

**CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT**

**MascoTech Sintered Components of Indiana, Inc.
3100 North State Highway # 3
North Vernon, Indiana 47265**

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.

Construction Permit No.: CP-079-9498-00014	
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), and presented in the permit application.

A.1 General Information

The Permittee owns and operates a sintering plant that manufactures carbon steel connective rods used for automotive industry.

Responsible Official: Jeff Gee
Source Address: 3100 North State Highway #3, North Vernon, Indiana 47265
Mailing Address: 3100 North State Highway #3, North Vernon, Indiana 47265
SIC Code: 3462
County Location: Jennings
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) Modification of four (4) Shot Peens identified as SP1, SP2, SP3, and SP4 by exchanging each 15-inch wheel to a 13-inch wheel to increase each shot throw rate of 108,000 pounds per hour to 144,000 pounds per hour. Each shot peen has a dedicated dust collector to control the particulate matter (PM) emissions, and
- (b) The request for an amendment to Operation Condition no. 5 of Construction Permit CP079-4413-00014, issued on May 16, 1995, due to an error in the number and identification of the De-Flash machines considered in the original permit, which was reflected in the PM allowable emissions given in the permit.

The De-Flash machines should be described as five (5) De-Flash machines, identified as D4 through D8, each De-Flash machine has a combination of a primary De-Flash, and a secondary De-flash machine. Each primary De-Flash machine is capable of producing 477.5 pounds of parts per hour, and each is controlled by a baghouse. Each secondary De-Flash machine is capable of producing 813.2 pounds of parts per hour, and each is controlled by a baghouse.

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

This stationary source will be 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 CONSTRUCTION AND OPERATION 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 2-1-3.4]

B.1 General Construction Conditions

- (a) 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).
- (b) 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 No.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 First Time Operation Permit [326 IAC 2-1-4]

This document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) 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. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
- (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 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 Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).

- (e) The Permittee is subject to the requirement of Part 70 permit. The facilities in this application shall be incorporated in the Part 70 permit application to be submitted.

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]

Pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:

- (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 this sintering plant 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(I)]

Pursuant to 326 IAC 2-1-3(I), 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 Limitation and Standards

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

The total source potential PM emissions 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 Opacity Limitations [326 IAC 5-1-2]

Pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:

- (a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.
- (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

C.3 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. 326 IAC 4-1-3(a)(2)(A and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.5 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). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment

All air pollution control equipment listed in this permit shall be in placed or operated at all times that the emission units vented to the control equipment are in operation, as described in Section D of this permit.

**C.7 Asbestos Abatement Projects - Accreditation [326 IAC 14-10] [326 IAC 18]
[40 CFR 61, Subpart M]**

Prior to the commencement of any demolition or renovation activities, the Permittee shall use an Indiana accredited asbestos inspector to inspect thoroughly the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos containing material. The requirement that the inspector be accredited is federally enforceable.

Compliance Monitoring Requirements

C.8 Compliance Monitoring

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 ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee shall notify:

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, no more than ninety (90) days after receipt of this permit, with full justification of the reasons for the inability to meet this date and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved.

C.9 Maintenance of Monitoring Equipment

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the 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.

C.11 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

C.12 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(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

(3) 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
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory 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) Indiana Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Record Keeping and Reporting Requirements

C.13 Annual Emission Reporting [326 IAC 2-6]

That pursuant to 326 IAC 2-6 (Emission Reporting), the Permittee must annually submit an emission statement for the source. This statement 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 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

The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31.

C.14 Monitoring Data Availability

- (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.15 General Record Keeping Requirements

- (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 and available within one (1) hour upon verbal request of an IDEM, OAM, representative, for a minimum of three (3) years. They may be stored elsewhere for the remaining two (2) years providing they are made available within thirty (30) days after written request.
- (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.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.16 General Reporting Requirements

- (a) To affirm that the source has met all the requirements stated in this permit the source shall submit a Quarterly Compliance Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports 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

- (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, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) 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.

Testing Requirements

C.17 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 the 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).

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 the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY CONDITIONS

- (a) Modification of four (4) Shot Peens identified as SP1, SP2, SP3, and SP4 by exchanging each 15-inch wheel to a 13-inch wheel to increase each shot throw rate of 108,000 pounds per hour to 144,000 pounds per hour. Each shot peen has a dedicated dust collector to control the particulate matter (PM) emissions, and
- (b) The request for an amendment to Operation Condition no. 5 of Construction Permit CP079-4413-00014, issued on May 16, 1995, due to an error in the number and identification of the De-Flash machines considered in the original permit, which was reflected in the PM allowable emissions given in the permit.

The De-Flash machines should be described as five (5) De-Flash machines, identified as D4 through D8, each De-Flash machine has a combination of a primary De-Flash, and a secondary De-flash machine. Each primary De-Flash machine is capable of producing 477.5 pounds of parts per hour, and each is controlled by a baghouse. Each secondary De-Flash machine is capable of producing 813.2 pounds of parts per hour, and each is controlled by a baghouse.

Emissions Limitation and Standards

D.1.1 Prevention of Significant Deterioration [326 IAC 2-2] and PM Process Operation [326 IAC 6-3]:

The following facilities shall have a PM emission limit using the following equation:

- (a) For process weight rate up to 60,000 lb/hr, the following equation is used.

$$E = 4.10 P^{0.67}$$

This equation is used for process weight rate up to 60,000 lb/hr

(b) For process weight rate in excess of 60,000 lb/hr, the following is used:

$$E = 55.0 P^{0.11} - 40$$

Where:

E = PM emissions limit in pounds per hour

P = Process weight rate in tons per hour

Process/Facility	Process Weight (ton/hr)	Truncated PM Allowable Emissions (lb/hr)
Shot Peen, SP1	72.0	9.45
Shot Peen, SP2	72.0	9.45
Shot Peen, SP3	72.0	9.45
Shot Peen, SP4	72.0	9.45
De-Flash, D4 Primary Secondary	0.24 0.41	1.6 2.2
De-Flash, D5 Primary Secondary	0.24 0.41	1.6 2.2
De-Flash, D6 Primary Secondary	0.24 0.41	1.6 2.2
De-Flash, D7 Primary Secondary	0.24 0.41	1.6 2.2
De-Flash, D8 Primary Secondary	0.24 0.41	1.6 2.2
Total		56.8

The above PM emission limits shall also be equivalent to PM10 emission limits. Compliance with this condition will make 326 IAC 2-2, the Prevention of Significant Deterioration (PSD) and 326 IAC 6-3-2 requirements not applicable.

This Operation Condition supersedes Operation Condition no. 5 of Construction Permit CP079-4413-00014, issued on May 16, 1995.

D.1.2 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.3 Testing Requirements

The Permittee shall perform a compliance tests for PM for one (1) representative -Shot Peen machine dust collector and one (1) representative Primary and Secondary De-Flash machine baghouse within 60 days from the issuance of this permit. The tests shall utilize the methods under the 40 CFR 60, Appendix A or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

This Operation Condition supersedes Operation Condition no. 4 of Construction Permit CP079-4413-00014, issued on May 16, 1995.

Compliance Monitoring Requirements

D.1.4 Baghouses Operating Condition

Baghouses shall be operated at all times when the Shot Peens SP1, SP2, SP3, SP4 and the De-Flash machines D4, D5, D6, D7, and D8 are in operation.

- (a) The Permittee shall take readings of the total static pressure drop across each Shot Peen's and De-Flash's baghouse, at least once per day. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop from each Shot Peen's baghouse shall be maintained at a pressure drop ranges determined during the compliance tests, and the pressure drop from each De-Flash's baghouse shall be maintained at a pressure drop ranges determined during the compliance tests. The Preventive Maintenance Plan for the baghouses shall contain troubleshooting contingency and corrective actions for the baghouses when the pressure reading is outside of this range for any one reading.
- (b) The instrument used for determining the pressure shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.
- (c) The gauge employed to take the pressure drop across the baghouses or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within $\pm 2\%$ of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.

This Operation Condition supersedes Operation Condition no. 5 of Construction Permit CP079-4413-00014, issued on May 16, 1995.

D.1.5 Visible Emissions Notations

- (a) Daily visible emission notations from the building vents and openings shall be performed once weekly during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.6 Emergency Reduction Plans

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) These ERPs shall be submitted for approval to:

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

within 180 calendar days from the issuance date of this permit.

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP. If after this time, the Permittee does not submit an approvable ERP, IDEM, OAM, shall supply such a plan.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate level. [326 IAC 1-5-3]

Record Keeping and Reporting Requirements

D.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain the following:
- (1) Daily records of the following operational parameters during normal operation:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure
 - (2) Documentation of all response steps implemented, per event .
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of the results of the Visible Emissions Notations required under Condition D.1.5.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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: MascoTech Sintered Components PHONE NO. (812)346-0363

LOCATION: (CITY AND COUNTY) North Vernon, Jennings

PERMIT NO. 079-9498 AFS PLANT ID: 079-00014 AFS POINT ID: _____ INSP: _____

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: _____

FAX NUMBER - 317 233-5967

*SEE REVERSE

**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 New Construction and Operation

Source Background and Description

Source Name: MascoTech Sintered Components of Indiana, Inc.
 Source Location: 3100 North State Highway # 3, North Vernon, Indiana 47265
 County: Jennings
 Construction Permit No.: CP-079-9498-00014
 SIC Code: 3462
 Permit Reviewer: Aida De Guzman

The Office of Air Management (OAM) has reviewed an application from MascoTech Sintered Components of Indiana, Inc. relating to the following equipment used in the production of sintered carbon steel connective rods for the automotive industry:

- (a) Modification of four (4) Shot Peens identified as SP1, SP2, SP3, and SP4 by exchanging each 15-inch wheel to a 13-inch wheel to increase each shot throw rate of 108,000 pounds per hour to 144,000 pounds per hour. Each shot peen has a dedicated dust collector to control the particulate matter (PM) emissions, and
- (b) The request for an amendment to Operation Condition no. 5 of Construction Permit CP079-4413-00014, issued on May 16, 1995, due to an error in the number and identification of the De-Flash machines considered in the original permit, which was reflected in the PM allowable emissions given in the permit.

The De-Flash machines should be described as five (5) De-Flash machines, identified as D4 through D8, each De-Flash machine has a combination of a primary De-Flash, and a secondary De-flash machine. Each primary De-Flash machine is capable of producing 477.5 pounds of parts per hour, and each is controlled by a baghouse. Each secondary De-Flash machine is capable of producing 813.2 pounds of parts per hour, and each is controlled by a baghouse.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
General Plant Ventilation	Sintered Carbon Steel Production (all operations)	13	NA	2,400	ambient

Enforcement Issue

IDEM is aware that the four (4) Shot Peens identified as SP1, SP2, SP3, and SP4 have been modified and operated with their new throughput, prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

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 requesting for an amendment to Operation Condition no. 5 of Construction Permit CP079-4413, issued on May 16, 1995 for the purposes of this review has been received on October 14, 1997.

An application for the modification of the permitted four (4) Shot Peens identified as SP1, SP2, SP3, and SP4 for the purposes of this review was received on February 17, 1998, with additional information submitted on April 14, 1998 .

The amendment application and the modification application were consolidated into one application.

Emissions Calculations

- (1) Four (4) Shot Peens (SP1 through SP4) Emissions:

Uncontrolled Emissions:

$$\begin{aligned} \text{PM Emissions} &= 0.6488 \text{ gr/scf} * 2400 \text{ acf/min} * 60 \text{ min/hr} * 8760 \text{ hr/yr} * \text{lb/7000 gr} \\ &\quad * \text{ton/2000 lb} \\ &= 58.5 \text{ ton/yr} * (4 \text{ machines}) \\ &= 234 \text{ tons/yr} \end{aligned}$$

$$\begin{aligned} \text{PM}_{10} \text{ Emissions} &= 234 \text{ ton PM/yr} * (0.25 \text{ lb PM}_{10}/\text{lb PM}) \\ &= 58.5 \text{ tons/yr} \end{aligned}$$

Controlled Emissions:

Each Shot Peen is controlled by a dust collector = 99.5% efficiency

$$\begin{aligned} \text{PM Emissions} &= 234 \text{ ton/yr} * (1-.995) \\ &= 1.17 \text{ ton/yr} * (4 \text{ machines}) \\ &= 4.68 \text{ ton/yr} \end{aligned}$$

$$\begin{aligned} \text{PM}_{10} \text{ Emissions} &= 58.5 \text{ ton/yr} * (1-.995) \\ &= 0.30 \text{ ton/yr} * (4 \text{ machines}) \\ &= 1.2 \text{ tons/yr} \end{aligned}$$

(2) Five (5) De-Flash Emissions:

Controlled Emissions:

$$\begin{aligned}
 \text{PM/PM10 Emissions} &= 0.005 \text{ gr/acf} * 5800 \text{ acf/min} * 60 \text{ min/hr} * 8760 \text{ hr/yr} \\
 &\quad * \text{lb/7000 gr} * \text{ton/2000 lb} \\
 &= 1.088 \text{ ton/yr (5 machines)} \\
 &= 5.44 \text{ ton/yr}
 \end{aligned}$$

Uncontrolled Emissions:

$$\begin{aligned}
 \text{PM/PM10 Emissions} &= \frac{1.088 \text{ ton/yr}}{(1-.99)} \\
 &= 108.8 \text{ ton/yr} * (5 \text{ machines}) \\
 &= 544 \text{ ton/yr}
 \end{aligned}$$

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)	924.2	778
Particulate Matter (PM10)	924.2	602.5
Sulfur Dioxide (SO ₂)	0.0	0.0
Volatile Organic Compounds (VOC)	0.0	0.0
Carbon Monoxide (CO)	0.0	0.0
Nitrogen Oxides (NO _x)	0.0	0.0
Single Hazardous Air Pollutant (HAP)	0.0	0.0
Combination of HAPs	0.0	0.0

- (a) Allowable emissions are determined from the applicability of rule 326 IAC 6-3. See attached spreadsheets for detailed calculations.

326 IAC 6-3 (Process Operations PM Allowable Emissions)
 This rule mandates a PM limit using the following equations:

- (i) For process weight rate up to 60,000 lb/hr, the following equation is used.

$$E = 4.10 P^{0.67}$$

This equation is used for process weight rate up to 60,000 lb/hr

- (ii) For process weight rate in excess of 60,000 lb/hr, the following is used:

$$E = 55.0 P^{0.11} - 40$$

Where:

- E = PM emissions limit in pounds per hour
 P = Process weight rate in tons per hour

Process/Facility	Process Weight (ton/hr)	PM Allowable Emissions (lb/hr)	Truncated PM Allowable Emissions (lb/hr)
Shot Peen, SP1	72.0	48.0	5.2
Shot Peen, SP2	72.0	48.0	5.2
Shot Peen, SP3	72.0	48.0	5.2
Shot Peen, SP4	72.0	48.0	5.2
De-Flash, D4 Primary Secondary	0.24 0.41	1.6 2.2	0.20 0.23
De-Flash, D5 Primary Secondary	0.24 0.41	1.6 2.2	0.20 0.23
De-Flash, D6 Primary Secondary	0.24 0.41	1.6 2.2	0.20 0.23
De-Flash, D7 Primary Secondary	0.24 0.41	1.6 2.2	0.20 0.23
De-Flash, D8 Primary Secondary	0.24 0.41	1.6 2.2	0.20 0.23
Total		211.0	22.2

Truncated PM Allowable Emissions = $\frac{\text{facility PM allowable, lb/hr}}{\text{Total Facilities PM Allowable, lb/hr}}$ * truncated total PM allowable, lb/hr

The above PM allowable emissions will be truncated, since their total exceeds the significant threshold of 100 tons per year for PSD.

- (b) The allowable emissions based on the rules cited are less than the potential emissions, therefore, the allowable emissions are used for the permitting determination.
- (c) Allowable emissions (as defined in the Indiana Rule) of PM and PM10 emissions are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

County Attainment Status

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Jennings County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Jennings County has been classified as attainment or unclassifiable for all the 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 Definition (emissions after controls, based on permits issued):

	<u>Permit Number</u>	<u>Issued Date</u>	<u>Emissions After Control</u>
1.	CP079-3694	October 25, 1994	PM = 7.2 ton/yr
2.	CP079-4413	May 16, 1995	PM = 6.52 ton/yr
3.	Total		PM = 13.72 ton/yr

This existing source is **not** a major stationary source because even though it is one of the 28 listed source categories being a sintering plant, it does not emit 100 tons per year or greater of any regulated pollutants.

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	10.2	6.64	0.0	0.0	0.0	0.0
PSD Threshold Level	100	100	100	100	100	100

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 a potential PM10 emissions above 100 tons per year. Therefore, it will be subject to Part 70 Permit Program. The source has the option to apply either a Part 70 permit or a FESOP. The source has indicated that they applied for a Part 70 permit in December, 1997, the OAM, however checked on the source's file and no record indicates that they have submitted this type of application. The source shall submit a Part 70 permit application as soon as possible, since it missed the submission deadline in December 1996.

The equipment being reviewed under this permit shall be incorporated in the Part 70 application.

Federal Rule Applicability

- (a) New Source Performance Standards:
There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 60 applicable to this facility.
- (b) National Standards for Hazardous Air Pollutants (NESHAPs)
The source does not emit any air toxic. Therefore, no NESHAPs 40 CFR Part 63 will apply.

State Rule Applicability

- (a) 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 Particulate Matter Less Than Ten Microns (PM10). Pursuant to this rule, the owner/operator of this 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.
- (b) 326 IAC 8 (Volatile Organic Compounds Sources)
The source is not subject to any rule in this Article 326 IAC 8, because it does not emit VOC.
- (c) 326 IAC 6-3-2 (Process Operations: PM Emissions Limitations)
The source is subject this rule, which mandates a PM emissions limitations using the following equations:

- (i) For process weight rate up to 60,000 lb/hr, the following equation is used.

$$E = 4.10 P^{0.67}$$

This equation is used for process weight rate up to 60,000 lb/hr

- (ii) For process weight rate in excess of 60,000 lb/hr, the following is used:

$$E = 55.0 P^{0.11} - 40$$

Where:

E = PM emissions limit in pounds per hour

P = Process weight rate in tons

Process/Facility	Process Weight (ton/hr)	PM Allowable Emissions (lb/hr)	Truncated PM Allowable Emissions (lb/hr)
Shot Peen, SP1	72.0	48.0	5.2
Shot Peen, SP2	72.0	48.0	5.2
Shot Peen, SP3	72.0	48.0	5.2
Shot Peen, SP4	72.0	48.0	5.2
De-Flash, D4 Primary Secondary	0.24 0.41	1.6 2.2	0.20 0.23
De-Flash, D5 Primary Secondary	0.24 0.41	1.6 2.2	0.20 0.23
De-Flash, D6 Primary Secondary	0.24 0.41	1.6 2.2	0.20 0.23
De-Flash, D7 Primary Secondary	0.24 0.41	1.6 2.2	0.20 0.23
De-Flash, D8 Primary Secondary	0.24 0.41	1.6 2.2	0.20 0.23
Total		211.0	22.2

Truncated PM Allowable Emissions = $\frac{\text{facility PM allowable, lb/hr}}{\text{Total Facilities PM Allowable, lb/hr}}$ * truncated total PM allowable, lb/hr

The source is in compliance with these limits, because baghouses are installed in each unit to control the PM emissions.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 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.

None of these listed air toxics will be emitted from this proposed modification.

Conclusion

The construction of the modification to the sintering plant will be subject to the conditions of the attached proposed **Construction Permit No. CP-079-9498-00014**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name: MascoTech Sintered Components of Indiana, Inc.
 Source Location: 3100 North State Highway #3, North Vernon, Indiana 47265
 County: Jennings
 Construction Permit No.: CP-079-9498-00014
 SIC Code: 3462
 Permit Reviewer: Aida P. De Guzman

On June 4, 1998, the Office of Air Management (OAM) had a notice published in the Plain Dealer and Sun, North Vernon, Indiana, stating that MascoTech Sintered Components of Indiana, Inc. had applied for a construction permit to construct and operate a modification to existing Shot Peens used in the production of sintered carbon steel connective rods for the automotive industry, and baghouses to control the PM emissions. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On July 12, 1998, the source had requested the OAM to suspend the timeclock from July 4, 1998, the date when the proposed permit was off of public notice, because of some issues that need to be resolved.

On June 30, 1998, MascoTech Sintered Components of Indiana, Inc. submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows (changes are bolded and strikeout for emphasis):

Comment 1: The OAM made a determination in the previous issued permits including in this proposed permit that MascoTech Sintered Components of Indiana, Inc. is a sintering plant. This determination is not correct. The source receives powdered metal from an outside company which is used in the production of sintered carbon steel rods. The source does not perform sintering operations, only molding, delubricating, forging normalizing, deflashing, grinding, shot peen and flux operations are performed. The source is not one of the 28 listed sources, since it is not a sintering plant and therefore, the threshold for PSD is 250 tons per year and not 100 tons/year.

Response 1: The proposed permit will be revised to state that the source is not a sintering plant, and the threshold will be at 250 tons per year. All the emission limits in the proposed permit based on the 100 tons per year will also be revised.

The revisions include the adjustment of the proposed PM allowable emissions in below table, which were based from the 100 tons per year PSD threshold.

Process/Facility	Process Weight (ton/hr)	PM Allowable Emissions (lb/hr)	Truncated PM Allowable Emissions (lb/hr)
Shot Peen, SP1	72.0	48.0	9.45 5.2

Shot Peen, SP2	72.0	48.0	9.45 5.2
Shot Peen, SP3	72.0	48.0	9.45 5.2
Shot Peen, SP4	72.0	48.0	9.45 5.2
De-Flash, D4 Primary Secondary	0.24 0.41	1.6 2.2	1.6 0.20 2.2 0.23
De-Flash, D5 Primary Secondary	0.24 0.41	1.6 2.2	1.6 0.20 2.2 0.23
De-Flash, D6 Primary Secondary	0.24 0.41	1.6 2.2	1.6 0.20 2.2 0.23
De-Flash, D7 Primary Secondary	0.24 0.41	1.6 2.2	1.6 0.20 2.2 0.23
De-Flash, D8 Primary Secondary	0.24 0.41	1.6 2.2	1.6 0.20 2.2 0.23
TOTAL		211.0	56.8 22.2

Truncated PM Allowable Emissions = $\frac{\text{facility PM allowable, lb/hr}}{\text{Total Facilities PM Allowable, lb/hr}}$ * truncated total PM allowable, lb/hr

The following controlled emission calculations shows that each machine is in compliance with the 326 IAC 6-3 rule.

Controlled Emissions:

Each Shot Peen is controlled by a dust collector = 99.5% efficiency

$$\begin{aligned} \text{PM Emissions} &= 234 \text{ ton/yr} * (1-.995) \\ &= 1.17 \text{ ton/yr} / (4 \text{ machines}) \\ &= 0.29 \text{ ton/yr each} \end{aligned}$$

$$\begin{aligned} \text{PM}_{10} \text{ Emissions} &= 58.5 \text{ ton/yr} * (1-.995) \\ &= 0.30 \text{ ton/yr} / (4 \text{ machines}) \\ &= 0.073 \text{ tons/yr each} \end{aligned}$$

(2) Five (5) De-Flash Emissions:

Controlled Emissions:

$$\text{PM/PM}_{10} \text{ Emissions} = 0.005 \text{ gr/acf} * 5800 \text{ acf/min} * 60 \text{ min/hr} * 8760 \text{ hr/yr}$$

$$\begin{aligned}
 & * \text{ lb/7000 gr } * \text{ ton/2000 lb} \\
 & = 1.088 \text{ ton/yr} * (5 \text{ machines}) \\
 & = 5.44 \text{ ton/yr}
 \end{aligned}$$

Also, the above PM controlled calculations will supersede the controlled PM calculations in the original TSD, pages 2 and 3 of 8.

Based on the above PM and PM10 controlled emissions the **Proposed Modification** Table on the Technical Support Document on page 5 of 8 is revised as follows:

Proposed Modification

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	40.2 6.61	6.64 5.74	0.0	0.0	0.0	0.0
PSD Threshold Level	250	250	250	250	250	250

Upon further review, the OAM has made the following changes (changes are bolded and strikethrough for emphasis):

- The following condition C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21] is added in section C.

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

The total source potential PM emissions 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.

- The Shot Peens dust collectors are all identical and Primary and Secondary De-Flash machines baghouses are also identical (the same model with identical outlet grain loading and air flow rates), therefore, only one representative control device for the Shot Peens and De-Flash machines shall be stack tested. Condition D.1.3 Testing Requirements will be revised as follows:

D.1.3 Testing Requirements

The Permittee shall perform a compliance tests for PM and ~~PM10~~ for one **(1) representative** the Shot Peen **machine dust collector and one (1) representative Primary and Secondary De-Flash machine baghouse** within 60 days from the issuance of this permit. The tests shall utilize the methods under the 40 CFR 60, Appendix A or other methods as approved by the Commissioner This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. ~~PM-10 includes filterable and condensable PM-10.~~

This Operation Condition supersedes Operation Condition no. 4 of Construction Permit CP079-4413-00014, issued on May 16, 1995.

- The source is required to apply for a Title V permit, because its PM10 allowable emissions are above 100 tons per year, therefore, compliance monitoring frequency required in Operation Condition D.1.4 is increased to once per day instead of once per week.

Pressure drops across a baghouse are typically maintained in a range which encompasses normal operations. Therefore, the minimum pressure drop in the proposed Operation Condition D.1.4 is deleted, instead, the pressure drop ranges are going to be established during the compliance tests.

D.1.4 Baghouses Operating Condition

Baghouses shall be operated at all times when the Shot Peens SP1, SP2, SP3, SP4 and the De-Flash machines D4, D5, D6, D7, and D8 are in operation.

- (a) The Permittee shall take readings of the total static pressure drop across each Shot Peen's and De-Flash's baghouse, at least once per ~~week~~ **day**. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop from each Shot Peen's baghouse shall be maintained at ~~4.0 inches of water~~ **a pressure drop range established during the compliance tests**, and the pressure drop from each De-Flash's baghouse shall be maintained at ~~3.5 inches of water~~ **a pressure drop range established during the compliance tests**. The Preventive Maintenance Plan for the baghouses shall contain troubleshooting contingency and corrective actions for the baghouses when the pressure reading is outside of this range for any one reading.
- (b) The instrument used for determining the pressure shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.
- (c) The gauge employed to take the pressure drop across the baghouses or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within $\pm 2\%$ of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.

This Operation Condition supersedes Operation Condition no. 5 of Construction Permit CP079-4413-00014, issued on May 16, 1995.

- 4. *The following condition for Performance Testing protocol is added in the final permit because it was inadvertently excluded in the proposed permit. This condition is applicable since the source is required to have a compliance tests.*

Testing Requirements

C.17 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 the 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).

MascoTech Sintered Components of Indiana, Inc.
3100 North State Highway #3
North Vernon, Indiana 47265

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____, I have personal
(Company Name)

knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)

4. I hereby certify that, MascoTech Sintered Components of Indiana, Inc., 3100 North State Highway #3 North Vernon, Indiana 47265 has constructed the following:

(a) Modification of four (4) Shot Peens identified as SP1, SP2, SP3, and SP4 by exchanging each 15-inch wheel to a 13-inch wheel to increase each shot throw rate of 108,000 pounds per hour to 144,000 pounds per hour. Each shot peen has a dedicated dust collector to control the particulate matter (PM) emissions, and

(b) The request for an amendment to Operation Condition no. 5 of Construction Permit CP079-4413-00014, issued on May 16, 1995, due to an error in the number and identification of the De-Flash machines considered in the original permit, which was reflected in the PM allowable emissions given in the permit.

The De-Flash machines should be described as five (5) De-Flash machines, identified as D4 through D8, each De-Flash machine has a combination of a primary De-Flash, and a secondary De-flash machine. Each primary De-Flash machine is capable of producing 477.5 pounds of parts per hour, and each is controlled by a baghouse. Each secondary De-Flash machine is capable of producing 813.2 pounds of parts per hour, and each is controlled by a baghouse, in conformity with the requirements and intent of the construction permit application received by the Office of Air Management on October 14, 1997 and as permitted pursuant to **Construction Permit No. CP-079-9498, Plant ID No. 079-00014** issued on _____

5. Additional (?operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit. (Delete this statement if it does not apply.)

6. MascoTech Sintered Components of Indiana, Inc., shall submit a Part 70 permit application as soon as possible, since it missed the submission deadline in December 1996.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of
Indiana on this _____ day of _____, 19 _____.
My Commission expires: _____

Signature

Name (typed or printed)