah Street**
Date: **April 4, 2012**

			Material Compositional Breakdown									
Material	Source of Information Density&VOC&Solids/ Components	Material Density lbs/gal	VOC Wt. %	Solids Wt. %	Pb Salt Wt. %	HCOH 50-00-0 Wt. %	Ethyl Benzene 100-41-4 Wt. %	MEK 78-93-3 Wt. %	MIBK 108-10-1 Wt. %	Xylene 1330-20-7 Wt. %	Tetrachloro-ethylene 127-18-4 Wt. %	MeOH 67-56-1 Wt. %
Solvent Based Coatings:												
C1		:	:	:	:	:	:	:	:	:	:	:
C2		:	:	:	:	:	:	:	:	:	:	:
C3		:	:	:	:	:	:	:	:	:	:	:
C4		:	:	:	:	:	:	:	:	:	:	:
C5		:	:	:	:	:	:	:	:	:	:	:
C6		:	:	:	:	:	:	:	:	:	:	:
C7		:	:	:	:	:	:	:	:	:	:	:
C8		:	:	:	:	:	:	:	:	:	:	:
C9		:	:	:	:	:	:	:	:	:	:	:
C10		:	:	:	:	:	:	:	:	:	:	:
Solvents:												
Xylene	Perry's (3-44)	7.25	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
MIBK	Chemfinder.com	6.65	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Methanol	Perry's (3-39)	6.61	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Coating Equipment (TUMB1, TUMB2, TUMB3, TUMB4)
Emission Calculations:

Material	As-Applied	Material Density (a) lbs/gal	Maximum Usage (b) gallons per tumbler per year	Maximum Usage pounds (density * usage)	Material Compositional Breakdown - As Applied (a)											Potential Emissions (c)										
					VOC Wt. %	Solids Wt. %	Pb Wt. %	HCOH Wt. %	Ethyl Wt. %	MEK Wt. %	MIBK Wt. %	Xylene Wt. %	Tetra- Wt. %	MeOH Wt. %	Total Wt. %	VOC lbs per year	Solids (PM) lbs per year	Pb Salt lbs per year	HCOH lbs per year	Ethyl lbs per year	MEK lbs per year	MIBK lbs per year	Xylene lbs per year	Tetra- lbs per year	MeOH lbs per year	Total Org. lbs per year
As Applied Coatings:																										
	C1	:	:	:	:	:	:	:	:	:	:	:	:	:	:	70,764	5,407	0	216	1,081	1,081	67,589	3,244	0	0	73,212
	C2	:	:	:	:	:	:	:	:	:	:	:	:	:	:	71,038	3,901	0	205	0	1,027	71,038	0	0	0	72,270
	C3	:	:	:	:	:	:	:	:	:	:	:	:	:	:	76,212	4,888	986	0	2,957	0	0	73,365	3,942	0	80,264
	C4	:	:	:	:	:	:	:	:	:	:	:	:	:	:	72,872	4,307	0	0	0	0	0	0	0	66,412	66,412
	C5	:	:	:	:	:	:	:	:	:	:	:	:	:	:	67,397	**14,585**	0	0	394	0	0	1,971	0	51,958	54,323
	C6	:	:	:	:	:	:	:	:	:	:	:	:	:	:	69,788	3,173	0	0	0	0	0	0	0	69,660	69,660
	C7	:	:	:	:	:	:	:	:	:	:	:	:	:	:	**76,869**	4,781	0	0	2,727	0	0	74,416	182	0	77,325
	C8	:	:	:	:	:	:	:	:	:	:	:	:	:	:	70,983	1,731	0	0	0	0	0	0	0	57,077	57,077
	C9	:	:	:	:	:	:	:	:	:	:	:	:	:	:	71,531	2,080	0	0	0	0	0	0	0	69,834	69,834
	C10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	70,983	1,750	0	0	0	0	0	0	0	57,077	57,077
Cleaning solvents:																										
	Xylene	7.25	1,095	7,939	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	**7,939**	0	0	0	0	0	0	7,939	0	0	7,939
	MIBK	6.65	1,095	7,282	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	7,282	0	0	0	0	0	7,282	0	0	0	7,282
	Methanol	6.61	1,095	7,238	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	7,238	0	0	0	0	0	0	0	0	7,238	7,238
Worst Case Coating + Worst Case Cleaner, pounds:																**84,808**	**14,585**	986	216	2,957	1,081	78,320	82,355	3,942	77,072	88,202
Adjustment for Solids (d):																										
	Transfer Efficiency, %			60													**5,834**	394								
	Control Efficiency of Filters, %			95													**292**	20								
Adjustment for Organics (e):																										
	Control Efficiency of RTO, %			98												**1,696**			4	59	22	1,566	1,647	79	1,541	1,764
															Total Uncontrolled Emissions (lbs/year) =	**84,807.75**	**14,585**									
															Total Uncontrolled Emissions (tons/year)	**42.40**	**7.29**									
															Total Controlled Emissions (pounds/year) =	**1,696.16**	**292**	20	4	59	22	1,566	1,647	79	1,541	1,764
															Total Controlled Emissions (tons/year) =	**0.85**	**0.15**	**0.01**	**0.002**	**0.03**	**0.01**	**0.78**	**0.82**	**0.04**	**0.77**	**0.88**

(a) See "As Applied Coatings and Thinners" table
(b) Per Dave Pehlman, maximum coating usage is 1.25 gallons/hour/unit, max cleaning solvent usage is 10% of coating usage
(c) Emissions, lbs = Annual usage, gallons x coating density, lbs/gallon x (wt. % compound in coating/100)
(d) Overspray, lbs = Subtotal, lbs x ((100 - transfer efficiency)/100)
Controlled Emissions, lbs = Overspray, lbs x ((100 - control efficiency)/100)
Use of filters federally enforceable per 326 IAC 6-3-2(d)
(e) Controlled Emissions, lbs = Uncontrolled Emissions, lbs x ((100 - control efficiency)/100); units required to have 100% capture and 98% destruction efficiency per T145-7643-00028, federally enforceable

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Emission Calculations: **Manual Booth (MAN1)**

Material As-Applied	Material Density (a) lbs/gal	Maximum Usage (b) gallons per year	Maximum Usage pounds per year	Material Compositional Breakdown - As Applied (a)											Potential Emissions (c)										
				VOC Wt. %	Solids Wt. %	Pb Wt. %	HCOH Wt. %	Ethyl Wt. %	MEK Wt. %	MIBK Wt. %	Xylene Wt. %	Tetra- Wt. %	MeOH Wt. %	Total Wt. %	VOC lbs	Solids (PM) lbs	Pb Salt lbs	HCOH lbs	Ethyl lbs	MEK lbs	MIBK lbs	Xylene lbs	Tetra- lbs	MeOH lbs	Total lbs
As Applied Coatings:																									
C1	:	:	:	:	:	:	:	:	:	:	:	:	:	:	26,982	2,061	0	82	412	412	25,771	1,237	0	0	27,915
C2	:	:	:	:	:	:	:	:	:	:	:	:	:	:	26,982	1,482	0	78	0	390	26,982	0	0	0	27,450
C3	:	:	:	:	:	:	:	:	:	:	:	:	:	:	26,982	1,731	349	0	1,047	0	0	25,974	1,396	0	28,416
C4	:	:	:	:	:	:	:	:	:	:	:	:	:	:	26,982	1,595	0	0	0	0	0	0	0	24,590	24,590
C5	:	:	:	:	:	:	:	:	:	:	:	:	:	:	26,982	**5,839**	0	0	158	0	0	789	0	20,801	21,748
C6	:	:	:	:	:	:	:	:	:	:	:	:	:	:	26,982	1,227	0	0	0	0	0	0	0	26,933	26,933
C7	:	:	:	:	:	:	:	:	:	:	:	:	:	:	26,982	1,678	0	0	957	0	0	26,121	64	0	27,142
C8	:	:	:	:	:	:	:	:	:	:	:	:	:	:	26,982	658	0	0	0	0	0	0	0	21,696	21,696
C9	:	:	:	:	:	:	:	:	:	:	:	:	:	:	26,982	784	0	0	0	0	0	0	0	26,342	26,342
C10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	26,982	665	0	0	0	0	0	0	0	21,696	21,696
Cleaning solvents:																									
Xylene	7.25	414	2,998	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	2,998	0	0	0	0	0	0	2,998	0	0	2,998
MIBK	6.65	451	2,998	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	2,998	0	0	0	0	0	2,998	0	0	0	2,998
Methanol	6.61	454	2,998	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	2,998	0	0	0	0	0	0	0	0	2,998	2,998
Worst Case Coating + Worst Case Cleaner, pounds:															**29,980**	5,839	349	82	1,047	412	29,980	29,119	1,396	29,931	31,414
Adjustment for Solids (d):																									
Transfer Efficiency, %			60													**2,336**	140								
Control Efficiency of Filters, %			95													**117**	7								
Total Uncontrolled Emissions (lbs/year)																**5,839**									
Total Uncontrolled Emissions (tons/year)																**2.919579529**									
Total Controlled Emissions (lbs/year)															29,980	**117**	7	82	1,047	412	29,980	29,119	1,396	29,931	31,414
Total Controlled Emissions (tons/year)															**14.99**	**0.06**	**0.00**	**0.04**	**0.52**	**0.21**	**14.99**	**14.56**	**0.70**	**14.97**	**15.71**

(a) See "As Applied Coatings and Thinners" table
(b) VOC input to MAN1 limited to 14.99 tons/12 months per T145-7643-00028, federally enforceable; usage back calculated; assume 10% VOC in cleaning chemicals
(c) Emissions, lbs = Annual usage, gallons x coating density, lbs/gallon x (wt. % compound in coating/100)
(d) Overspray, lbs = Subtotal, lbs x ((100 - transfer efficiency)/100)
Controlled Emissions, lbs = Overspray, lbs x ((100 - control efficiency)/100)
Use of filters federally enforceable per 326 IAC 6-3-2(d)
Note: assume the RTO has 0% control efficiency of particulate

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Coating Equipment (MAN1)
Proposed Limited Emissions (reflects proposed limit of 1 tpy VOC delivered to coater)
Emission Calculations:

Material As-Applied	Material Density lbs/gal	Maximum Usage gallons	Maximum Usage pounds	Material Compositional Breakdown - As Applied (a)											Potential Emissions (c)										
				VOC Wt. %	Solids Wt. %	Pb Wt. %	HCOH Wt. %	Ethyl Wt. %	MEK Wt. %	MIBK Wt. %	Xylene Wt. %	Tetra- Wt. %	MeOH Wt. %	Total Wt. %	VOC lbs	Solids lbs	Pb Salt lbs	HCOH lbs	Ethyl lbs	MEK lbs	MIBK lbs	Xylene lbs	Tetra- lbs	MeOH lbs	Total lbs
As Applied Coatings:																									
C1	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1,790	137	0	5	27	27	1,710	82	0	0	1,852
C2	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1,790	98	0	5	0	26	1,790	0	0	0	1,821
C3	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1,790	115	23	0	69	0	0	1,723	93	0	1,885
C4	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1,790	106	0	0	0	0	0	0	0	1,631	1,631
C5	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1,790	387	0	0	10	0	0	52	0	1,380	1,443
C6	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1,790	81	0	0	0	0	0	0	0	1,787	1,787
C7	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1,790	111	0	0	63	0	0	1,733	4	0	1,801
C8	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1,790	44	0	0	0	0	0	0	0	1,439	1,439
C9	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1,790	52	0	0	0	0	0	0	0	1,748	1,748
C10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1,790	44	0	0	0	0	0	0	0	1,439	1,439
Cleaning solvents:																									
Xylene	7.25	29	211	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	211	0	0	0	0	0	0	211	0	0	211
MIBK	6.65	29	193	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	193	0	0	0	0	0	193	0	0	0	193
Methanol	6.61	29	192	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	192	0	0	0	0	0	0	0	0	192	192
Worst Case Coating + Worst Case Cleaner, pounds:															2,001	387	23	5	69	27	1,983	1,944	93	1,979	2,096
Adjustment for Solids (d):																									
Transfer Efficiency, %			60													155	9								
Control Efficiency of Filters, %			95													8	0								
Total Controlled Emissions, pounds															2,001	7.75	0.46	5	69	27	1,983	1,944	93	1,979	2,096
Total Controlled Emissions, tons															**1.00**	**0.0039**	**0.0002**	**0.003**	**0.03**	**0.01**	**0.99**	**0.97**	**0.05**	**0.99**	**1.05**

(a) See "As Applied Coatings and Thinners" table
(b) Maximum coating usage back-calculated to achieve requested limit of 1 tpy VOC delivered to coater; max cleaning solvent usage is 10% of coating usage
(c) Emissions, lbs = Annual usage, gallons x coating density, lbs/gallon x (wt. % compound in coating/100)
(d) Overspray, lbs = Subtotal, lbs x ((100 - transfer efficiency)/100)
Controlled Emissions, lbs = Overspray, lbs x ((100 - control efficiency)/100)
Use of filters federally enforceable per 326 IAC 6-3-2(d)

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Potential Rubber Production
Maximum Pressing Information:

Equipment Group	Equipment Identification	Maximum lbs/hr/unit	Maximum lbs/yr/unit	Number of Units	Maximum lbs/yr/group	Throughput Reference
STA Presses	63,64,67,68,70,71,72,73,74	1.5	13,140	10	131,400	R. Mann - 2/10/97
Small Lot Presses	120-125	8.05	70,518	6	423,108	2003 TV Renewal application
Desma Presses	300, 301, 305, 307-309, 312 - 316	13	113,880	11	1,252,680	R. Mann - 2/10/97 and 2003 TV app
REP Press	Engel 100TL	20.30	177,828	1	177,828	2003 TV Renewal application
20-P Presses	8-19	33	289,080	13	3,758,040	R. Mann - 2/10/97
24-T Presses	6, 50-59	33	289,080	11	3,179,880	R. Mann - 2/10/97
Misc 16/20/24" Presses	5&7, 31	33	289,080	3	867,240	R. Mann - 2/10/97
Desma Presses	317-322,324-327	13	113,880	10	1,138,800	Source
Misc 16"/24" Presses	929, 905-907, 914, 915, 917	33	289,080	7	2,023,560	Source
Panstone Presses	910, 911	13	113,880	2	227,760	Source
Grimco Double Deck	912/913	13	113,880	1	113,880	Source
Hannifin Air Presses	909, 916	33	289,080	2	578,160	Source
TOTAL				**77**	**13,872,336**	

Maximum Oven Curing Information:

Equipment Group	Equipment Identification	Maximum lbs/hr/unit	Maximum lbs/yr/unit	Number of Units	Maximum lbs/yr/group	Throughput Reference
Precision Quincy and	3805-3809, 3812, 3814, 3816,	20	175,200	9	1,576,800	5/97 Permit Application; Admin
Precision Quincy Oven	3820	6.90	60,444	1	60,444	2003 TV Renewal application
TOTAL				**10**	**1,637,244**	

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Platen Pressing Emission Factors (1 of 3 pages)

Pollutant Name	CAS No.	Max Factors
		lb/lb rubber
Total VOC		6.68E-03
Total Speciated Organics		3.29E-03
Total Organic HAPs		1.36E-03
Total Metal HAPs		
Total HAPs		1.36E-03
Total Particulate Matter		
1,1,1-Trichloroethane	71-55-6	3.56E-04
1,1,2,2-Tetrachloroethane	79-34-5	0.00E+00
1,1,2-Trichloroethane	79-00-5	0.00E+00
1,1-Dichloroethane	75-34-3	0.00E+00
1,1-Dichloroethene	75-35-4	1.07E-05
1,2,4-Trichlorobenzene	120-82-1	1.66E-08
1,2-Dibromo-3-Chloropropane	96-12-8	0.00E+00
1,2-Dibromoethane	106-93-4	0.00E+00
1,2-Dichloroethane	107-06-2	0.00E+00
1,2-Dichloropropane	78-87-5	0.00E+00
1,3-Butadiene	106-99-0	2.56E-05
1,4-Dichlorobenzene	106-37-6	
1,4-Dichlorobenzene	106-46-7	1.03E-07
1,4-Dioxane	123-91-1	0.00E+00
1,4-Phenylenediamine	106-50-3	0.00E+00
2,4,5-Trichlorophenol	95-95-4	0.00E+00
2,4,6-Trichlorophenol	88-06-2	0.00E+00
2,4-Dinitrophenol	51-28-5	0.00E+00
2,4-Dinitrotoluene	121-14-2	0.00E+00
2-Butanone	78-93-3	5.35E-05
2-Chloro-1,3-Butadiene	126-99-8	9.08E-06
2-Chloroacetophenone	532-27-4	0.00E+00
2-Methylphenol	95-48-7	1.17E-07
3,3'-Dichlorobenzidine	91-94-1	0.00E+00
3,3'-Dimethoxybenzidine	119-90-4	0.00E+00
3,3'-Dimethylbenzidine	119-93-7	0.00E+00
4,4'-Methylenedianiline	101-77-9	0.00E+00
4-Aminobiphenyl	92-67-1	0.00E+00
4-Methyl-2-Pentanone	108-10-1	5.99E-04
4-Nitrobiphenyl	92-93-3	0.00E+00
4-Nitrophenol	100-02-7	0.00E+00
a,a,a-Trichlorotoluene	98-07-7	0.00E+00
Acetaldehyde	75-07-0	1.00E-05
Acetaldehyde + Isobutane		

Platen Pressing Emission Factors (pg. 2 of 3)		
Pollutant Name	**CAS No.**	**Max**
		Factors
		lb/lb rubber
Acetonitrile	75-05-8	5.47E-06
Acetophenone	98-86-2	4.39E-04
Acrolein	107-02-8	4.44E-06
Acrylonitrile	107-13-1	3.02E-05
Allyl Chloride	107-05-1	0.00E+00
Aniline	62-53-3	1.02E-03
Benzene	71-43-2	5.62E-06
Benzidine	92-87-5	4.53E-06
Benzyl Chloride	100-44-7	0.00E+00
Biphenyl	92-52-4	3.06E-07
bis(2-Chloroethyl)ether	111-44-4	0.00E+00
bis(2-Ethylhexyl)phthalate	117-81-7	1.78E-05
Bromoform	75-25-2	0.00E+00
Bromomethane	74-83-9	0.00E+00
Cadmium (Cd) Compounds		
Carbon Disulfide	75-15-0	1.32E-03
Carbon Tetrachloride	56-23-5	9.15E-04
Carbonyl Sulfide	463-58-1	4.39E-04
Chlorobenzene	108-90-7	0.00E+00
Chloroethane	75-00-3	1.48E-06
Chloroform	67-66-3	1.27E-05
Chloromethane	74-87-3	7.68E-06
Chromium (Cr) Compounds		
Cobalt (Co) Compounds		
Cumene	98-82-8	2.76E-06
Di-n-butylphthalate	84-74-2	9.64E-06
Dibenzofuran	132-64-9	1.54E-07
Dimethylaminoazobenzene	60-11-7	3.20E-07
Dimethylphthalate	131-11-3	1.80E-07
Epichlorohydrin	106-89-8	0.00E+00
Ethyl Acrylate	140-88-5	
Ethylbenzene	100-41-4	5.43E-06
Hexachlorobenzene	118-74-1	0.00E+00
Hexachlorobutadiene	87-68-3	3.93E-07
Hexachlorocyclopentadiene	77-47-4	0.00E+00
Hexachloroethane	67-72-1	2.41E-05
Hexane	110-54-3	3.00E-04
Hydroquinone	123-31-9	1.58E-05
Isooctane	540-84-1	4.81E-06
Isophorone	78-59-1	1.16E-06

Platen Pressing Emission Factors (pg. 3 of 3)

Pollutant Name	CAS No.	Max Factors
		lb/lb rubber
Lead (Pb) Compounds		
m-Xylene	108-38-3	
m-Xylene + p-Xylene		1.73E-05
Methylene bis-chloroaniline	101-14-4	0.00E+00
Methylene Chloride	75-09-2	4.87E-05
N,N-Dimethylaniline	121-69-7	0.00E+00
N-Nitrosodimethylamine	62-75-9	0.00E+00
N-Nitrosodimethylamine	86-30-6	
N-Nitrosomorpholine	59-89-2	0.00E+00
Naphthalene	91-20-3	4.04E-06
Nickel (Ni) Compounds		
Nitrobenzene	98-95-3	0.00E+00
o-Anisidine	90-04-0	0.00E+00
o-Toluidine	95-53-4	4.36E-06
o-Xylene	95-47-6	1.86E-05
p-Xylene	106-42-3	
Pentachloronitrobenzene	82-68-8	0.00E+00
Pentachlorophenol	87-86-5	0.00E+00
Phenol	108-95-2	2.67E-06
Propanal	123-38-6	
Propylene Oxide	75-56-9	1.04E-04
Styrene	100-42-5	8.31E-05
Substituted Quinoline	91-22-5	
t-Butyl Methyl Ether	1634-04-4	1.56E-04
Tetrachloroethene	127-18-4	1.36E-05
Toluene	108-88-3	3.96E-05
Trichloroethene	79-01-6	0.00E+00
Trifluralin	1582-09-8	0.00E+00
Vinyl Acetate	108-05-4	0.00E+00
Vinyl Chloride	75-01-4	2.57E-07

Emission factors from draft AP-42, Chapter 4.12 (AP-

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Platen Pressing Emissions (Page 1 of 3)

Pollutant Name	CAS No.	Max Total Platen Pressing Emissions		Limited Total Platen Pressing Emissions	
		pounds	tons	pounds	tons
Rubber Throughput, pounds		**13,872,336**		**13,303,030**	
Total VOC		9.27E+04	4.64E+01	8.89E+04	4.45E+01
Total Speciated Organics		4.57E+04	2.28E+01	4.38E+04	2.19E+01
Total Organic HAPs		1.89E+04	9.44E+00	1.81E+04	9.05E+00
Total Metal HAPs					
Total HAPs		1.89E+04	9.44E+00	1.81E+04	9.05E+00
Total Particulate Matter					
1,1,1-Trichloroethane	71-55-6	4.94E+03	2.47E+00	4.74E+03	2.37E+00
1,1,2,2-Tetrachloroethane	79-34-5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,1,2-Trichloroethane	79-00-5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,1-Dichloroethane	75-34-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,1-Dichloroethene	75-35-4	1.48E+02	7.42E-02	1.42E+02	7.11E-02
1,2,4-Trichlorobenzene	120-82-1	2.30E-01	1.15E-04	2.20E-01	1.10E-04
1,2-Dibromo-3-Chloropropane	96-12-8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2-Dibromoethane	106-93-4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2-Dichloroethane	107-06-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2-Dichloropropane	78-87-5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,3-Butadiene	106-99-0	3.56E+02	1.78E-01	3.41E+02	1.71E-01
1,4-Dichlorobenzene	106-37-6				
1,4-Dichlorobenzene	106-46-7	1.43E+00	7.16E-04	1.37E+00	6.87E-04
1,4-Dioxane	123-91-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,4-Phenylenediamine	106-50-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,4,5-Trichlorophenol	95-95-4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,4,6-Trichlorophenol	88-06-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,4-Dinitrophenol	51-28-5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,4-Dinitrotoluene	121-14-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2-Butanone (MEK)	78-93-3	7.42E+02	3.71E-01	7.11E+02	3.56E-01
2-Chloro-1,3-Butadiene	126-99-8	1.26E+02	6.30E-02	1.21E+02	6.04E-02
2-Chloroacetophenone	532-27-4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2-Methylphenol	95-48-7	1.63E+00	8.14E-04	1.56E+00	7.81E-04
3,3'-Dichlorobenzidine	91-94-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3,3'-Dimethoxybenzidine	119-90-4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3,3'-Dimethylbenzidine	119-93-7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4,4'-Methylenedianiline	101-77-9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4-Aminobiphenyl	92-67-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4-Methyl-2-Pentanone (MIBK)	108-10-1	8.31E+03	4.15E+00	7.97E+03	3.98E+00
4-Nitrobiphenyl	92-93-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4-Nitrophenol	100-02-7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
a,a,a-Trichlorotoluene	98-07-7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acetaldehyde	75-07-0	1.39E+02	6.94E-02	1.33E+02	6.66E-02
Acetaldehyde + Isobutane					

Platen Pressing Emissions (Page 2 of 3)

Pollutant Name	CAS No.	Max Total Platen Pressing Emissions		Limited Total Platen Pressing Emissions	
		pounds	tons	pounds	tons
Acetonitrile	75-05-8	7.58E+01	3.79E-02	7.27E+01	3.64E-02
Acetophenone	98-86-2	6.10E+03	3.05E+00	5.85E+03	2.92E+00
Acrolein	107-02-8	6.16E+01	3.08E-02	5.91E+01	2.95E-02
Acrylonitrile	107-13-1	4.19E+02	2.09E-01	4.02E+02	2.01E-01
Allyl Chloride	107-05-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Aniline	62-53-3	1.41E+04	7.04E+00	1.35E+04	6.75E+00
Benzene	71-43-2	7.79E+01	3.90E-02	7.47E+01	3.74E-02
Benzidine	92-87-5	6.29E+01	3.14E-02	6.03E+01	3.02E-02
Benzyl Chloride	100-44-7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biphenyl	92-52-4	4.24E+00	2.12E-03	4.07E+00	2.03E-03
bis(2-Chloroethyl)ether	111-44-4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
bis(2-Ethylhexyl)phthalate	117-81-7	2.47E+02	1.24E-01	2.37E+02	1.18E-01
Bromoform	75-25-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bromomethane	74-83-9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cadmium (Cd) Compounds					
Carbon Disulfide	75-15-0	18333.52	9.17	1.76E+04	8.79E+00
Carbon Tetrachloride	56-23-5	1.27E+04	6.35E+00	1.22E+04	6.08E+00
Carbonyl Sulfide	463-58-1	6.09E+03	3.04E+00	5.84E+03	2.92E+00
Chlorobenzene	108-90-7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chloroethane	75-00-3	2.05E+01	1.03E-02	1.97E+01	9.84E-03
Chloroform	67-66-3	1.76E+02	8.82E-02	1.69E+02	8.46E-02
Chloromethane	74-87-3	1.07E+02	5.33E-02	1.02E+02	5.11E-02
Chromium (Cr) Compounds					
Cobalt (Co) Compounds					
Cumene	98-82-8	3.83E+01	1.91E-02	3.67E+01	1.84E-02
Di-n-butylphthalate	84-74-2	1.34E+02	6.69E-02	1.28E+02	6.41E-02
Dibenzofuran	132-64-9	2.13E+00	1.07E-03	2.04E+00	1.02E-03
Dimethylaminoazobenzene	60-11-7	4.44E+00	2.22E-03	4.26E+00	2.13E-03
Dimethylphthalate	131-11-3	2.50E+00	1.25E-03	2.40E+00	1.20E-03
Epichlorohydrin	106-89-8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethyl Acrylate	140-88-5				
Ethylbenzene	100-41-4	7.53E+01	3.76E-02	7.22E+01	3.61E-02
Hexachlorobenzene	118-74-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hexachlorobutadiene	87-68-3	5.45E+00	2.73E-03	5.23E+00	2.61E-03
Hexachlorocyclopentadiene	77-47-4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hexachloroethane	67-72-1	3.34E+02	1.67E-01	3.20E+02	1.60E-01
Hexane	110-54-3	4.16E+03	2.08E+00	3.98E+03	1.99E+00
Hydroquinone	123-31-9	2.20E+02	1.10E-01	2.11E+02	1.05E-01
Isooctane	540-84-1	6.67E+01	3.33E-02	6.40E+01	3.20E-02
Isophorone	78-59-1	1.61E+01	8.04E-03	1.54E+01	7.71E-03

Platen Pressing Emissions (Page 3 of 3)

Pollutant Name	CAS No.				
		Max Total Platen Pressing Emissions		Limited Total Platen Pressing Emissions	
		pounds	tons	pounds	tons
Lead (Pb) Compounds					
m-Xylene	108-38-3				
m-Xylene + p-Xylene		2.39E+02	1.20E-01	2.30E+02	1.15E-01
Methylene bis-chloroaniline	101-14-4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Methylene Chloride	75-09-2	6.75E+02	3.37E-01	6.47E+02	3.24E-01
N,N-Dimethylaniline	121-69-7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
N-Nitrosodimethylamine	62-75-9	0.00E+00	0.00E+00	0.00E+00	0.00E+00
N-Nitrosodimethylamine	86-30-6				
N-Nitrosomorpholine	59-89-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Naphthalene	91-20-3	5.60E+01	2.80E-02	5.37E+01	2.69E-02
Nickel (Ni) Compounds					
Nitrobenzene	98-95-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
o-Anisidine	90-04-0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
o-Toluidine	95-53-4	6.05E+01	3.03E-02	5.80E+01	2.90E-02
o-Xylene	95-47-6	2.58E+02	1.29E-01	2.47E+02	1.24E-01
p-Xylene	106-42-3				
Pentachloronitrobenzene	82-68-8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pentachlorophenol	87-86-5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Phenol	108-95-2	3.70E+01	1.85E-02	3.55E+01	1.77E-02
Propanal	123-38-6				
Propylene Oxide	75-56-9	1.44E+03	7.20E-01	1.38E+03	6.91E-01
Styrene	100-42-5	1.15E+03	5.76E-01	1.11E+03	5.53E-01
Substituted Quinoline	91-22-5				
t-Butyl Methyl Ether	1634-04-4	2.16E+03	1.08E+00	2.08E+03	1.04E+00
Tetrachloroethene	127-18-4	1.88E+02	9.42E-02	1.81E+02	9.03E-02
Toluene	108-88-3	5.50E+02	2.75E-01	5.27E+02	2.64E-01
Trichloroethene	79-01-6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Trifluralin	1582-09-8	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Vinyl Acetate	108-05-4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Vinyl Chloride	75-01-4	3.57E+00	1.78E-03	3.42E+00	1.71E-03

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Emission Category: Rubber Processing, Mold Release Usage
Emission Calculation Basis: 2005 Actual Emissions and Potential Emissions

Actual Emission Calculations:

Materials Used (2)	Annual Usage (1) gallons	Material Density lbs/gal	Annual Usage (1) pounds		Composition, wt. % VOC Content wt. %	Gly. Ether Content wt%		Emissions, tpy VOC lbs/year	Gly. Ether lbs/year
RR5 Hot EFI	91	7.09	645		91.6	0.0		591	0
McLube 1711L Aerosol	---	6.65	315		93.3	20.0		294	63
McLube 1711L Bulk	20	7.01	140		95.6	45.0		134	63
MAC 668	13	8.34	108		0.5	0.0		0.54	0
Crystal 1053	32	8.34	267		1.0	0.0		2.67	0
Crystal 5000	42	8.34	350		5.0	0.0		17.51	0
SM2162	---	8.20	40		1.1	0.0		0.44	0
Monocoat 1505W	51	8.34	425		3.0	0.0		12.76	0
Monocoat 1633W	32	8.42	270		1.0	0.0		2.70	0
Monocoat 1663W	4	8.42	34		0.2	0.0		0.07	0
Monocoat 1609W	58	8.42	489		6.0	0.0		29.31	0
Monocoat 1656W	486	8.34	4,053		2.0	0.0		81.06	0
Monocoat 1652W	4	8.34	33		1.0	0.0		0.33	0
Dow Corning 36	---	8.34	441		0.10	0.0		0.42	0
Dow Corning 550	---	8.88	45		0.09	0.0		0.04	0
						Total, lbs:		1,166	126
						Total, tons:		**0.58**	**0.06**

(1) Marc Hart/Nick Nogalski
(2) Other mold releases (Darvan ME, PolyEM40, Emcone 1000, McLube 1779 Bulk, MAC 787) contain no VOC or HAPs

Potential Emission Calculations:

Type of Press		Annual Rubber Throughput (1) pounds	Max. Mold Release Usage (2) lb/lb rubber	Max. Annual Mold Release Usage pounds		Composition, wt. % VOC Content wt. %	Gly. Ether Content wt%		Emissions, tpy VOC tpy	Gly. Ether tpy
STA Presses		131,400	0.00843	1,108		91.6	45.0		0.51	0.25
Small Lot Presses		423,108	0.00843	3,567		91.6	45.0		1.63	0.80
Desma Presses		1,252,680	0.00843	10,562		91.6	45.0		4.83	2.38
REP Presses		177,828	0.00843	1,499		91.6	45.0		0.69	0.34
20-P Presses		3,758,040	0.00843	31,685		91.6	45.0		14.50	7.13
24-T Presses		3,179,880	0.00843	26,810		91.6	45.0		12.27	6.03
Misc 16/20/24" Presses		867,240	0.00843	7,312		91.6	45.0		3.35	1.65
Desma Presses		1,138,800	0.00843	9,601		91.6	45.0		4.40	2.16
Misc 16"/24" Presses		2,023,560	0.00843	17,061		91.6	45.0		7.81	3.84
Panstone Presses		227,760	0.00843	1,920		91.6	45.0		0.88	0.43
Grimco Double Deck		113,880	0.00843	960		91.6	45.0		0.44	0.22
Hannifin Air Presses		578,160	0.00843	4,875		91.6	45.0		2.23	1.10
TOTAL		13,872,336							**53.54**	**26.32**

(1) See rubber processing emission calculations, "Potential Production"
(2) Data gathered on 8/9/04 on worst-case part (release used every 5th heat):
0.334 pounds mold release/39.61474 pounds rubber
Mold release usage factor: (lbs/lbs rubber) = 0.00843

Appendix A: Emission Calculations

Company Name: **Freudenberg - NOK General Partnership**
Address City IN Zip: **487 West Main Street, Morristown, IN 46161**
FESOP Renewal No.: **F145-30383-00028**
Permit Reviewer: **Deborah Cole**
Issuance: **December 14, 2011**
FESOP AA No.: **F145-31681-00028**
Permit Reviewer: **Sarah Street**
Date: **April 4, 2012**

Particulate Emissions - Rubber Curing

General Information, Curing:

Curing Emission Factor, lb/lb rubber c 0.000675 Freudenberg-NOK Emission Factor
Maximum Total Rubber Post Cured, lb 1,637,244 See "Potential Rubber Production" sheet

Maximum Sitewide Curing Emissions:

			Cure
Parameter			Ovens -
			Sitewide
Maximum Throughput, lbs			1,637,244
Curing Emission Factor, lb/lb rubber cured			0.000675
Uncontrolled Emissions, lbs			1,105.1
Uncontrolled Emissions, tons			**0.55**

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Oven Curing Emission Factors (Page 1 of 3)		
Pollutant Name	**CAS No.**	**Max**
		Factors
		lb/lb rubber
Total VOC		1.87E-02
Total Speciated Organics		5.30E-03
Total Organic HAPs		3.45E-03
Total Metal HAPs		
Total HAPs		3.45E-03
Total Particulate Matter		
1,1,1-Trichloroethane	71-55-6	1.47E-05
1,1,2,2-Tetrachloroethane	79-34-5	0.00E+00
1,1,2-Trichloroethane	79-00-5	0.00E+00
1,1-Dichloroethane	75-34-3	0.00E+00
1,1-Dichloroethene	75-35-4	5.40E-06
1,2,4-Trichlorobenzene	120-82-1	0.00E+00
1,2-Dibromo-3-Chloropropane	96-12-8	0.00E+00
1,2-Dibromoethane	106-93-4	0.00E+00
1,2-Dichloroethane	107-06-2	0.00E+00
1,2-Dichloropropane	78-87-5	0.00E+00
1,3-Butadiene	106-99-0	9.41E-06
1,4-Dichlorobenzene	106-37-6	
1,4-Dichlorobenzene	106-46-7	0.00E+00
1,4-Dioxane	123-91-1	0.00E+00
1,4-Phenylenediamine	106-50-3	0.00E+00
2,4,5-Trichlorophenol	95-95-4	0.00E+00
2,4,6-Trichlorophenol	88-06-2	0.00E+00
2,4-Dinitrophenol	51-28-5	3.98E-07
2,4-Dinitrotoluene	121-14-2	0.00E+00
2-Butanone	78-93-3	1.44E-04
2-Chloro-1,3-Butadiene	126-99-8	
2-Chloroacetophenone	532-27-4	1.34E-08
2-Methylphenol	95-48-7	2.10E-06
3,3'-Dichlorobenzidine	91-94-1	0.00E+00
3,3'-Dimethoxybenzidine	119-90-4	0.00E+00
3,3'-Dimethylbenzidine	119-93-7	0.00E+00
4,4'-Methylenedianiline	101-77-9	0.00E+00
4-Aminobiphenyl	92-67-1	0.00E+00
4-Methyl-2-Pentanone	108-10-1	1.93E-04
4-Nitrobiphenyl	92-93-3	0.00E+00
4-Nitrophenol	100-02-7	2.44E-07
a,a,a-Trichlorotoluene	98-07-7	0.00E+00
Acetaldehyde	75-07-0	1.71E-05
Acetaldehyde + Isobutane		

Oven Curing Emission Factors (Page 2 of 3)		
Pollutant Name	**CAS No.**	**Max**
		Factors
		lb/lb rubber
Acetonitrile	75-05-8	1.14E-05
Acetophenone	98-86-2	2.13E-04
Acrolein	107-02-8	2.03E-05
Acrylonitrile	107-13-1	2.59E-04
Allyl Chloride	107-05-1	0.00E+00
Aniline	62-53-3	1.26E-05
Benzene	71-43-2	4.88E-05
Benzidine	92-87-5	9.15E-08
Benzyl Chloride	100-44-7	0.00E+00
Biphenyl	92-52-4	3.96E-06
bis(2-Chloroethyl)ether	111-44-4	0.00E+00
bis(2-Ethylhexyl)phthalate	117-81-7	1.01E-05
Bromoform	75-25-2	6.85E-06
Bromomethane	74-83-9	1.39E-06
Cadmium (Cd) Compounds		
Carbon Disulfide	75-15-0	1.37E-03
Carbon Tetrachloride	56-23-5	2.38E-04
Carbonyl Sulfide	463-58-1	1.91E-04
Chlorobenzene	108-90-7	0.00E+00
Chloroethane	75-00-3	4.04E-05
Chloroform	67-66-3	3.31E-06
Chloromethane	74-87-3	2.08E-05
Chromium (Cr) Compounds		
Cobalt (Co) Compounds		
Cumene	98-82-8	7.54E-05
Di-n-butylphthalate	84-74-2	8.22E-06
Dibenzofuran	132-64-9	3.29E-06
Dimethylaminoazobenzene	60-11-7	8.32E-08
Dimethylphthalate	131-11-3	3.87E-07
Epichlorohydrin	106-89-8	0.00E+00
Ethyl Acrylate	140-88-5	1.16E-04
Ethylbenzene	100-41-4	1.06E-04
Hexachlorobenzene	118-74-1	2.29E-07
Hexachlorobutadiene	87-68-3	0.00E+00
Hexachlorocyclopentadiene	77-47-4	0.00E+00
Hexachloroethane	67-72-1	6.26E-06
Hexane	110-54-3	2.78E-03
Hydroquinone	123-31-9	4.11E-06
Isooctane	540-84-1	1.89E-05
Isophorone	78-59-1	1.63E-05

Oven Curing Emission Factors (pg. 3)

Pollutant Name	CAS No.	Max Factors
		lb/lb rubber
Lead (Pb) Compounds		
m-Xylene	108-38-3	1.33E-06
m-Xylene + p-Xylene		3.52E-04
Methylene bis-chloroaniline	101-14-4	0.00E+00
Methylene Chloride	75-09-2	9.50E-04
N,N-Dimethylaniline	121-69-7	1.26E-06
N-Nitrosodimethylamine	62-75-9	0.00E+00
N-Nitrosodimethylamine	86-30-6	
N-Nitrosomorpholine	59-89-2	0.00E+00
Naphthalene	91-20-3	7.01E-06
Nickel (Ni) Compounds		
Nitrobenzene	98-95-3	4.97E-07
o-Anisidine	90-04-0	0.00E+00
o-Toluidine	95-53-4	2.03E-06
o-Xylene	95-47-6	1.89E-04
p-Xylene	106-42-3	2.53E-05
Pentachloronitrobenzene	82-68-8	0.00E+00
Pentachlorophenol	87-86-5	3.08E-07
Phenol	108-95-2	3.13E-05
Propanal	123-38-6	8.19E-05
Propylene Oxide	75-56-9	1.72E-04
Styrene	100-42-5	2.16E-05
Substituted Quinoline	91-22-5	1.23E-04
t-Butyl Methyl Ether	1634-04-4	4.06E-05
Tetrachloroethene	127-18-4	1.01E-04
Toluene	108-88-3	5.62E-04
Trichloroethene	79-01-6	5.46E-06
Trifluralin	1582-09-8	0.00E+00
Vinyl Acetate	108-05-4	0.00E+00
Vinyl Chloride	75-01-4	6.69E-08

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP No.: F145-23439-00028
Reviewer: Deborah Cole
Date: July 25, 2011

Oven Curing Emissions (adjusted) (Page 1 of 3 pages)			
Pollutant Name	**CAS No.**		
		Maximum Total Oven	
		pounds	tons
Rubber Throughput, pounds		1,637,244	
Total VOC		3.06E+04	1.53E+01
Total Speciated Organics		8.68E+03	4.34E+00
Total Organic HAPs		5.64E+03	2.82E+00
Total Metal HAPs			
Total HAPs		5.64E+03	2.82E+00
Total Particulate Matter			
1,1,1-Trichloroethane	71-55-6	2.40E+01	1.20E-02
1,1,2,2-Tetrachloroethane	79-34-5	0.00E+00	0.00E+00
1,1,2-Trichloroethane	79-00-5	0.00E+00	0.00E+00
1,1-Dichloroethane	75-34-3	0.00E+00	0.00E+00
1,1-Dichloroethene	75-35-4	8.84E+00	4.42E-03
1,2,4-Trichlorobenzene	120-82-1	0.00E+00	0.00E+00
1,2-Dibromo-3-Chloropropane	96-12-8	0.00E+00	0.00E+00
1,2-Dibromoethane	106-93-4	0.00E+00	0.00E+00
1,2-Dichloroethane	107-06-2	0.00E+00	0.00E+00
1,2-Dichloropropane	78-87-5	0.00E+00	0.00E+00
1,3-Butadiene	106-99-0	1.54E+01	7.70E-03
1,4-Dichlorobenzene	106-37-6		
1,4-Dichlorobenzene	106-46-7	0.00E+00	0.00E+00
1,4-Dioxane	123-91-1	0.00E+00	0.00E+00
1,4-Phenylenediamine	106-50-3	0.00E+00	0.00E+00
2,4,5-Trichlorophenol	95-95-4	0.00E+00	0.00E+00
2,4,6-Trichlorophenol	88-06-2	0.00E+00	0.00E+00
2,4-Dinitrophenol	51-28-5	6.52E-01	3.26E-04
2,4-Dinitrotoluene	121-14-2	0.00E+00	0.00E+00
2-Butanone	78-93-3	2.35E+02	1.18E-01
2-Chloro-1,3-Butadiene	126-99-8		
2-Chloroacetophenone	532-27-4	2.20E-02	1.10E-05
2-Methylphenol	95-48-7	3.43E+00	1.72E-03
3,3'-Dichlorobenzidine	91-94-1	0.00E+00	0.00E+00
3,3'-Dimethoxybenzidine	119-90-4	0.00E+00	0.00E+00
3,3'-Dimethylbenzidine	119-93-7	0.00E+00	0.00E+00
4,4'-Methylenedianiline	101-77-9	0.00E+00	0.00E+00
4-Aminobiphenyl	92-67-1	0.00E+00	0.00E+00
4-Methyl-2-Pentanone	108-10-1	3.15E+02	1.58E-01
4-Nitrobiphenyl	92-93-3	0.00E+00	0.00E+00
4-Nitrophenol	100-02-7	3.99E-01	2.00E-04
a,a,a-Trichlorotoluene	98-07-7	0.00E+00	0.00E+00
Acetaldehyde	75-07-0	2.80E+01	1.40E-02
Acetaldehyde + Isobutane			

Oven Curing Emissions (Page 2 of 3)

Pollutant Name	CAS No.		
		Maximum Total Oven	
		pounds	tons
Acetonitrile	75-05-8	1.87E+01	9.34E-03
Acetophenone	98-86-2	3.48E+02	1.74E-01
Acrolein	107-02-8	3.33E+01	1.66E-02
Acrylonitrile	107-13-1	4.24E+02	2.12E-01
Allyl Chloride	107-05-1	0.00E+00	0.00E+00
Aniline	62-53-3	2.07E+01	1.03E-02
Benzene	71-43-2	7.99E+01	3.99E-02
Benzidine	92-87-5	1.50E-01	7.49E-05
Benzyl Chloride	100-44-7	0.00E+00	0.00E+00
Biphenyl	92-52-4	6.49E+00	3.24E-03
bis(2-Chloroethyl)ether	111-44-4	0.00E+00	0.00E+00
bis(2-Ethylhexyl)phthalate	117-81-7	1.65E+01	8.26E-03
Bromoform	75-25-2	1.12E+01	5.61E-03
Bromomethane	74-83-9	2.27E+00	1.13E-03
Cadmium (Cd) Compounds			
Carbon Disulfide	75-15-0	2.25E+03	1.12E+00
Carbon Tetrachloride	56-23-5	3.89E+02	1.95E-01
Carbonyl Sulfide	463-58-1	3.12E+02	1.56E-01
Chlorobenzene	108-90-7	0.00E+00	0.00E+00
Chloroethane	75-00-3	6.62E+01	3.31E-02
Chloroform	67-66-3	5.41E+00	2.71E-03
Chloromethane	74-87-3	3.40E+01	1.70E-02
Chromium (Cr) Compounds			
Cobalt (Co) Compounds			
Cumene	98-82-8	1.23E+02	6.17E-02
Di-n-butylphthalate	84-74-2	1.35E+01	6.73E-03
Dibenzofuran	132-64-9	5.38E+00	2.69E-03
Dimethylaminoazobenzene	60-11-7	1.36E-01	6.81E-05
Dimethylphthalate	131-11-3	6.34E-01	3.17E-04
Epichlorohydrin	106-89-8	0.00E+00	0.00E+00
Ethyl Acrylate	140-88-5	1.91E+02	9.53E-02
Ethylbenzene	100-41-4	1.74E+02	8.72E-02
Hexachlorobenzene	118-74-1	3.75E-01	1.87E-04
Hexachlorobutadiene	87-68-3	0.00E+00	0.00E+00
Hexachlorocyclopentadiene	77-47-4	0.00E+00	0.00E+00
Hexachloroethane	67-72-1	1.02E+01	5.12E-03
Hexane	110-54-3	4.54E+03	2.27E+00
Hydroquinone	123-31-9	6.73E+00	3.37E-03
Isooctane	540-84-1	3.10E+01	1.55E-02
Isophorone	78-59-1	2.67E+01	1.34E-02

Oven Curing Emissions (Page 3 of 3)

Pollutant Name	CAS No.		
		Maximum Total Oven	
		pounds	tons
Lead (Pb) Compounds			
m-Xylene	108-38-3	2.18E+00	1.09E-03
m-Xylene + p-Xylene		5.76E+02	2.88E-01
Methylene bis-chloroaniline	101-14-4	0.00E+00	0.00E+00
Methylene Chloride	75-09-2	1.55E+03	7.77E-01
N,N-Dimethylaniline	121-69-7	2.06E+00	1.03E-03
N-Nitrosodimethylamine	62-75-9	0.00E+00	0.00E+00
N-Nitrosodimethylamine	86-30-6		
N-Nitrosomorpholine	59-89-2	0.00E+00	0.00E+00
Naphthalene	91-20-3	1.15E+01	5.74E-03
Nickel (Ni) Compounds			
Nitrobenzene	98-95-3	8.14E-01	4.07E-04
o-Anisidine	90-04-0	0.00E+00	0.00E+00
o-Toluidine	95-53-4	3.32E+00	1.66E-03
o-Xylene	95-47-6	3.09E+02	1.54E-01
p-Xylene	106-42-3	4.15E+01	2.07E-02
Pentachloronitrobenzene	82-68-8	0.00E+00	0.00E+00
Pentachlorophenol	87-86-5	5.05E-01	2.52E-04
Phenol	108-95-2	5.12E+01	2.56E-02
Propanal	123-38-6	1.34E+02	6.71E-02
Propylene Oxide	75-56-9	2.81E+02	1.40E-01
Styrene	100-42-5	3.54E+01	1.77E-02
Substituted Quinoline	91-22-5	2.02E+02	1.01E-01
t-Butyl Methyl Ether	1634-04-4	6.64E+01	3.32E-02
Tetrachloroethene	127-18-4	1.65E+02	8.26E-02
Toluene	108-88-3	9.20E+02	4.60E-01
Trichloroethene	79-01-6	8.94E+00	4.47E-03
Trifluralin	1582-09-8	0.00E+00	0.00E+00
Vinyl Acetate	108-05-4	0.00E+00	0.00E+00
Vinyl Chloride	75-01-4	1.10E-01	5.48E-05

Appendix A: Emission Calculations

Company Name: **Freudenberg - NOK General Partnership**
Address City IN Zip: **487 West Main Street, Morristown, IN 46161**
FESOP Renewal No.: **F145-30383-00028**
Permit Reviewer: **Deborah Cole**
Issuance: **December 14, 2011**
FESOP AA No.: **F145-31681-00028**
Permit Reviewer: **Sarah Street**
Date: **April 4, 2012**

Emission Unit: **Universal Mold Cleaning Blaster**
Emission Calculation Basis: **2010 Actual Emissions and Potential Emissions**

Source Information:

Blaster Media	Plastic	Plant Walkthrough
Annual Particulate Collected, pounds	600	Jeff Carlton (50 lbs/month)
Normal Annual Operating Hours	1,560	Jeff Carlton (2 hrs/shift, 3 shifts/day, 5 days/week, 52 weeks/yr)
Maximum Annual Operating Hours	8,760	Continuous Operation
Maximum Hourly Throughput, lbs	3,600	Jeff Carlton (25 minutes/load, 1,500 lbs/load)

Emission Calculations:

Finishing Unit	Annual Particulate Collected pounds	Collector Control Efficiency (1) %	Annual Particulate Generated pounds	Annual Particulate Released pounds	Venting Location (Indoors/ Outdoors)
2010 Actual Emissions:					
Universal Mold Cleaner/Blaster	600	98.0	612.24	12.24	Indoors
Potential Emissions (lbs/yr:)					
Universal Mold Cleaner/Blaster	0	0.0	3,438	3,438	Indoors
Potential Emissions: (tons/yr)					
Universal Mold Cleaner/Blaster			**1.72**		

(1) Engineering Estimate
(2) Assume that all particulate emitted is PM-10

Example Calculations:
Particulate Generated, lbs = Particulate Collected, pounds / (Collector Control Efficiency, % /100)

Appendix A: Emission Calculations

Company Name: **Freudenberg - NOK General Partnership**
Address City IN Zip: **487 West Main Street, Morristown, IN 46161**
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Permit Reviewer: **Sarah Street**
Date: **April 4, 2012**

Emission Unit: **Wheelabrator Metal Case Blaster**
Emission Calculation Basis: **2010 Actual Emissions and Potential Emissions**

Source Information:

Blaster Media	Metal	Plant Walkthrough
Annual Particulate Collected, pounds	60	Vic West (20 lbs, 3x/year)
Normal Annual Operating Hours	260	Vic West (5 hours/week, 52 weeks/year)
Maximum Annual Operating Hours	8,760	Continuous Operation
Maximum Hourly Throughput, lbs	333	Vic West (9 minutes/load, 50 lbs/load)

Emission Calculations:

Finishing Unit	Annual Particulate Collected pounds	Collector Control Efficiency (1) %	Annual Particulate Generated pounds	Annual Particulate Released pounds	Venting Location (Indoors/ Outdoors)
2010 Actual Emissions:					
Wheelabrator Shot Blaster	60	98.0	61.22	1.22	Indoors
Potential Emissions (lbs/yr):					
Wheelabrator Shot Blaster	0	0.0	2,063	2,063	Indoors
Potential Emissions (tons/yr):					
Wheelabrator Shot Blaster			**1.03**		

(1) Engineering Estimate
(2) Assume that all particulate emitted is PM-10

Example Calculations:
Particulate Generated, lbs = Particulate Collected, pounds / (Collector Control Efficiency, % /100)

Appendix A: Emission Calculations

Company Name: **Freudenberg - NOK General Partnership**
Address City IN Zip: **487 West Main Street, Morristown, IN 46161**
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Issuance: **December 14, 2011**
FESOP AA No.: **F145-31681-00028**
Permit Reviewer: **Sarah Street**
Date: **April 4, 2012**

Emission Unit: **Gritblaster Aluminum Oxide**
Emission Calculation Basis: **2010 Actual Emissions and Potential Emissions**

Source Information:

Blaster Media	Al Ox	Plant Walkthrough
Annual Particulate Collected, pounds	200	Vic West (50 lbs, 4x/year)
Normal Annual Operating Hours	260	Vic West (5 hours/week, 52 weeks/year)
Maximum Annual Operating Hours	8,760	Continuous Operation
Maximum Hourly Throughput, lbs	3,600	Vic West (9 minutes/load, 50 lbs/load)

Emission Calculations:

Finishing Unit	Annual Particulate Collected pounds	Collector Control Efficiency (1) %	Annual Particulate Generated pounds	Annual Particulate Released pounds	Venting Location (Indoors/ Outdoors)
2010 Actual Emissions:					
Gritblaster AlOX	200	98.0	204.08	4.08	Indoors
Potential Emissions (lbs/yr):					
Gritblaster AlOX	0	0.0	6,876	6,876	Indoors
Potential Emissions (tons/yr):					
Gritblaster AlOX			**3.44**		

(1) Engineering Estimate
(2) Assume that all particulate emitted is PM-10

Example Calculations:
Particulate Generated, lbs = Particulate Collected, pounds / (Collector Control Efficiency, % /100)

Appendix A: Emission Calculations

Company Name: **Freudenberg - NOK General Partnership**
Address City IN Zip: **487 West Main Street, Morristown, IN 46161**
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FESOP AA No.: **F145-31681-00028**
Permit Reviewer: **Sarah Street**
Date: **April 4, 2012**

Emission Unit: **Universal Mold Cleaning Blaster**
Emission Calculation Basis: **2010 Actual Emissions and Potential Emissions**

Source Information:

Blaster Media	Baking Soda	Plant Walkthrough
Annual Particulate Collected, pounds	30,000	Jeff Carlton (2500 lbs/month)
Normal Annual Operating Hours	1,560	Jeff Carlton (2 hrs/shift, 3 shifts/day, 5 days/week, 52 weeks/yr)
Maximum Annual Operating Hours	8,760	Continuous Operation
Maximum Hourly Throughput, lbs	3,600	Jeff Carlton (25 minutes/load, 1,500 lbs/load)

Emission Calculations:

Finishing Unit	Annual Particulate Collected pounds	Collector Control Efficiency (1) %	Annual Particulate Generated pounds	Annual Particulate Released pounds	Venting Location (Indoors/ Outdoors)
2010 Actual Emissions:					
Universal Mold Cleaner/Blaster	30,000	98.0	30,612.24	612.24	Indoors
Potential Emissions (lbs/yr):					
Universal Mold Cleaner/Blaster	0	0.0	171,900	171,900	Indoors
Potential Emissions (tons/yr):					
Universal Mold Cleaner/Blaster			**85.95**		

(1) Engineering Estimate
(2) Assume that all particulate emitted is PM-10

Example Calculations:
Particulate Generated, lbs = Particulate Collected, pounds / (Collector Control Efficiency, % /100)

326 IAC 6-3-2(e) Allowable Rate of Emissions

Abrasive Blasting	Process Rate	Process Weight	Allowable PM	Allowable PM
	(lbs/hr)	(tons/hr)	(lbs/hr)	(tons/yr)
Mold Cleaner Blaster (baking soda)	4,600	2.300	7.16	31.38

Appendix A: Emission Calculations

Company Name: **Freudenberg - NOK General Partnership**
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Emission Unit: **Case Treat blaster AlOx**
Emission Calculation Basis: **2010 Actual Emissions and Potential Emissions**

Source Information:

Blaster Media	Al Ox	Plant Walkthrough
Annual Particulate Collected, pounds	800	Vic West (50 lbs, 16x/year)
Normal Annual Operating Hours	2,080	Vic West (40 hours/week, 52 weeks/year)
Maximum Annual Operating Hours	8,760	Continuous Operation
Maximum Hourly Throughput, lbs	3,600	Vic West (9 minutes/load, 50 lbs/load)

Emission Calculations:

Finishing Unit	Annual Particulate Collected pounds	Collector Control Efficiency (1) %	Annual Particulate Generated pounds	Annual Particulate Released pounds	Venting Location (Indoors/ Outdoors)
2010 Actual Emissions:					
Gritblaster AlOX	800	98.0	816.33	16.33	Indoors
Potential Emissions (lbs/yr):					
Gritblaster AlOX	0	0.0	3,438	3,438	Indoors
Potential Emissions (tons/yr):					
Gritblaster AlOX			**1.72**		

(1) Engineering Estimate
(2) Assume that all particulate emitted is PM-10

Example Calculations:
Particulate Generated, lbs = Particulate Collected, pounds / (Collector Control Efficiency, % /100)

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: **Freudenberg - NOK General Partnership**
Address City IN Zip: **487 West Main Street, Morristown, IN 46161**
FESOP Renewal No.: **F145-30383-00028**
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Date: **April 4, 2012**

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
17.6	1000	154.2

	Pollutant						
	PM*	PM10*	PM 2.5	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	5.7	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.15	0.59	0.44	0.05	7.71	0.42	6.48

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See following page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

	HAPs - Organics					TOTAL
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.62E-04	9.25E-05	0.006	0.139	2.62E-04	0.145

	HAPs - Metals					TOTAL
	Lead	Cadmium	Chromium	Manganese	Nickel	
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	3.85E-05	8.48E-05	1.08E-04	2.93E-05	1.62E-04	4.22E-04

Methodology is the same as previous page.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See following page for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions

Company Name: **Freudenberg - NOK General Partnership**
Address City IN Zip: **487 West Main Street, Morristown, IN 46161**
FESOP Renewal No.: **F145-30383-00028**
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Permit Reviewer: **Sarah Street**
Date: **April 4, 2012**

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	9250.56	0.1773024	0.1695936
Summed Potential Emissions in tons/yr	9,250.91		
CO2e Total in tons/yr	9,306.86		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Calculation: Breathing and Working Losses
Method Reference: AP-42, Section 4.3 (9/85)
Emission Calculations: Storage Tanks

Tanks/Conten	Actual Tank Diameter ft (Da)	Actual Tank Length ft (La)	Actual Tank Capacity gal (V)	Effective Tank Diameter ft (De)	Avg. Vapor Height ft (H)	Storage Temp. °F	Vapor Molecular Weight lb/lb-mole (Mv)	Material Vapor Pressure psia (P)	Diurnal Temp. Change °F (delta T)	Tank Color dim	Paint Factor dim (Fp)	Tank Diam. Factor dim (C)	Product Factor dim (Kc)	Tank Through-put gal/yr (TP)	Number of Tank Turnovers dim (N)	Turnover Factor dim (Kn)	Breathing Loss lbs/yr (Lb)	Working Loss lbs/yr (Lw)	TOTAL Annual Emissions lbs/yr	TOTAL Annual Emissions tons/year
Actual Emissions:																				
New Hydrauli	5.33	6.0	1,000	6.4	3.2	70	190	1.93E-03	0	-	-	-	1	1,563	1.56	1	Negligible	1.38E-02	0.01	0.00
Used Hydrau	6.0	15.0	3,000	10.7	5.4	70	190	1.93E-03	21	-	1	0.58	1	1,563	0.52	1	3.71E+00	1.38E-02	3.72	0.00
Potential Emissions:																				
New Hydrauli	5.33	6.0	1,000	6.4	3.2	70	190	1.93E-03	0	-	-	-	1	365,000	365.00	1	Negligible	3.22E+00	3.22	0.00
Used Hydrau	6.0	15.0	3,000	10.7	5.4	70	190	1.93E-03	21	-	1	0.58	1	1,095,000	365.00	1	3.71E+00	9.66E+00	13.37	0.01

NOTES:

The new hydraulic oil tank is a horizontal indoor tank; the used hydraulic oil tank is a horizontal outdoor tank
Breathing losses from the new hydraulic oil storage tank are negligible because the diurnal temperature change is essentially zero
To be conservative, the used hydraulic oil was assumed to contain no water
The chemical properties of hydraulic oil were based on properties of similar materials
Actual tank throughputs based on information from Marc Hart
Potential tank throughput = 1 turnover per day

Appendix A: Emission Calculations

Company Name: **Freudenberg - NOK General Partnership**
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Date: **April 4, 2012**

Emission Category: **Phosphating Line**
Emission Calculation Basis: **2005 Actual Emissions and Potential Emissions**

Source Information - Actual:

2005 Chryscoat 187 Usage, gals	4,865	Nick Nogalski
Chryscoat 187 Makeup, gals/week	18	Vic West (9 gallons, 2X/week)
Total Chryscoat 187 Makeup, gals	936	Calculated Value (52 weeks/yr)
Total Chryscoat 187 Adds, gals	3,929	Calculated Value (Total - Makeup)

Source Information - Potential:

Chryscoat Makeup, gals/shift	9	Vic West (Worst Case)
Chryscoat Adds, gals/shift	3	Vic West
Maximum Operation, shifts	1,095	Continuous Operation (3 shifts/day, 365 days/year)

Emission Calculations:

Materials Used		Annual Usage	Material Density	Annual Usage	Material Composition		Emissions	
					VOC	Diethylene Glycol Butyl Ether	VOC	Diethylene Glycol Butyl Ether
		gallons	lbs/gal	pounds	wt. %	wt. %	tpy	tpy
2005 Actual:								
Makeup	Chryscoat 187	936	9.4	8,798	2.0	5.0	0.09	0.02
Add	Chryscoat 187	3,929	9.4	36,933	2.0	5.0	0.37	0.09
							0.46	0.11
Potential:								
Makeup	Chryscoat 187	9,855	9.4	92,637	2.0	5.0	0.93	0.23
Add	Chryscoat 187	3,285	9.4	30,879	2.0	5.0	0.31	0.08
							1.24	**0.31**

Notes:

100	% of the VOC in Chryscoat 187 added to the line as makeup and adds is assumed to be emitted
10	% of the diethylene glycol butyl ether in Chryscoat 187 added to the line as makeup and adds is assumed to be emitted

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 487 West Main Street, Morristown, IN 46161
FESOP Renewal No.: F145-30383-00028
Permit Reviewer: Deborah Cole
Issuance: December 14, 2011
FESOP AA No.: F145-31681-00028
Permit Reviewer: Sarah Street
Date: April 4, 2012

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Personal (entering plant/one-way trip)	150.0	1.0	150.0	3.0	450.0	500	0.095	14.2	5184.7
Personal (leaving plant/one-way trip)	150.0	1.0	150.0	3.0	450.0	500	0.095	14.2	5184.7
Tracker/Trailer (entering plant/one way trip)	4.0	1.0	4.0	40.0	160.0	500	0.095	0.4	138.3
Tracker/Trailer (leaving plant/one way trip)	4.0	1.0	4.0	40.0	160.0	500	0.095	0.4	138.3
TOTAL			**308.0**		**1,220.0**			**29.2**	**10,645.8**

Average Vehicle Weight Per Trip = 4.0 tons/trip
Average Miles Per Trip = 0.09 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	4.0	4.0	4.0	tons = average vehicle weight (provided by source)
sL =	0.6	0.6	0.6	g/m^2 = silt loading value = ubiquitous baseline factor - Table 13.2.1-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	0.028	0.006	0.0014	lb/mile
Mitigated Emission Factor, Eext =	0.026	0.005	0.0013	lb/mile
Dust Control Efficiency =	0%	0%	0%	

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Personal (entering plant) (one-way trip)	0.07	0.01	0.00	0.07	0.01	0.00	0.07	0.01	0.00
Personal (leaving plant) (one-way trip)	0.07	0.01	0.00	0.07	0.01	0.00	0.07	0.01	0.00
Tracker/Trailer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tracker/Trailer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	**0.15**	**0.03**	**0.01**	**0.14**	**0.03**	**0.01**	**0.14**	**0.03**	**0.01**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Robert Sams
Freudenberg – NOK General Partnership
555 Marathon Blvd
Findlay, OH 45840

DATE: April 17, 2012

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Administrative Amendment
145-31681-00028

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Stacy Flora (Lead Ctr Manager)
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Mail Code 61-53

IDEM Staff	MIDENNEY 4/17/2012 Freudenberg-NOK General Partnership 145-31681-00028 (final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

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2		Stacy Flora Lead Ctr Mgr Freudenberg-NOK General Partnership 487 W Main St Morristown IN 46161 *(RO CAATS)*									
3		Mr. Hugh Garner 10203 S Degelow Road Milroy IN 46156 *(Affected Party)*									
4		Morristown Town Council and Town Manager P.O. Box 389 Morristown IN 46161 *(Local Official)*									
5		Shelby County Commissioners 25 West Polk Shelbyville IN 46176 *(Local Official)*									
6		Shelby County Health Department 1600 E. SR 44B Shelbyville IN 46176 *(Health Department)*									
7		Margaret Brunk Shelby County Council PO Box 107 Fountaintown In 46130 *(Affected Party)*									
8		Tami Grubbs Shelby County Council 2961 N 100 W Shelbyville In 46176 *(Affected Party)*									
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