

**ENHANCED NEW SOURCE REVIEW (ENSR) /
CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT**

**Freudenberg - NOK (Ligonier Plant 1)
1497 Gerber Street
Ligonier, Indiana 46767**

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Enhanced New Source Review / Construction Permit No.: ENSR / CP-113-10131-00023	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). 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

The Permittee owns and operates stationary source, that manufactures automobile anti-vibrant components.

Responsible Official: Linda Hildebrand
Source Address: 1497 Gerber Street, Ligonier, Indiana 46767
Mailing Address: 1497 Gerber Street, Ligonier, Indiana 46767
SIC Code: 3061
County Location: Noble
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD Rules;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) adhesive spray booth identified as C-170SB with a high volume low pressure (HVLP) spray application system, with a maximum capacity of 1,080 metal units per hour, particulate matter (PM) emissions controlled by a dry filter, exhausting by a stack E36;
- (b) Three (3) 500 tons injection molding presses, identified as C-170P1 through 3, each with a maximum capacity of 50 pounds of uncured natural rubber per hour, exhausting to a stack identified as E27.

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);

SECTION B

GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

Construction Conditions [326 IAC 2-1-3.2]

B.1 General Construction Conditions

- (c) The data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).

- (d) 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.

B.2 Effective Date of the Permit [IC13-15-5-3]

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

B.3 Revocation of Permits [326 IAC 2-1-9(b)]

Pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit 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.

B.4 Permit Review Rules [326 IAC 2]

Notwithstanding Construction Condition (B.5), all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.5 Administrative Permit Amendments [326 IAC 2-7-11(a) (5)]

This construction shall be incorporated in the Part 70 Operating Permit when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with an operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

- (c) Permittee shall receive an Administrative Amendment to the Part 70 Permit (T113-7644-00023), received on December 12, 1996 that incorporates the facilities under this Enhanced New Source Review (ENSR).

- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).

Operation Conditions

B.6 General Operation Conditions

- (a) The data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).
- (b) The Permittee shall 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 (IC13-17) and the rules promulgated thereunder.

B.7. Preventive Maintenance Plan [326 IAC 1-6-3]

If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:

- (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
- (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
- (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

B.8 Transfer of Permit [326 IAC 2-1-6]

Pursuant to 326 IAC 2-1-6 (Transfer of Permits):

- (a) In the event that ownership of a source or facility is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
- (b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.
- (c) The OAM shall reserve the right to issue a new permit.

B.9 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

B.10 Availability of Permit [326 IAC 2-1-3(l)]

Pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of the source and shall make this permit available for inspection by the IDEM, or other public official having jurisdiction.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of volatile organic compounds (VOC) are less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

C.2 Notice of Malfunction [326 IAC 1-6-2]

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.3 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 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.

C.4 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

Testing Requirements

C.5 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, 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 Commissioner, 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).

Compliance Monitoring Requirements

C.6 Compliance Monitoring [326 IAC 2-1-3]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than thirty (30) days after the date the Affidavit of Construction is postmarked for each unit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional thirty (30) 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

in writing, prior to the end of the initial thirty (30) 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.7 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Corrective Actions and Response Steps

C.8 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-1-3]

- (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 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 permit conditions may be grounds for immediate revocation of the permit 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

C.9 Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements and be used for the purpose of a Part 70 fee assessment:
- (1) Indicate actual emissions of criteria pollutants from the source;
 - (2) Indicate actual emissions of other regulated pollutants from the source.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:
- Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) The annual emission statement 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, OAM, on or before the date it is due.

C.10 Monitoring Data Availability [326 IAC 2-1-3]

- (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 permit 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 permit 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 permit.
- (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.11 General Record Keeping Requirements [326 IAC 2-1-3]

- (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 permit;
 - (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 improper maintenance 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. 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 thirty (30) days after the date the Affidavit of Construction is postmarked.

C.12 General Reporting Requirements [326 IAC 2-1-3]

- (a) The report required by conditions in Section D of this permit 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 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, OAM, on or before the date it is due.
- (c) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (d) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

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).

SECTION D.1 FACILITY OPERATION CONDITIONS

- (a) One (1) adhesive spray booth identified as C-170SB with a high volume low pressure (HVLP) spray application system, with a maximum capacity of 1,080 metal units per hour, particulate matter (PM) emissions controlled by a dry filter, exhausting by a stack E36;
- (b) Three (3) 500 tons injection molding presses, identified as C-170P1 through 3, each with a maximum capacity of 50 pounds of uncured natural rubber per hour, exhausting to a stack identified as E27.

Emission Limitations and Standards

D.1.1 Hazardous Air Pollutant (HAPs) Limitation

- (a) The input single hazardous air pollutant (HAP) and combined hazardous air pollutants including clean up solvent, minus solvent shipped outside, delivered to the applicators of the hot melt glue operation shall be limited to less than 10.0 and 25.0 tons per year, rolled on a monthly basis, respectively. Therefore, the Maximum Achievable Control Technology (MACT) requirements of 326 IAC 2-1-.3.4 will not apply.
- (b) During the first 12 months of operation, the input raw material usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed the 0.75 for single hazardous air pollutant and 2.0 for combined hazardous air pollutants (HAPs), respectively.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the one (1) paint booth (C-170SB) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation 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:

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

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the paint booth (C-170SB) and the dry filters.

Compliance Determination Requirements

D.1.4 Testing Requirements

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the single hazardous air pollutant (HAP) limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when paint booth (C-170SB) is in operation.

D.1.6 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, daily observations shall be made of the overspray from the surface coating booth stack (E36) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements

D.1.7 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the Hazardous Air Pollutant (HAP) usage limits established in Condition D.1.1.
 - (1) The amount and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each month;
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain a log of daily overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address 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.

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

ENSR / Construction Permit Quarterly Report

Source Name: Freudenberg - NOK (Ligonier Plant 1)
Source Address: 1497 Gerber Street, Ligonier, Indiana 46767
Mailing Address: 1497 Gerber Street, Ligonier, Indiana 46767
ENSR / CP No.: 113-10131-00023
Facility: Adhesive Spray Booth (CS-170SB)
Parameter: Single HAP, Combined HAP
Limit: 9.0 tons of single HAP per 12 month, 24.0 tons of combined HAPs per 12 month
First Year Limit: 0.75 tons of single HAP per month, 2 tons of combined HAPs per 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			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

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

MALFUNCTION REPORT
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE: IT HAS POTENTIAL TO EMIT 25 LBS/HR PARTICULATES ? _____, 100 LBS/HR VOC ? _____, 100 LBS/HR SULFUR DIOXIDE ? _____ OR 2000 LBS/HR OF ANY OTHER POLLUTANT ? _____ EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: Freudenberg - NOK (Ligonier Plant 1) PHONE NO. (219) 894 - 7183
LOCATION: (CITY AND COUNTY): 1497 Gerber Street, Ligonier, Indiana 46767
PERMIT NO. 113-10131 AFS PLANT ID: 113-00023 AFS POINT ID: _____ INSP: Doyle Houser
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/ 19____ ____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/ 19____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO₂, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

326 IAC 1-2-39 “Malfunction” definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m. : 11 IR 2373)

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for Enhanced New Source Review (ENSR) / New Construction and Operation

Source Background and Description

Source Name: Freudenberg- NOK (Ligonier Plant 1)
 Source Location: 1497 Gerber Street, Ligonier, Indiana 46767
 County: Noble
 Construction Permit No.: CP-113-10131-00023
 SIC Code: 3061
 Permit Reviewer: Manoj P. Patel

The Office of Air Management (OAM) has reviewed an application from Freudenberg-NOK (Ligonier Plant 1) relating to the construction and operation of adhesive spray booth and injection molding operations, consisting of the following equipment:

- (a) One (1) adhesive spray booth identified as C-170SB with a high volume low pressure (HVLP) spray application system, with a maximum capacity of 1,080 metal units per hour, particulate matter (PM) emissions controlled by a dry filter, exhausting by a stack E36;
- (b) Three (3) 500 tons injection molding presses, identified as C-170P1 through 3, each with a maximum capacity of 50 pounds of uncured natural rubber per hour, exhausting to a stack identified as E27.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
E27	Injection Presses	27	3.0	3,920	100
E36	Spray Booth	27	3.0	2,940	150

Recommendation

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

Information, unless otherwise stated, 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 September 11, 1998, with additional information received on October 26, and December 29, 1998.

Emissions Calculations

(a) Injection Molding Presses:

See Appendix A (Emissions Calculation Spreadsheet) for detailed calculations.

(b) Spray Booth:

See Appendixes B & C (Emissions Calculation Spreadsheets) for detailed calculations.

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	0.0	0.0
Particulate Matter (PM10)	0.0	0.0
Sulfur Dioxide (SO ₂)	0.0	0.0
Volatile Organic Compounds (VOC)	23.70	23.70
Carbon Monoxide (CO)	0.0	0.0
Nitrogen Oxides (NO _x)	0.0	0.0
Single Hazardous Air Pollutant (HAP)	10.80	10.80
Combination of HAPs	23.0	23.0

- (a) The potential VOC emissions before control are same as the allowable emissions, therefore, the potential emissions before control are used for the permitting determination.
- (b) Allowable emissions (as defined in the Indiana Rule) of a single hazardous air pollutant (HAP) are greater than 10 tons per year or the allowable emissions of any combination of the HAPs are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, a construction permit is required.

County Attainment Status

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Noble County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Noble County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	22.75
PM10	22.75
SO ₂	0.0
VOC	153.80
CO	0.20
NO _x	1.50

- (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 in one of the 28 listed source categories.
- (b) These emissions were based on the prior permits issued to the source.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification				23.70		
PSD Threshold Level	250	250	250	250	250	250

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.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-113-7644-00023) application on December 12, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 60 applicable to these facilities.

- (b) There are no National Emissions Standard for Hazardous Air Pollutants (326 IAC 14) and 40 CFR Part 63 applicable to these facilities.

State Rule Applicability

326 IAC 2-6 (Emission Reporting)

This facility is subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 100 tons/yr of VOC, 10 tons of single hazardous air pollutant (HAP), and 25 tons of combination hazardous air pollutants. Pursuant to this rule, the owner/operator of the facility must annually submit an emission statement of the facility. The annual statement must be received by July 1 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

326 IAC 8-2-9 (Surface Coating Emission Limitations: Miscellaneous Metal Coating Operations)

The adhesive spray booth identified as C-170SB is not subject to this rule because the plant 1 has Standard Industrial Classification (SIC) of 3061, which is excluded from the rule.

326 IAC 8-1-6 (General Provision Relating to VOC Rules: General Reduction Requirements for New Facilities)

This rule does not apply to the adhesive spray booth because the facility has potential VOC emissions of less than 25 tons per year.

326 IAC 2-1-3.4(Air Toxics Control Rule)

This rule applies to the adhesive spray booth because it emits or has potential to emit ten (10) tons per year or more of any hazardous air pollutant (HAP) which is listed in section 112(b) of the Clean Air Act. However, the source has limited a single hazardous air pollutant (HAP) to less than 10 tons per year and combination of hazardous air pollutants to less than 25 tons per year. Therefore, the requirements of this rule will not apply to the facility.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This proposed modification will emit levels of air toxics less than those that constitute major source applicability according to Section 112 of the Clean Air Act.
- (b) See Appendix C for detailed air toxic calculations.

Conclusion

The construction of this adhesive spray booth and injection molding presses will be subject to the conditions of the attached proposed **ENSR / Construction Permit No. CP-113-10131-00023**.

**Appendix B: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: Freudenberg- NOK (Ligonier Plant 1)
Address City IN Zip: 1497 Gerber Street, Ligonier, Indiana 46767
CP: 113-10131
Pit ID: 113-00023
Reviewer: Manoj P. Patel
Date: October 15, 1998

Material	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (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 - 207	7.5	82.00%	0.0%	83.0%	0.0%	10.70%	0.00038	1080.0	6.23	6.23	2.55	61.31	11.19	0.61	58.18	75%
Chemlok-225	8.0	80.00%	0.0%	84.0%	0.0%	13.70%	0.00036	1080.0	6.71	6.71	2.61	62.63	11.43	0.68	48.99	75%

State Potential Emissions

Add worst case coating to all solvents

5.16

123.94

22.62

1.29

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)
 Total = Worst Coating + Sum of all solvents used

**Appendix A: Emissions Calculations
VOC and HAP Emissions
(From Natural Rubber Injection Molding Press Operations)**

**Company Name: Freudenberg- NOK (Ligonier Plant 1)
Address City IN Zip: 1497 Gerber Street, Ligonier, Indiana 46767
CP: 113-10131
Plt ID: 113-00023
Reviewer: Manoj P. Patel
Date: October 15, 1998**

Pollutant	Max. Rate (lbs./hr)	No. of Press	E.F. (lb./lb.)	Emission Rate (Lb./hr) (lb./hr)	Total Emissions (tons/year)
VOC	50	3	0.00168	0.252	1.10
HAPs					
Acetaldehyde	50	3	7.6000E-06	0.00114	0.005
Acetonitrile	50	3	6.1000E-06	0.000915	0.004
Acetophenone	50	3	0.00044	0.066	0.2891
Acrylonitrile	50	3	6.1000E-06	0.000915	0.004
Aniline	50.0	3	0.0000002	0.0000225	0.0001
Benzene	50.0	3	1.2000E-06	0.00018	0.0008
Benzidine	50.0	3	8.0000E-08	0.000012	0.0001
Biphenyl	50.0	3	9.0000E-08	0.0000135	0.0001
Bis (2-ethylhexyl) phthalate	50.0	3	2.6000E-06	0.00039	0.0017
1,3 Butadiene	50.0	3	7.5000E-06	0.001125	0.0049
Carbondisulfide	50	3	4.2000E-06	0.00063	0.0028
Carbonyl sulfide	50.0	3	3.8000E-06	0.00057	0.0025
Cumene	50.0	3	2.8000E-06	0.00042	0.0018
Dibenzofuran	50.0	3	6.90*e-8	0	0.0000
Dibutylphthalate	50.0	3	7.2000E-06	0.00108	0.0047
Dimethylphthalate	50.0	3	7.0000E-08	0.0000105	0.0000
Ethylbenzene	50.0	3	1.1000E-06	0.000165	0.0007
Ethylchloride	50.0	3	3.1000E-06	0.000465	0.0020
Hexachlorobutadiene	50.0	3	3.9000E-07	0.0000585	0.0003
Hexane	50.0	3	0.000016	0.0024	0.0105
Methylchloroform	50.0	3	4.2000E-06	0.00063	0.0028
Methyl Ethyl Ketone	50.0	3	3.0000E-06	0.00045	0.0020
MIBK	50.0	3	3.1000E-06	0.000465	0.0020
Methyl Chloride	50.0	3	5.0000E-08	0.0000075	0.0000
Napthalene	50.0	3	4.0000E-06	0.0006	0.0026
Phenol	50.0	3	1.3000E-06	0.000195	0.0009
Propylene Oxide	50.0	3	6.1000E-06	0.000915	0.0040
Tetrachloroethylene	50.0	3	3.1000E-06	0.000465	0.0020
2,4 Toluenediamine	50.0	3	2.3000E-07	0.0000345	0.0002
o-Toludine	50.0	3	1.5000E-07	0.0000225	0.0001
1,2,4 Trichlorobenzene	50.0	3	2.0000E-07	0.00003	0.0001
o-Xyelene	50.0	3	1.7000E-06	0.000255	0.0011
Total HAPs (tons/year)					0.35

Methodology:

Emissions factors are obtained from Volume 4: Emission Factors Application Manual for the Rubber Manufacturer's Association (RMA), May 1996.

Emissions factors are provided from the applicant.

Potential Emissions in tons per year = Max. production rate (lbs./hr) * e.f. (lb./lb.) * 4.38