

Mr. Thomas Julian
Freudenberg - NOK General Partnership
821 South Lake Road
Scottsburg, IN 47170

Re: Minor Source Modification No:
143-12867-00010

Dear Mr. Julian:

Freudenberg - NOK General Partnership applied for a Part 70 operating permit on September 2, 1997 for the operation of a rubber and spring packed seals manufacturing plant. An application to modify the source was received on October 17, 2000. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) One (1) Banbury rubber mixer, identified as MIX2, with a maximum capacity of processing 2000 pounds of raw material per hour, using no control, and exhausting to the atmosphere;
- (b) One (1) Mariyama rubber mixer, identified as MIX3, with a maximum capacity of processing 360 pounds of raw material per hour, using no control, and exhausting to the atmosphere;
- (c) One (1) adhesive drum machine, identified as AC1, with a maximum capacity of coating 10,300 parts per hour, and exhausting to a stack identified as AC-1.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

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 Linda Quigley, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (973) 575-2555, ext. 3284 or dial (800) 451-6027, press 0 and ask for 3-6878.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

LQ/EVP

cc: File - Scott County
U.S. EPA, Region V
Scott County Health Department
Air Compliance Section Inspector - Joe Foyst
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michelle Boner

PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR MANAGEMENT

**Freudenberg - NOK General Partnership
821 South Lake Road
Scottsburg, Indiana 47170**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval 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 2-7 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.

Source Modification No.: 143-12867-00010	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
- A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

B GENERAL CONSTRUCTION CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions [326 IAC 2-7-1]
- B.3 Effective Date of the Permit [IC13-15-5-3]
- B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

C GENERAL OPERATION CONDITIONS

- C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
- C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
- C.4 Opacity [326 IAC 5-1]
- C.5 Operation of Equipment [326 IAC 2-7-6(6)]
- C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]
- C.7 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
- C.8 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
- C.9 General Record Keeping Requirements [326 IAC 2-7-5(3)]
- C.10 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

D.1 FACILITY OPERATION CONDITIONS - two (2) rubber mixers, MIX2 and MIX3 and one (1) adhesive drum machine

Construction Conditions

- D.1.1 General Construction Conditions
- D.1.2 Effective Date of the Permit
- D.1.3 Effective Date of the Permit

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.4 Particulate Matter (PM) [326 IAC 6-3-2]
- D.1.5 Miscellaneous Metal Coating Operations [326 IAC 8-2-9]

Certification

SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 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 approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a rubber and spring packed seals manufacturing plant.

Responsible Official: Thomas Julian
Source Address: 821 South Lake Road, Scottsburg, IN 47170
Mailing Address: 821 South Lake Road, Scottsburg, IN 47170
SIC Code: 3061 and 3499
County Location: Scott
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) One (1) Banbury rubber mixer, identified as MIX2, with a maximum capacity of processing 2000 pounds of raw material per hour, using no control, and exhausting to the atmosphere;
- (b) One (1) Mariyama rubber mixer, identified as MIX3, with a maximum capacity of processing 360 pounds of raw material per hour, using no control, and exhausting to the atmosphere;
- (c) One (1) adhesive drum machine, identified as AC1, with a maximum capacity of coating 10,300 parts per hour, and exhausting to a stack identified as AC-1.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

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

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification ~~[326 IAC 2-7-4(f)]~~~~[326 IAC 2-7-6(1)]~~~~[326 IAC 2-7-5(3)(C)]~~

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan ~~[326 IAC 2-7-5(1),(3) and (13)]~~ ~~[326 IAC 2-7-6(1) and (6)]~~ ~~[326 IAC 1-6-3]~~

- (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, 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;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP 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 Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Amendment or Modification ~~[326 IAC 2-7-11]~~ ~~[326 IAC 2-7-12]~~

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.
- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

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

- (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.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

-
- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.7 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.8 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.9 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this approval;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.10 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval 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, OAM on or before the date it is due.
- (c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) One (1) Banbury rubber mixer, identified as MIX2, with a maximum capacity of processing 2000 pounds of raw material per hour, using no control, and exhausting to the atmosphere;
- (b) One (1) Mariyama rubber mixer, identified as MIX3, with a maximum capacity of processing 360 pounds of raw material per hour, using no control, and exhausting to the atmosphere.
- (c) One (1) adhesive drum machine, identified as AC1, with a maximum capacity of coating 10,300 metal parts per hour, and exhausting to a stack identified as AC-1.

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

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 326 IAC 2-7-10.5, WITH CONDITIONS LISTED BELOW.

Construction Conditions

General Construction Conditions

- D.1.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

- D.1.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.
- D.1.3 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications pursuant to 326 IAC 2.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-7-5(1)]

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

- (a) Pursuant to 326 IAC 6-3-2, the PM from the rubber mixer (MIX2) shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

$$E = 4.10 (1.00)^{0.67} = 4.10 \text{ lbs PM/hr}$$

Based on the above equation, particulate matter emissions from the mixing of rubber shall be limited to 4.10 pounds per hour.

- (b) Pursuant to 326 IAC 6-3-2, the PM from the rubber mixer (MIX3) shall not exceed the pound per hour emission rate established as E in the following formula:

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

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

$$E = 4.10 (0.18)^{0.67} = 0.32 \text{ lbs PM/hr}$$

Based on the above equation, particulate matter emissions from the mixing of rubber shall be limited to 0.32 pounds per hour.

D.1.5 Miscellaneous Metal Coating Operations [326 IAC 8-2-9]

Any change or modification which would increase the potential to emit VOC from coating metal in the emission unit to fifteen (15) pounds per day or more, shall obtain prior approval from IDEM, OAM and shall be subject to the requirements of 326 IAC 8-2-9.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: Freudenberg - NOK General Partnership
Source Address: 821 South Lake Road, Scottsburg, IN 47170
Mailing Address: 821 South Lake Road, Scottsburg, IN 47170
Source Modification No.: 143-12867-00010

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

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 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 Management

Technical Support Document (TSD) for a for a Minor Source Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	Freudenberg - NOK General Partnership
Source Location:	821 South Lake Road, Scottsburg, IN 47170
County:	Scott
SIC Code:	3061 and 3499
Operation Permit No.:	T143-8936-00010
Operation Permit Application Date:	September 2, 1997
Source Modification No.:	143-12867-00010
Permit Reviewer:	Linda Quigley/EVP

The Office of Air Management (OAM) has reviewed a minor source modification application from Freudenberg - NOK General Partnership relating to the construction and operation of the following:

- (a) One (1) Banbury rubber mixer, identified as MIX2, with a maximum capacity of processing 2000 pounds of raw material per hour, using no control, and exhausting to the atmosphere;
- (b) One (1) Mariyama rubber mixer, identified as MIX3, with a maximum capacity of processing 360 pounds of raw material per hour, using no control, and exhausting to the atmosphere;
- (c) One (1) adhesive drum machine, identified as AC1, with a maximum capacity of coating 10,300 parts per hour, and exhausting to a stack identified as AC-1.

History

On October 17, 2000, Freudenberg-NOK General Partnership submitted an application to the OAM requesting to add two (2) additional rubber mixers and one (1) drum machine for adhesive application to their existing plant. Freudenberg-NOK General Partnership submitted a Part 70 permit application (T143-8936-00010) on September 2, 1997 which is currently under OAM's review.

Unpermitted Emission Units and Pollution Control Equipment

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

Existing Approvals

The source applied for a Part 70 Operating Permit on September 2, 1997. The source has been operating under previous approvals including, but not limited to, the following:

- (a) Registration 143-10230-00010, issued on November 5, 1998;
- (b) Exemption 143-8659-00010, issued on July 23, 1997; and
- (c) Registration 143-3308-00010, issued on February 18, 1994;
- (d) Registration, issued on July 12, 1989.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
AC-1	Adhesive Application	22	1.2 X 1.2	7,200	70

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 17, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 - 4).

Potential To Emit Before Controls (Modification)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	9.56
PM-10	9.56
SO ₂	0.00
VOC	5.30
CO	0.00
NO _x	0.00

HAP's	Potential To Emit (tons/year)
Hexane	1.19
Carbon Disulfide	1.06
Carbon Tetrachloride	0.48
TOTAL	5.22

Note: This table reflects the three (3) worst case single HAPs. See Appendix A for a list of all single HAP emissions. The TOTAL in this table is the combined total of all HAPs listed in Appendix A.

*Note: Emission factors taken from the AP-42 Section 4.12 (DRAFT). Worst case HAP emission factors were used from Table 4.12-4 (Compounds #1 through #23). This yielded a higher PTE of total HAPs than VOC. Therefore, PTE for total HAPs was used for PTE of VOC.

Justification for Modification

The Title V permit is being modified through a Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(e) because potential PM and PM-10 emissions are less than twenty-five (25) tons per year, but greater than five (5) tons per year.

County Attainment Status

The source is located in Scott County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Scott County has been designated as attainment or unclassifiable for ozone.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	2.09
PM-10	2.19
SO ₂	0.00
VOC	18.38
CO	0.10
NO _x	1.30

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon documentation supplied by the permittee in the Part

70 permit application.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

Process/facility	Potential to Emit (tons/year)							
	PM	PM-10	SO ₂	VOC	CO	NO _x	Single HAP	Total HAPs
Banbury and Mariyama Mixers (MIX2 and MIX3)	9.56	9.56	0.00	5.19	0.00	0.00	1.17	5.19
Drum Machine adhesive application	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.03
Total Emissions	9.56	9.56	0.00	5.30	0.00	0.00	1.17	5.22

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

*Note: Emission factors taken from the AP-42 Section 4.12 (DRAFT). Worst case HAP emission factors were used from Table 4.12-4 (Internal Mixing and Milling, compounds #1 through #23). This yielded a higher PTE of total HAPs than VOC. Therefore, PTE for total HAPs was used for PTE of VOC.

Federal Rule Applicability

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

State Rule Applicability - Entire Source

326 IAC 2-4.1 (New Source Toxics Control)

This rule applies to new or reconstructed facilities with potential emissions of any single HAP equal to or greater than ten (10) tons per year and potential emissions of combination of HAPs greater than or equal to twenty-five (25) tons per year. Since this facility emits less than ten (10) tons per year of a single HAP and less than twenty-five (25) tons per year of combination of HAPs, the requirements of 326 IAC 2-4.1 do not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Scott County and the source does not have the potential to emit CO, VOC, NO_x, PM-10, or SO₂ at greater than a 100 ton per year rate. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

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

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 8-2-9 (Miscellaneous Metal Coating)

326 IAC 8-2-9 does not apply to this source because the potential to emit VOCs from the surface coating of metal is less than fifteen (15) pounds per day.

326 IAC 6-3-2 (Process Operations)

- (a) The particulate matter (PM) from the rubber mixer, identified as MIX2, shall be limited by the following:

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

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

$$E = 4.10 (1.00)^{0.67} = 4.10 \text{ lbs PM/hr}$$

Based on the above equation, particulate matter emissions from the mixing of rubber shall be limited to 4.10 pounds per hour.

Compliance calculation:

$$(3.89 \text{ tons PM/yr}) * (\text{yr}/8,760 \text{ hrs}) * (2,000 \text{ lbs/ton}) = 0.89 \text{ lbs PM/hr}$$

The uncontrolled emission of 0.89 lb/hr is less than the allowable emission of 4.10 lb/hr, therefore this facility complies with this limit without the benefit or necessity of any add-on emission control equipment.

- (b) The particulate matter (PM) from the rubber mixer, identified as MIX3, shall be limited by the following:

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

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

$$E = 4.10 (0.18)^{0.67} = 0.32 \text{ lbs PM/hr}$$

Based on the above equation, particulate matter emissions from the mixing of rubber shall be limited to 0.32 pounds per hour.

Compliance calculation:

$$(0.70 \text{ tons PM/yr}) * (\text{yr}/8,760 \text{ hrs}) * (2,000 \text{ lbs/ton}) = 0.16 \text{ lbs PM/hr}$$

The uncontrolled emission of 0.16 lb/hr is less than the allowable emission of 0.32 lb/hr, therefore this facility complies with this limit without the benefit or necessity of any add-on emission control equipment.

Testing Requirements

Testing is not required on any of the significant emission units for this source modification because they do not meet the IDEM, OAM criteria for requiring a stack test.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to this source modification because it does not meet the IDEM, OAM criteria for requiring compliance monitoring.

Conclusion

The operation of the rubber mixers and drum machine shall be subject to the conditions of the attached proposed Minor Source Modification No. 143-12867-00010.

Appendix A: Emission Calculations

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 821 South Lake Road, Scottsburg, IN 47170
MSM: 143-12867-00010
Pit ID: 143-00010
Reviewer: Linda Quigley/EVP
Date: November 10, 2000

Uncontrolled Potential Emissions (tons/year)			
Emissions Generating Activity			
Pollutant	Rubber Mixing (MIX2 AND MIX3)	Adhesive Application (AC1)	TOTAL
PM	9.56	0.00	9.56
PM10	9.56	0.00	9.56
SO2	0.00	0.00	0.00
NOx	0.00	0.00	0.00
VOC	5.19	0.11	5.30
CO	0.00	0.00	0.00
total HAPs	5.19	0.03	5.22
worst case single HAP	1.17	0.02	1.17
Total emissions based on rated capacity at 8,760 hours/year.			
Controlled Potential Emissions (tons/year)			
Emissions Generating Activity			
Pollutant	Rubber Mixing (MIX2 AND MIX3)	Adhesive Application (AC1)	TOTAL
PM	9.56	0.00	9.56
PM10	9.56	0.00	9.56
SO2	0.00	0.00	0.00
NOx	0.00	0.00	0.00
VOC	5.19	0.11	5.30
CO	0.00	0.00	0.00
total HAPs	5.19	0.03	5.22
worst case single HAP	1.17	0.02	1.17
Total emissions based on rated capacity at 8,760 hours/year, after control.			

Appendix A: Emission Calculations

VOC and HAP Emissions

Rubber Mixers (MIX2 and MIX3)

Company Name: Freudenberg - NOK General Partnership (Scottsburg I)
 Address City IN Zip: 821 South Lake Road, Scottsburg, IN 47170
 MSM 143-12867-00010
 Plant ID: 143-00010
 Reviewer: Linda Quigley/EVP
 Date: November 10, 2000

Pollutant	Max. Rate (lb/yr)	E.F. (lb/lb)	Emission Rate (lb/yr)	Total emissions (ton/yr)
VOC (MIX2 and MIX3)	20,673,600	4.44E-04	9.179E+03	5.19E+00 *
PM (MIX2 and MIX3)	20,673,600	9.25E-04	1.912E+04	9.562E+00
HAPs (MIX2 and MIX3)				
1,1,1-Trichloroethane	20,673,600	7.31E-07	1.511E+01	7.56E-03
1,1 Dichloroethene	20,673,600	5.47E-07	1.131E+01	5.65E-03
1,3-Butadiene	20,673,600	4.67E-07	9.655E+00	4.83E-03
1,4-Dichlorobenzene	20,673,600	4.48E-09	9.262E-02	4.63E-05
2,4-Dinitrophenol	20,673,600	1.62E-08	3.349E-01	1.67E-04
2-Butanone	20,673,600	5.91E-06	1.222E+02	6.11E-02
2-Chloroacetophenone	20,673,600	5.46E-10	1.129E-02	5.64E-06
2-Methylphenol	20,673,600	8.64E-08	1.786E+00	8.93E-04
4-Methyl-2-Pentanone	20,673,600	3.06E-05	6.326E+02	3.16E-01
4-Nitrophenol	20,673,600	9.90E-09	2.047E-01	1.02E-04
Acetaldehyde	20,673,600	6.95E-07	1.437E+01	7.18E-03
Acetaldehyde + Isobutane	20,673,600	6.12E-07	1.265E+01	6.33E-03
Acetonitrile	20,673,600	4.63E-07	9.572E+00	4.79E-03
Acetophenone	20,673,600	2.32E-06	4.796E+01	2.40E-02
Acrolein	20,673,600	8.26E-07	1.708E+01	8.54E-03
Acrylonitrile	20,673,600	1.17E-05	2.419E+02	1.21E-01
Aniline	20,673,600	5.13E-07	1.061E+01	5.30E-03
Benzene	20,673,600	6.61E-07	1.367E+01	6.83E-03
Benzidine	20,673,600	1.80E-08	3.721E-01	1.86E-04
Biphenyl	20,673,600	5.63E-08	1.164E+00	5.82E-04
bis(2-Ethylhexyl)phthalate	20,673,600	7.40E-07	1.530E+01	7.65E-03
Bromotorm	20,673,600	2.78E-07	5.747E+00	2.87E-03
Bromomethane	20,673,600	5.62E-08	1.162E+00	5.81E-04
Cadmium (Cd) Cpounds	20,673,600	9.35E-09	1.933E-01	9.66E-05
Carbon Disulfide	20,673,600	1.03E-04	2.129E+03	1.06E+00
Carbon Tetrachloride	20,673,600	4.68E-05	9.675E+02	4.84E-01
Carbonyl Sulfide	20,673,600	2.24E-05	4.631E+02	2.32E-01
Chloroethane	20,673,600	1.70E-06	3.515E+01	1.76E-02
Chloroform	20,673,600	6.51E-07	1.346E+01	6.73E-03
Chloromethane	20,673,600	8.86E-07	1.832E+01	9.16E-03
Chromium (Cr) Compounds	20,673,600	1.23E-07	2.543E+00	1.27E-03
Cumene	20,673,600	3.17E-06	6.554E+01	3.28E-02
Di-n-butylphthalate	20,673,600	3.34E-07	6.905E+00	3.45E-03
Dibenzoturan	20,673,600	3.42E-08	7.070E-01	3.54E-04
Dimethylaminoazobenzene	20,673,600	1.64E-08	3.390E-01	1.70E-04
Dimethylphthalate	20,673,600	1.57E-08	3.246E-01	1.62E-04
Ethyl Acrylate	20,673,600	4.73E-06	9.779E+01	4.89E-02
Ethylbenzene	20,673,600	4.32E-06	8.931E+01	4.47E-02
Hexachlorobenzene	20,673,600	9.29E-09	1.921E-01	9.60E-05
Hexachloroethane	20,673,600	1.23E-06	2.543E+01	1.27E-02
Hexane (c)	20,673,600	1.13E-04	2.336E+03	1.17E+00
Hydroquinone	20,673,600	2.62E-05	5.416E+02	2.71E-01
Isooctane	20,673,600	7.94E-07	1.641E+01	8.21E-03
Isophorone	20,673,600	6.63E-07	1.371E+01	6.85E-03
Lead (Pb) Compounds	20,673,600	2.03E-08	4.197E-01	2.10E-04
m-Xylene + p-Xylene	20,673,600	1.44E-05	2.977E+02	1.49E-01
Methylene Chloride	20,673,600	3.86E-05	7.980E+02	3.99E-01
N-Nitrosodimethylamine	20,673,600	2.34E-09	4.838E-02	2.42E-05
Naphthalene	20,673,600	3.08E-07	6.367E+00	3.18E-03
Nickel (Ni) Compounds	20,673,600	9.53E-08	1.970E+00	9.85E-04
Nitrobenzene	20,673,600	2.02E-08	4.176E-01	2.09E-04
o-Iouidine	20,673,600	2.23E-07	4.610E+00	2.31E-03
o-Xylene	20,673,600	7.73E-06	1.598E+02	7.99E-02
Pentachlorophenol	20,673,600	1.25E-08	2.584E-01	1.29E-04
Phenol	20,673,600	1.27E-06	2.626E+01	1.31E-02
Propanal	20,673,600	3.33E-06	6.884E+01	3.44E-02
Propylene Oxide	20,673,600	6.97E-06	1.441E+02	7.20E-02
Styrene	20,673,600	4.25E-06	8.786E+01	4.39E-02
t-Butyl Methyl Ether	20,673,600	7.98E-06	1.650E+02	8.25E-02
Tetrachloroethene	20,673,600	4.10E-06	8.476E+01	4.24E-02
Ioluene	20,673,600	2.31E-05	4.776E+02	2.39E-01
Trichloroethene	20,673,600	2.22E-07	4.590E+00	2.29E-03
Vinal Acetate	20,673,600	2.35E-06	4.858E+01	2.43E-02
Vinyl Chloride	20,673,600	1.32E-08	2.729E-01	1.36E-04
			Total HAPs	5.19E+00

Methodology

Emission factors taken from the study completed for the Rubber Manufacturers Association (RMA), 9/96; emission factors shown represent worst case rubber on a pollutant-by-pollutant basis

Potential emissions in tons per year = maximum production rate (20,673,600 lbs/yr) * e.f. (lb/lb)/2000

Hexane is the worst case single HAP (in bold).

*Note: Because the worst case HAP emission factors were used, it yielded a higher PTE of total HAPs than VOC. Therefore, PTE of rubber was used for PTE of VOC.

**Appendix A: Emissions Calculations
VOC and Particulate
From Adhesive Operations**

Company Name: Freudenberg - NOK General Partnership (Scottsburg I)
Address City IN Zip: 821 South Lake Road, Scottsburg, IN 47170
CP: MSM 143-12867-00010
Plt ID: 143-00010
Reviewer: Linda Quigley/EVP
Date: November 10, 201

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Chemlok 610	8.40	95.70%	94.5%	1.2%	94.9%	4.30%	1.65E-05	10,300.00	1.98	0.10	0.02	0.41	0.08	0.00	2.34	100%
Chemlok 8003	9.50	60.00%	57.1%	2.9%	65.8%	31.00%	1.65E-06	10,300.00	0.82	0.28	0.00	0.11	0.02	0.00	0.90	100%
Chemlok 8200	9.50	63.60%	60.8%	2.8%	69.7%	74.00%	1.26E-06	10,300.00	0.87	0.26	0.00	0.08	0.01	0.00	0.36	100%

State Potential Emissions

0.03 0.61 0.11 0.00

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

**Appendix A: Emission Calculations
HAP Emission Calculations**

Company Name: Freudenberg - NOK General Partnership
Address City IN Zip: 821 South Lake Road, Scottsburg, IN 47170
MSM: 143-12867-00010
Pit ID: 143-00010
Permit Reviewer: Linda Quigley/EVP
Date: November 10, 2000

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Glycol Ethers	Weight % Selenium	Glycol Ethers Emissions (ton/yr)	Selenium Emissions (ton/yr)
Chemlok 8003	9.5	0.000002	10300.00	3.00%	0.00%	0.02	0.00
Chemlok 8200	9.5	0.000001	10300.00	0.00%	2.00%	0.00	0.01

Total State Potential Emissions

0.02

0.01

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs