

CONSTRUCTION PERMIT OFFICE OF AIR MANAGEMENT

**Chrysler Corporation - Kokomo Transmission & Casting Plant
2401 South Reed Road & 1001 East Boulevard
Kokomo, Indiana 46904**

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-067-10006-00065	
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.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this 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 a stationary source that operates machining, cleaning, heat treating, and marking facilities to produce transmissions for use in automobiles and light trucks.

Responsible Official: Kenneth Moore
Source Address: 2401 South Reed Road & 1001 East Boulevard, Kokomo, Indiana
46904
Mailing Address: P. O. Box 9007, Kokomo, Indiana 46904-9007
SIC Code: 3714 & 3363
County Location: Howard
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major 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:

Kokomo Transmission Plant:

- (a) One (1) Wheelabrator Multi table Shotblast Deburr identified as AAA006276, with a maximum steel shot blast recirculation capacity of 48,000 pounds per hour and parts throughput of 2315 pounds per hour, particulate matter controlled by a Centrispray wet collector identified as #180785 and exhausting at a stack identified as A;
- (b) One (1) Wheelabrator #22 Super III Tumblast identified as AAA012334, with a maximum steel shot blast recirculation capacity of 56,760 pounds per hour and parts throughput of 2315 pounds per hour, particulate matter controlled by a Devansco wet collector identified as # 329053 and exhausting at a stack identified as B;
- (c) One (1) Engineered Abrasive Shot Blaster identified as AAA018493, with a maximum steel shot blast recirculation capacity of 80 pounds per hour and parts throughput of 4000 pounds per hour, particulate matter controlled by a Torit cartridge bag house identified as # BH1 and exhausting inside the plant;
- (d) One (1) Engineered Abrasive Shot Blaster identified as AAA018494, with a maximum steel shot blast recirculation capacity of 80 pounds per hour and parts throughput of 4000 pounds per hour, particulate matter controlled by a Devansco wet collector identified as #329053 and exhausting at a stack identified as B;

Kokomo Casting Plant:

- (e) One (1) existing natural gas-fired aluminum melting reverberatory furnace, with a heat input capacity of 20 million British thermal units (mmBtu) per hour, melt rate of 5.10 tons aluminum and granular flux per hour and holding capacity of 82 tons, exhausting through a stack identified as 4RF. The existing furnace was originally permitted under Operation Permit No. 067-0002-0295 issued on November 13, 1990.

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

- (f) 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).
- (g) 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 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 has submitted their Part 70 application (T-067-6504-00003) on September 4, 1996. The equipment being reviewed under this permit shall be incorporated into the Part 70 Operating Permit.

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 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source.

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 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings, as determined in 326 IAC 5-1-4.
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

C.4 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.5 Operation of Equipment [326 IAC 2-1-3]

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 units covered by this permit that are vented to the control equipment are in operation.

Testing Requirements

C.6 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.7 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.8 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.

C.9 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.

Corrective Actions and Response Steps

C.10 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) 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.
- (c) 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.
- (d) 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.
- (e) 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 episode level. [326 IAC 1-5-3]

C.11 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.12 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:
- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (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.13 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.14 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.15 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

Kokomo Transmission Plant:	
(a)	One (1) Wheelabrator Multi table Shotblast Deburr identified as AAA006276, with a maximum steel shot blast recirculation capacity of 48,000 pounds per hour and parts throughput of 2315 pounds per hour, particulate matter controlled by a Centrispray wet collector identified as #180785 and exhausting at a stack identified as A;
(b)	One (1) Wheelabrator #22 Super III Tumblast identified as AAA012334, with a maximum steel shot blast recirculation capacity of 56,760 pounds per hour and parts throughput of 2315 pounds per hour, particulate matter controlled by a Devansco wet collector identified as # 329053 and exhausting at a stack identified as B;
(c)	One (1) Engineered Abrasive Shot Blaster identified as AAA018493, with a maximum steel shot blast recirculation capacity of 80 pounds per hour and parts throughput of 4000 pounds per hour, particulate matter controlled by a Torit cartridge bag house identified as # BH1 and exhausting inside the plant;
(d)	One (1) Engineered Abrasive Shot Blaster identified as AAA018494, with a maximum steel shot blast recirculation capacity of 80 pounds per hour and parts throughput of 4000 pounds per hour, particulate matter controlled by a Devansco wet collector identified as #329053 and exhausting at a stack identified as B;
Kokomo Casting Plant:	
(e)	One (1) existing natural gas-fired aluminum melting reverberatory furnace, with a heat input capacity of 20 million British thermal units (mmBtu) per hour, melt rate of 5.10 tons aluminum and granular flux per hour and holding capacity of 82 tons, exhausting through a stack identified as 4RF. The existing furnace was originally permitted under Operation Permit No. 067-0002-0295 issued on November 13, 1990.

Emission Limitations and Standards

D.1.1 PSD Minor Limit [326 IAC 2-2][40 CFR 52.21], Nonattainment Area Particulate Limitations [326 IAC 6-1-2] and State Construction and Operating Permits: Emissions Limitations [326 IAC 2-1-5] Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), Nonattainment Area Particulate Limitations [326 IAC 6-1-2] and State Construction and Operating Permits: Emissions Limitations [326 IAC 2-1-5];

(a) Chrysler Corporation - Kokomo Transmission Plant has the following limits:

Process / Facility	Process Exhaust (scfm)	PM / PM ₁₀ Allowable Emissions (lbs./hr)
Wheelabrator Shot Blaster Deburr (ID. #AAA006276)	4,350	1.08
Wheelabrator #22 Super III Tumblast (ID. #AAA012334)	16,000	1.31
Engineered Abrasive Shot Blaster (ID. # AAA018494)		0.13
Engineered Abrasive Shot Blaster (ID. # AAA018493)	2,000	0.06

(b) Chrysler Corporation - Kokomo Casting Plant has the following limits:

(a)

Process / Facility	Process Exhaust (scfm)	PM / PM ₁₀ Allowable Emissions (lbs./hr)
Aluminum Melting Reverberatory Furnace (No. # 4)	4,583	0.74

- (b) only clean scrap shall be melted,
- (c) the melt rate shall not exceed 5.10 tons per hour,
- (d) only natural gas shall be utilized
- (e) Upon construction and operation of the proposed furnace No. 4 issued under this construction permit, the existing Reverberatory Furnace D shall be permanently taken out of service.
- (f) the Permittee shall not melt any scrap from outside sources. Therefore, the source will not be classified as a secondary metal processing plant, one of the 28 listed categories.

Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 shall not apply.

Compliance Determination Requirements

D.1.2 Testing Requirements [326 IAC 2-1-3]

Within 60 days after achieving maximum production rate but no later than 180 days after initial start-up, the Permittee shall perform particulate matter (PM) and PM-10 testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, 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 condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance. The PM and PM-10 emission limits specified in Condition D.1.1 for Wheelabrator Shot Blaster Deburr (ID. # AAA006276), Wheelabrator # 22 Super III Tumblast (ID.# AAA012334), Engineered Abrasive Shot Blaster (ID. # AAA018494), and Aluminum Melting Reverberatory Furnace (No. # 4) shall be determined by a compliance stack test conducted in accordance with Section C - Performance Testing.

D.1.3 Particulate Matter (PM)

- (a) The Centrispray Wet Collector identified as # 180785 for PM control shall be in operation at all times when the Wheelabrator Multitable Shotblast Deburr identified as AAA006276 is in operation and exhausting to the outside atmosphere.
- (b) The Devansco Wet Collector identified as # 329053 for PM control shall be in operation at all times when the Wheelabrator #22 Super III Tumblast identified as AAA012334 is in operation and exhausting to the outside atmosphere.
- (c) The Torit Cartridge Bag House identified as # BH-1 for PM control shall be in operation at all times when the Engineered Abrasive Shot Blaster identified as AAA018493 is in operation and exhausting to inside the plant.
- (d) The Devansco Wet Collector identified as # 329053 for PM control shall be in operation at all times when the Engineered Abrasive Shot Blaster identified as AAA018494 is in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements

D.1.4 Visible Emissions Notations

- (a) Daily visible emission notations of the facilities identified as Wheelabrator Multitable Shot Blaster (AAA0006276), Wheelabrator #22 Super III Tumbblast (AAA012334), and Engineered Abrasive Shot Blaster (AAA018494) stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. 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.

D.1.5 Wet Scrubber Operating Condition

- (a) The Permittee shall monitor and record the pressure drop and flow rate of the scrubbers identified as #180785 and # 329053, at least once per week. The Preventive Maintenance Plan for the scrubbers shall contain troubleshooting contingency and corrective actions for when pressure drop and flow rate readings are outside of the normal range for any one reading.
- (b) The instruments used for determining the pressure drop and flow rate shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.
- (c) An inspection shall be performed each calendar quarter of the scrubbers. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced.
- (d) In the event that a scrubber's failure has been observed:
 - (i) The affected process will be shut down immediately until the failed unit has been replaced or repaired.

D.1.6 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags (or paper cartridge filters) controlling the all shot blasting operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.7 Broken Bag or Failure Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

Record Keeping and Reporting Requirement

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of daily visible emission notations of the facilities identified as Wheelabrator Multitable Shot blast (AAA006276), Wheelabrator #22 Super III Tumblast (AAA012334), and Engineered Abrasive Shot Blaster (AAA018494) stack exhaust.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of the results of the inspections required under Condition D.1.6.
- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7.
- (d) The Permittee shall certify monthly that only clean scrap has been melted in Furnace No. 4 and maintain records of the amount of scrap melted to demonstrate compliance with Condition D.1.1(b)(2) and D.1.1(b)(3).
- (e) The Permittee shall certify annually that no outside scrap has been melted at the source to demonstrate compliance with Condition D.1.1(b)(6).
- (f) 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: Chrysler Corporation - Kokomo Transmission Plant PHONE NO. (765) 454 - 1526

LOCATION: (CITY AND COUNTY): Kokomo, Howard
PERMIT NO. 067-10006 AFS PLANT ID: 067-00003 AFS POINT ID: _____ INSP: Ryan Hillman
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 New Construction and Operation

Source Background and Description

Source Name: Chrysler Corporation - Kokomo Transmission Plant
 Source Location: 2401 South Reed Road, Kokomo, Indiana 46904
 County: Howard
 Construction Permit No.: CP-067-10006-00003
 SIC Code: 3714
 Permit Reviewer: Manoj P. Patel

The Office of Air Management (OAM) has reviewed an application from Chrysler Corporation relating to the construction and operation of shot blasting processes, consisting of the following:

- (a) One (1) Wheelabrator Multitable Shotblast Deburr identified as AAA006276, with a maximum steel shot blast recirculation capacity of 48,000 pounds per hour and parts throughput of 2315 pounds per hour, particulate matter controlled by a Centrispray wet collector identified as #180785 and exhausting at a stack identified as A;
- (b) One (1) Wheelabrator #22 Super III Tumblast identified as AAA012334, with a maximum steel shot blast recirculation capacity of 56,760 pounds per hour and parts throughput of 2315 pounds per hour, particulate matter controlled by a Devansco wet collector identified as # 329053 and exhausting at a stack identified as B;
- (c) One (1) Engineered Abrasive Shot Blaster identified as AAA018493, with a maximum steel shot blast recirculation capacity of 80 pounds per hour and parts throughput of 4000 pounds per hour, particulate matter controlled by a Torit cartridge bag house identified as # BH1 and exhausting at a stack identified as C;
- (d) One (1) Engineered Abrasive Shot Blaster identified as AAA018494, with a maximum steel shot blast recirculation capacity of 80 pounds per hour and parts throughput of 4000 pounds per hour, particulate matter controlled by a Devansco wet collector identified as #329053 and exhausting at a stack identified as D.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Stack Gas Flow Rate (acfm)	Temperature (°F)
A	Wheelabrator Shot Blaster Deburr	49.80	2.23	16,000	Ambient
B	Wheelabrator #22 Super III Tumblast	44	2.67	16,000	Ambient
D	Engineered Abrasive Shot Blaster	44	2.67	16,000	Ambient

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.

A complete application for the purposes of this review was received on August 3, 1998.

Emissions Calculations

- (a) See Appendix A (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)	324.10	116.05
Particulate Matter (PM10)	99.80	99.80
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)	5.80	5.80
Combination of HAPs	7.0	7.0

- (a) Allowable emissions are determined from the applicability of rule 326 IAC 6-3. See Appendix A of this TSD for detailed allowable PM emissions calculations.
- (b) The potential emissions before control are less than the allowable emissions, therefore, the potential emissions before control are used for the permitting determination.
- (c) Allowable emissions (as defined in the Indiana Rule) of particulate matter (PM) 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) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Howard 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) Howard County has been classified as attainment or unclassifiable for all 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	175.25
PM10	67.80
SO ₂	1637.0
VOC	18.75
CO	200
NO _x	844.75

- (a) This existing source is a major stationary source because at least one attainment regulated pollutant is emitted at a rate of 250 tons per year.
- (b) These emissions were based on Facility Quick Look Report, dated April 1, 1998.

Proposed Modification

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

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	11.20	9.60	0.0	0.0	0.0	0.0
Contemporaneous Increases	n/a	n/a	0.0	0.0	0.0	0.0
Contemporaneous Decreases	n/a	n/a	0.0	0.0	0.0	0.0
Net Emissions	11.20	9.60	0.0	0.0	0.0	0.0
PSD Significant Level	25	15	40	40	100	40

- (a) This modification to an existing major stationary source is not major because the emissions 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 (T067-6504-00003) application on September 4, 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 Standards for Hazardous Air Pollutants (326 IAC 12 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 carbon monoxide (CO), sulfur dioxide (SO₂), and oxides of nitrogen (NO_x). 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.

326 IAC 5-1-2 (Visible Emission Limitations)

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.

326 IAC 6-3-2 (Process Operations: Particulate Matter Limitations)

- (a) The allowable PM emission rate from the Wheelabrator Multitable Shotblast Deburr identified as AAA006276 shall not exceed 34.50 pounds per hour when operating at a process weight rate of 48,000 pounds per hour.
- (b) The allowable PM emission rate from the Wheelabrator #22 Super III Tumbblast identified as AAA012334 shall not exceed 38.60 pounds per hour when operating at a process weight rate of 58,760 pounds per hour.
- (c) The allowable PM emission rate from the Engineered Abrasive shot Blaster identified as AAA018493 shall not exceed 0.47 pounds per hour when operating at a process weight rate of 80 pounds per hour.
- (d) The allowable PM emission rate from the engineered Arasive Shot Blaster identified as AAA018494 shall not exceed 0.47 pounds per hour when operating at a process weight rate of 80 pounds per hour.

The pound per hour limitation was calculated with the following equation:

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

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

At an allowable emission rate of 324 tons per year for particulate matter, this modification would be subject to the PSD rules for exceeding the PSD significant levels for a modifications of an existing major source (25 tons per year for PM and 15 tons per year for PM₁₀). Allowable particulate matter emissions are truncated as follows:

$$(14.0 \text{ tons/ year PM-10}) * (PM / 0.86 \text{ PM}_{10}) = 16.30 \text{ tons/year} = 3.70 \text{ lbs. PM/hour}$$

Process / Facility	Process Weight Rate (tons/hour)	PM Allowable Emissions (lbs./hr)	Truncated PM Allowable Emissions (lbs./hr)
Wheelbrator Shot Blaster Debur (ID. #AAA006276)	24.0	34.50	1.73
Wheelbrator #22 Super III Tumbblast (ID. #AAA012334)	28.38	38.60	1.94
Engineered Abrasive Shot Blaster (ID. # AAA018493)	0.04	0.47	0.024
Engineered Abrasive Shot Blaster (ID. # AAA018494)	0.04	0.47	0.024

$$\text{Truncated PM allowable Emissions} = \frac{\text{facility's PM allowable PM, lbs./hr} * \text{truncated PM allowable, lbs./hr}}{\text{Total facilities PM allowable, lb./hour}}$$

At a particulate matter allowable emission rate of 3.70 lbs PM/hour, PM emissions will be less than 25 tons per year and PM₁₀ emissions will be less than 15 tons per year. Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 do not apply.

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.

- (a) This modification will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.
- (b) See Appendix A of this TSD for detailed air toxic calculations.

Conclusion

The construction of this shot blasting facilities will be subject to the conditions of the attached proposed **Construction Permit No. CP-067-10006-00003**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name: Chrysler Corporation - Kokomo Transmission & Casting Plant
Source Location: 2401 South Reed Road & 1001 East Boulevard, Kokomo, Indiana 46904
County: Howard
CP No.: CP-067-10006-00065
SIC Code: 3714 & 3363
Permit Reviewer: Manoj P. Patel

On September 22, 1998, the Office of Air Management (OAM) had a notice published in the Kokomo Tribune, Kokomo, Indiana, stating that Chrysler Corporation had applied for a construction permit to construct and operate a shot blasting operations with a wet collector and a cartridge filter as particulate matter control. 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 June 17, 1998, Chrysler Corporation - Casting Plant located at 1001 East Boulevard, Kokomo, Indiana 46904 has submitted the Construction Permit application (CP-067-9855-00002) to IDEM for a modification of an existing reverberatory furnace no. 4. On August 3, 1998, Chrysler Corporation - Transmission Plant located at 2401 South Reed Road, Kokomo, Indiana 46902 has submitted the Construction Permit application (CP-067-10006-00003) to IDEM for a construction of four (4) shot blasters. The Office of Air Management has determined that the both plants as a single source with the identification of 067-00065. Therefore, OAM combines an emission unit covered in the application (CP-067-9855-00002) into this construction permit and issue the construction permit under the source identification of 067-00065 instead of 067-00003. The Office of Air Management also determined the modification at the both plants to be considered as a single project because of nature of the process and their interdependability with each other. The source has also confirmed this concern with OAM.

On October 26, 1998, The Chrysler Corporation submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows:

Comment 1:

The description of the emission units and pollution control equipment in Section A.2 of the proposed construction permit should be changed to the format that is consistent with the description in Chrysler's draft Part 70 Operating Permit, as the equipments will be incorporated in the final Part 70 Operating Permit. The shot blaster identified as AAA18493 exhausts inside the facility, and not through a stack C. The units identified as AAA012334 and AAA018494 will exhaust through a common stack.

Response 1:

The information in Section A.2 of the proposed permit is descriptive information and does not constitute enforceable conditions. The Office of Air Management prefers the information such as the maximum capacity, stack identification number, blast media and the recirculation rate for the compliance stack test purposes. The production rate is necessary to determine allowable emissions during the stack test and whether there have been any changes requiring permit revisions. Therefore, OAM will not change the description for the short blasters except the stack identification. Section A.2 and D.1 have been changed as follows in the final construction permit as follows:

A.2 Emission Units and Pollution Control Equipment Summary

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

Kokomo Transmission Plant:

- (a) One (1) Wheelabrator Multi table Shotblast Deburr identified as AAA006276, with a maximum steel shot blast recirculation capacity of 48,000 pounds per hour and parts throughput of 2315 pounds per hour, particulate matter controlled by a Centrispray wet collector identified as #180785 and exhausting at a stack identified as A;
- (b) One (1) Wheelabrator #22 Super III Tumblast identified as AAA012334, with a maximum steel shot blast recirculation capacity of 56,760 pounds per hour and parts throughput of 2315 pounds per hour, particulate matter controlled by a Devansco wet collector identified as # 329053 and exhausting at a stack identified as B;
- (c) One (1) Engineered Abrasive Shot Blaster identified as AAA018493, with a maximum steel shot blast recirculation capacity of 80 pounds per hour and parts throughput of 4000 pounds per hour, particulate matter controlled by a Torit cartridge bag house identified as # BH1 and exhausting **inside the plant** ~~at a stack identified as C~~;
- (d) One (1) Engineered Abrasive Shot Blaster identified as AAA018494, with a maximum steel shot blast recirculation capacity of 80 pounds per hour and parts throughput of 4000 pounds per hour, particulate matter controlled by a Devansco wet collector identified as #329053 and exhausting at a stack identified as ~~C~~ **B**.

Kokomo Casting Plant:

- (e) **One (1) existing natural gas-fired aluminum melting reverberatory furnace, with a heat input capacity of 20 million British thermal units (mmBtu) per hour, melt rate of 5.10 tons aluminum and granular flux per hour and holding capacity of 82 tons, exhausting through a stack identified as 4RF. The existing furnace was originally permitted under Operation Permit No. 067-0002-0295 issued on November 13, 1990.**

Comment 2:

Condition B.5(e), on page 5 of 18 of the proposed permit should be changed to "the equipment being reviewed under this permit shall be incorporated into the submitted Part 70 application or the Part 70 Operating Permit."

Response 2:

Condition B.5(e) has been changed as follows:

- (e) The Permittee has submitted their Part 70 application (T-067-6504-00003) on September 4, 1996. The equipment being reviewed under this permit shall be incorporated ~~in the submitted Part 70 application~~ **into the Part 70 Operating Permit.**

Comment 3:

Condition C.7 (Compliance Monitoring), on page 9 of 18 of the proposed permit contains references to a compliance schedule of "thirty (30) days after the date the Affidavit of Construction is postmarked for each unit." Chrysler requests that all references to "thirty (30) days" be changed to "ninety (90) days."

Response 3:

Condition C.7 (Compliance Monitoring) requires the company to install any necessary equipment and initiate monitoring for any applicable requirements. The OAM believes that 30 days are enough to install the monitoring equipment and initiate monitoring of pressure drops on the existing control equipment. However, the source can be allowed an extension of 30 more days for compliance monitoring on a case by case basis by providing full justification for complex monitoring requirements. Therefore, the Condition C.7 remains unchanged.

Comment 4:

Condition C.9 (Pressure Gauge Specifications), on page 10 of 18 should be deleted because the pressure gauge scale is too restrictive.

Response 4:

This condition requires the Permittee to operate their control equipment or the process unit, with no less than 20 percent of the full scale and accuracy within plus or minus two percent of full scale reading. The pressure gauge provides information to an operator that the process or control device is working properly within the vendor's specifications. No permit change was made in response to this comment.

Comment 5:

Condition C.14 (d) (General Record Keeping Requirements), on page 12 of 18 of the proposed should be change to read as ninety (90) days instead of thirty (30) days.

Response 5:

See Comment / Response 3 above.

Comment 6:

Condition D.1.1 (PSD Minor Limit and Process Operation), on page 14 of 18 of the proposed permit is based on the process weight rate. The process weight rates listed in the table are those for the recirculation rate of the shotblast media. Chrysler recommends that the allowable emissions be based upon the process weight rate of parts and that values listed in Section D.1.1(a) should be modified to reflect the weight of the parts and the weight of the shotblast media. Chrysler observed that the "Truncated PM Allowable Emissions (lbs./hr)" listed in the proposed CP were increased for the two Wheelabrator units and decreased for the two Engineered Abrasive units. Chrysler has one additional concern with the hourly limit proposed in the Construction Permit with respect to Prevention of Significant Deterioration (PSD). Chrysler estimated the potential (i.e. allowable) emissions of particulate matter (PM) and particulate matter less than 10 microns (PM10) to be 11.30 tons per year. The hourly limits in the proposed CP appear to yield annual potential (ie. allowable) emissions of 16.28 tons per year.

Response 6:

Chrysler Corporation - Kokomo Transmission Plant & Casting Plant is considered to be as a single major source located in the Howard County. Sources or facilities that are located in the nonattainment counties listed in 326 IAC 6-1-7 and have potential to emit one hundred (100) tons or more of particulate matter per year or have actual emissions of ten (10) tons or more of particulate matter per year, shall comply with the limitations of 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations: Specified). Pursuant to 326 IAC 6-1-2(a), facilities shall not allow or permit discharge to atmosphere of any gases which contained particulate matter in excess of 0.07 gram per dry standard cubic meter (g/dscm) (0.03 grain per dry standard cubic foot (dscf)). The source has accepted the lower PM emission limit at some facilities and OAM will accept under the rule 326 IAC 2-1-5 [State Construction and Operating Permits: Emission Limitations]. The Office of Air Management has revised the applicability of particulate matter (PM) emissions limits based on the rule 326 IAC 6-1-2(a) instead of 326 IAC 6-3-2(c). The proposed emissions from the modification project will increase the PM and PM10 emissions of less than 25 and 15 tons per year, respectively. Therefore, the requirements of Prevention of Significant Deterioration (PSD) 326 IAC 2-2 and 40 CFR 52.21 will not apply to the modification covered by this construction permit. Condition D.1.1 has been changed as follows:

D.1.1 PSD Minor Limit [326 IAC 2-2][40 CFR 52.21], and ~~Process Operation [326 IAC 6-3]~~ Nonattainment Area Particulate Limitations [326 IAC 6-1-2] and State Construction and Operating Permits: Emissions Limitations [326 IAC 2-1-5]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), ~~and 326 IAC 6-3 (Process Operations)~~ **Nonattainment Area Particulate Limitations [326 IAC 6-1-2] and State Construction and Operating Permits: Emissions Limitations [326 IAC 2-1-5]**, the following facilities shall have an allowable PM emission limits:

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

~~$E = 4.10 P^{0.07}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour~~

Process / Facility	Process Weight Rate (tons/hour)	Truncated PM Allowable Emissions (lbs./hr)
Wheelabrator Shot Blaster Deburr (ID. #AAA006276)	24.0	4.73
Wheelabrator #22 Super III Tumblast (ID. #AAA012334)	28.38	4.94
Engineered Abrasive Shot Blaster (ID. # AAA018493)	0.04	0.024
Engineered Abrasive Shot Blaster (ID. # AAA018494)	0.04	0.024

(a) Chrysler Corporation - Kokomo Transmission Plant has the following limits:

Process / Facility	Process Exhaust (scfm)	PM / PM ₁₀ Allowable Emissions (lbs. /hr)
Wheelabrator Shot Blaster Deburr (ID. #AAA006276)	4,350	1.08
Wheelabrator #22 Super III Tumbblast (ID. #AAA012334)	16,000	1.31
Engineered Abrasive Shot Blaster (ID. # AAA018494)		0.13
Engineered Abrasive Shot Blaster (ID. # AAA018493)	2,000	0.06

(b) Chrysler Corporation - Kokomo Casting Plant has the following limits:

(1)

Process / Facility	Process Exhaust (scfm)	PM / PM ₁₀ Allowable Emissions (lbs. /hr)
Aluminum Melting Reverberatory Furnace (No. # 4)	4,583	0.74

- (2) only clean scrap shall be melted,
- (3) the melt rate shall not exceed 5.10 tons per hour,
- (4) only natural gas shall be utilized
- (5) Upon construction and operation of the proposed furnace No. 4 issued under this construction permit, the existing Reverberatory Furnace D shall be permanently taken out of service.
- (6) the Permittee shall not melt any scrap from outside sources. Therefore, the source will not be classified as a secondary metal processing plant, one of the 28 listed categories.

~~Compliance with this condition will make~~ **Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 requirements shall not applicable apply.**

Comment 7:

Condition D.1.3 (Particulate Matter (PM)), on page 15 of 18 of the proposed permit should be deleted because Condition C.5 already states that "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 units covered by this permit that are vented to the control equipment are in operation."

Response 7:

Condition D.1.3 describes the function of the control equipment at their respective facilities while Condition C.5 describes all control equipment at the source. Therefore, Condition D.1.3 will remain unchanged.

Comment 8:

Condition D.1.3 (c) (Particulate Matter (PM)), on page 15 of 18 of the proposed permit, should be changed to read as "exhaust inside the plant" instead of "outside atmosphere."

Response 8:

Condition D.1.3(c) has been revised as follows:

- (c) The Torit Cartridge Bag House identified as # BH-1 for PM control shall be in operation at all times when the Engineered Abrasive Shot Blaster identified as AAA018493 is in operation and exhausting to ~~the outside atmosphere~~ **inside the plant.**

Comment 9:

Condition D.1.4 (a) (Visible Emissions Notations), on page 15 of 18, the facility identified as The Engineered Abrasive Shot Blaster (ID. # AAA018493) requiring visible emission inspection should be removed because this facility does not have a stack that vents outside the plant.

Response 9:

Since there is no stack on the facility identified as Engineered Abrasive Shot Blaster (ID. # AAA018493), visible emissions inspections are not required for it. However, visible emissions inspections are required for the other facilities covered by this permit. Condition D.1.4(a) (Visible Emissions Notations), has been revised as follows:

- (a) Daily visible emission notations of the facilities identified as Wheelabrator Multitable Shot Blaster (AAA0006276), Wheelabrator #22 Super III Tumblast (AAA012334), ~~Engineered Abrasive Shot Blaster (AAA018493)~~, and Engineered Abrasive Shot Blaster (AAA018494) stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

Comment 10:

Condition D.1.8(a) (Record Keeping Requirements), the record keeping of the facility identified as Engineered Abrasive Shot Blaster (ID. # AAA018493) should be deleted because the facility does not have a stack that vents outside the plant. Subsection (c) of Condition D.1.8 containing the phrase " and the dates the vents are redirected" should be deleted because no vents will be redirected.

Response 10:

Condition D.1.8 (Record Keeping Requirements) has been changed as follows:

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of daily visible emission notations of the facilities identified as Wheelabrator Multitable Shot blast (AAA006276), Wheelabrator #22 Super III Tumblast (AAA012334), ~~Engineered Abrasive Shot Blaster (AAA018493)~~, and Engineered Abrasive Shot Blaster (AAA018494) stack exhaust.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of the results of the inspections required under Condition D.1.6.
- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7 ~~and the dates the vents are redirected.~~

- (d) **The Permittee shall certify monthly that only clean scrap has been melted in Furnace No. 4 and maintain records of the amount of scrap melted to demonstrate compliance with Condition D.1.1(b)(2) and D.1.1(b)(3).**
- (e) **The Permittee shall certify annually that no outside scrap has been melted at the source to demonstrate compliance with Condition D.1.1(b)(6).**
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Upon further review, OAM has made the following changes to the Technical Support Document and final permit (changes are bolded for emphasis):

D.1.2 Testing Requirements [326 IAC 2-1-3]

~~During the period between 2 and 6 months after issuance of this permit~~ **Within 60 days after achieving maximum production rate but no later than 180 days after initial start-up**, the Permittee shall perform particulate matter (PM) **and PM-10 testing for at Centrispray wet collector (ID.# 180785) and Devansco wet collector (ID.# 329053)** utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM **and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10**, 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.** In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance. The PM **and PM-10** emission limits specified in Condition D.1.1 for **Wheelabrator Shot Blaster Deburr (ID.# AAA006276), Wheelabrator # 22 Super III Tumblast (ID.# AAA012334), Engineered Abrasive Shot Blaster (ID.# AAA018494), and Aluminum Melting Reverberatory Furnace (No. # 4)** shall be determined by a compliance stack test conducted in accordance with Section C - Performance Testing.

Source Definition

This automobile manufacturing company consists of two (2) plants:

- (a) **Chrysler Corporation - Kokomo Transmission Plant is located at 2401 South Reed Road, Kokomo, Indiana; and**
- (b) **Chrysler Corporation - Kokomo Casting Plant is located at 1001 East Boulevard, Kokomo, Indiana.**

Since the two (2) plants are located in contiguous properties, have the same SIC codes and owned by one company, they will be considered as one (1) source.

Source Background and Description

Source Name:	Chrysler Corporation - Kokomo Transmission & Casting Plant
Source Location:	2401 South Reed Road & 1001 East Boulevard , Kokomo, Indiana 46904
County:	Howard
Construction Permit No.:	CP-067-10006- 00003 65
SIC Code:	3714 & 3363
Permit Reviewer:	Manoj P. Patel

The Office of Air Management (OAM) has reviewed an application from Chrysler Corporation relating to the construction and operation of shot blasting processes, consisting of the following:

Kokomo Transmission Plant:

- (a) One (1) Wheelabrator Multitable Shotblast Deburr identified as AAA006276, with a maximum steel shot blast recirculation capacity of 48,000 pounds per hour and parts throughput of 2315 pounds per hour, particulate matter controlled by a Centrispray wet collector identified as #180785 and exhausting at a stack identified as A;
- (b) One (1) Wheelabrator #22 Super III Tumblast identified as AAA012334, with a maximum steel shot blast recirculation capacity of 56,760 pounds per hour and parts throughput of 2315 pounds per hour, particulate matter controlled by a Devansco wet collector identified as # 329053 and exhausting at a stack identified as B;
- (c) One (1) Engineered Abrasive Shot Blaster identified as AAA018493, with a maximum steel shot blast recirculation capacity of 80 pounds per hour and parts throughput of 4000 pounds per hour, particulate matter controlled by a Torit cartridge bag house identified as # BH1 and exhausting ~~at a stack identified as C~~ **inside the plant;**
- (d) One (1) Engineered Abrasive Shot Blaster identified as AAA018494, with a maximum steel shot blast recirculation capacity of 80 pounds per hour and parts throughput of 4000 pounds per hour, particulate matter controlled by a Devansco wet collector identified as #329053 and exhausting at a stack identified as ~~B~~ **B;**

Kokomo Casting Plant:

- (e) **One (1) existing natural gas-fired aluminum melting reverberatory furnace, with a heat input capacity of 20 million British thermal units (mmBtu) per hour, melt rate of 5.10 tons aluminum and granular flux per hour and holding capacity of 82 tons, exhausting through a stack identified as 4RF. The existing furnace was originally permitted under Operation Permit No. 067-0002-0295 issued on November 13, 1990.**

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Stack Gas Flow Rate (acfm)	Temperature (°F)
A	Wheelabrator Shot Blaster Deburr	49.80	2.23	16,000	Ambient
B	Wheelabrator #22 Super III Tumblast	44	2.67	16,000	Ambient
B 4RF	Engineered Abrasive Shot Blaster Melting Furnace No. 4	44 70	2.67 1.0	16,000 4583	Ambient 385

Emissions Calculations

- (a) See **Revised** Appendix A (Emissions Calculation Spreadsheets) for detailed calculations.

Proposed Modification

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

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	44.20 11.95	9.60 11.95	0.0	0.0	0.0	0.0
Contemporaneous Increases	n/a	n/a	0.0	0.0	0.0	0.0
Contemporaneous Decreases	n/a	n/a	0.0	0.0	0.0	0.0
Net Emissions	44.20 11.95	9.60 11.95	0.0	0.0	0.0	0.0
PSD Significant Level	25	15	40	40	100	40

- (a) This modification to an existing major stationary source is not major because the emissions 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.

State Rule Applicability

~~326 IAC 6-3-2 (Process Operations: Particulate Matter Limitations)~~

- ~~(a) The allowable PM emission rate from the Wheelabrator Multitable Shotblast Deburr identified as AAA006276 shall not exceed 34.50 pounds per hour when operating at a process weight rate of 48,000 pounds per hour.~~
- ~~(b) The allowable PM emission rate from the Wheelabrator #22 Super III Tumbblast identified as AAA012334 shall not exceed 38.60 pounds per hour when operating at a process weight rate of 58,760 pounds per hour.~~
- ~~(c) The allowable PM emission rate from the Engineered Abrasive shot Blaster identified as AAA018493 shall not exceed 0.47 pounds per hour when operating at a process weight rate of 80 pounds per hour.~~
- ~~(d) The allowable PM emission rate from the engineered Abrasive Shot Blaster identified as AAA018494 shall not exceed 0.47 pounds per hour when operating at a process weight rate of 80 pounds per hour.~~

~~The pound per hour limitation was calculated with the following equation:~~

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

~~$E = 4.10 P^{0.97}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour~~

~~At an allowable emission rate of 324 tons per year for particulate matter, this modification would be subject to the PSD rules for exceeding the PSD significant levels for a modifications of an existing major source (25 tons per year for PM and 15 tons per year~~

for PM_{10}). Allowable particulate matter emissions are truncated as follows:

$$(14.0 \text{ tons/year } PM_{10}) * (PM / 0.86 \text{ } PM_{10}) = 16.30 \text{ tons/year} = 3.70 \text{ lbs. } PM/\text{hour}$$

Process / Facility	Process Weight Rate (tons/hour)	PM Allowable Emissions (lbs./hr)	Truncated PM Allowable Emissions (lbs./hr)
Wheelbrator Shot Blaster Deburr (ID. #AAA006276)	24.0	34.50	1.79
Wheelbrator #22 Super III Tumbblast (ID. #AAA012334)	29.38	38.60	1.94
Engineered Abrasive Shot Blaster (ID. # AAA018493)	0.04	0.47	0.024
Engineered Abrasive Shot Blaster (ID. # AAA018494)	0.04	0.47	0.024

$$\text{Truncated PM allowable Emissions} = \frac{\text{facility's PM allowable PM, lbs./hr} * \text{truncated PM allowable, lbs./hr}}{\text{Total facilities PM allowable, lb./hour}}$$

At a particulate matter allowable emission rate of 3.70 lbs PM/hour, PM emissions will be less than 25 tons per year and PM_{10} emissions will be less than 15 tons per year. Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 do not apply.

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations: Specified)

This rule applies to all facilities covered by this permit. Pursuant to 326 IAC 6-1-2(a), facilities shall not allow or permit discharge to the atmosphere of any gases which contain particulate matter in excess of 0.07 gram per dry standard cubic meter (gr./dscm) (0.03 grain per dry standard cubic foot (dscf)). The controlled particulate matter (PM) emissions are at levels equal to or less than 0.03 gr./dscf. Therefore, the facilities comply with this rule.

**Revised Appendix A: Emissions Calculations
Particulate Matter Emissions
From Shot Blasting Operations**

Company Name: Chrysler Corporation - Kokomo Transmission & Casting Plant
Address City IN Zip: 2401 South Reed Road & 1001 East Boulevard, Kokomo, Indiana 46904
CP: 067-10006-00065
Pit ID: 067-00065
Reviewer: Manoj P. Patel
Date: November 16, 1998

1. Kokomo Transmission Plant Emissions:

Blasting Equipment ID. #	Media	Blast Rate Tons/hr	PM Emission Factor * (lb.PM/lb. abrasive)	PM10 E.F., lb./lb. PM	Particulate Control Device	Control Device Efficiency	Potential Uncontrolled PM Emissions (tons/year)	Potential Controlled PM Emissions (tons/year)	Potential Uncontrolled PM10 Emissions (Tons/year)	Potential Controlled PM10 Emissions (tons/year)	Allowable PM gr./dscf	Process Exhaust (SCFM)	Allowable Emissions lbs./hr	Allowable Emissions (tons/year)
Wheelabrator Shotblast Debur	Steel Shot	24	0.00023	1	Centrispray Wet Collector	90.00%	48.36	4.84	48.36	4.84	0.03	4350	1.12	4.90
Wheelabrator #22 Super III Tumbleblast	Steel Shot	28.38	0.00023	1	Devansco Wet Collector	90.00%	57.18	5.72	57.18	5.72	0.03	4350	1.12	4.90
Engineered Abrasives - Shots	Steel Shot	0.04	0.015	1	Eng. Abrasives w/ Torit Cart.	98.00%	5.26	0.11	5.26	0.11	0.01	2000	0.17	0.75
Engineered Abrasive Shot	Steel Shot	0.04	0.015	1	Devansco Wet Collector	90.00%	5.26	0.53	5.26	0.53	0.001	2000	0.02	0.08
							116.05	11.18	116.05	11.18			Total (tons/year):	10.62

METHODOLOGY:

* Uncontrolled PM Emission Factor from Casting Plant 3/96 Stack Test of Existing Shotblast Outlet. The Emission factor was calculated from the test results as follows:

PM Emission Rate (from Stack Test): 1.62 lb.PM /hour
Control Efficiency (From Stack Test) 95.00%
Uncontrolled PM Emission Factor: (1.62 lb. PM/hr/72 ton shots/hr) * (1/1-0.95) = 0.45 lb. PM / ton shot
Shot Circulation Rate (from Stack Test): 72 tons/year
= **0.00023 lb. PM / lb. shot**

Uncontrolled PM10 Emission Factor from Steppa Alapco, Section 3, "Abrasive Blasting".

Controlled PM Emissions = Blast Rate (tons/hour) * Emission Factor (lb. PM/ lb. Abrasive) * (1 - C.E.) * 8760 hours

PM10 Emissions = PM Emissions (tons/year) * Emission Factor (lb. PM10/lb. PM)

HAP Emissions = Uncontrolled PM Emissions (tons/year) * % shot composition

Allowable Emissions (lbs./hr) = allowable PM 0.03 gr./dscf (as 326 IAC 6-1) * (SCFM*60 min/1hr) * (1 lb./7000 gr)

HAP Emissions			
Manganese		Nickle	
Shot Composition (%)	tons/year	Shot Composition (%)	tons/year
5.0	2.418	1.0	0.494
5.0	2.859	1.0	0.572
5.0	0.263	1.0	0.053
5.0	0.263	1.0	0.053
		1.16	

Total Allowable Emissions (tons/year):	13.87
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2. Kokomo Casting Plant:

Pollutant	Emission Factor	Max. Capacity	Potential Emissions	Allowable PM (gr./dscf)	Process Exhaust scfm	Allowable Emissions (lb./hr)	Allowable Emissions Tons/year
PM	0.035	5.0	0.77	0.03	2880.00	0.74	3.24
PM10	0.035	5.0	0.77	0.03	2880.00	0.74	3.24
Chromium	0.00026	5.0	0.01				
Lead	0.00256	5.0	0.06				
Manganese	0.00704	5.0	0.15				
Nickel	0.00032	5.0	0.01				
HF	0.00260	5.0	0.06				

Methodology:

PM & PM10 emission factor are provided by the applicant, based on the 1996 actual stack test performed on the simillar furnace.

Potential Emissions (tons/year): emission factor (lb./ton) * Max. capacity (tons/hour) * 4.38

Allowable PM emissions are 0.03 grper dscf , based on 326 IAC 6-1-2, NonAttainment Area Particulate Limitations: Specified

Process Exhaust provided by applicant.

PM emission factor includes particulate matter from the furnace particulate and natural gas combustion particulate. However, a separate spread sheet attached for natural gas combustion.