

# **PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY**

**DaimlerChrysler Corporation - Indiana Transmission Plant  
3660 North US Highway 31  
Kokomo, Indiana 46901**

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

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 067-12802-00058	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: April 26, 2001  Expiration Date: April 26, 2006

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**Laser Welders  
Deburring Units  
Machining Operations**

**Certification**

## SECTION A SOURCE SUMMARY

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

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a stationary transmission production facility.

Responsible Official:	Kenneth Moore
Source Address:	3660 North US Highway 31, Kokomo, Indiana 46901
Mailing Address:	3660 North US Highway 31, Kokomo, Indiana 46901
<b>General Source Phone Number:</b>	<b>(765) 854-4183</b>
SIC Code:	3714
County Location:	Howard
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

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

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

- (a) Seven (7) atmosphere generators, identified as Atmos Gen 7 - 13, each with a maximum heat input capacity of 6 MMBtu/hr, and each exhausting through one (1) stack;
- (b) eleven (11) shotblast machines, identified as Shotblast 16 - 26, each using a maximum of 7700 pound per hour of cut steel wire shot, each controlled by a dust collector for particulate matter control, and exhausting inside the building.

### A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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This stationary source is also approved to the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (b) The following VOC and HAP storage containers:
  - (1) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (c) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (d) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (e) Cleaners and solvents characterized as:
  - (1) Having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38EC (100EF) or;
  - (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

- (f) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment:
  - (1) Eight (8) laser welding stations, identified as Welder 13 thru 19, and exhausting inside the building;
- (g) Closed loop heating and cooling systems.
- (h) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (i) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (j) Noncontact cooling tower systems with either of the following:
  - (a) Natural draft cooling towers not regulated under a NESHAP.
  - (b) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (k) Quenching operations used with heat treating processes.
- (l) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (m) Heat exchanger cleaning and repair.
- (n) Paved and unpaved roads and parking lots with public access.
- (o) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (p) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (q) Stationary fire pumps.
- (r) A laboratory as defined in 326 IAC 2-7-1(20)(C).
- (s) Activities or categories not previously identified with emissions less than or equal to insignificant thresholds:
  - (1) Eleven (11) high pressure deburring units, identified as Deburr 2 thru 12, each with a maximum oil usage of 90 gallons per year, and exhausting within the building.
  - (2) Machining operations consisting of two hundred (200) wet machines, and eighteen (18) dry hobbing units, identified as Mach & Hob 21-38.

**A.4 Part 70 Permit Applicability [326 IAC 2-7-2]**

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

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

## **SECTION B GENERAL CONSTRUCTION CONDITIONS**

### **B.1 Permit No Defense [IC 13]**

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

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

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

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

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

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

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

### **B.5 Significant Source Modification [326 IAC 2-7-10.5(h)]**

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) 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 Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) 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.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

- (1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.
- (2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.

- (3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.

B.6 Phase Construction Time Frame

That pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the IDEM may revoke this approval to construct if the:

- (a) Construction of (seven (7) atmosphere generators, eleven (11) shotblast units and associated insignificant activities) has not begun within eighteen (18) months from the effective date of this approval or if during the construction of (seven (7) atmosphere generators, eleven (11) shotblast units and associated insignificant activities), work is suspended for a continuous period of one (1) year or more.

The OAQ may extend such time upon satisfactory showing that an extension, formally requested by the Permittee is justified.

B.7 BACT Determination for Phase Constructions

That pursuant to 40 CFR 52.21(j)(4), for phase construction projects, the determination of BACT shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than eighteen (18) months prior to commencement of construction of each independent phase of the project.

**SECTION C GENERAL OPERATION CONDITIONS**

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

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

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

- (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

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

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



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

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

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

**C.4 Opacity [326 IAC 5-1]**

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

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

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

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

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

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

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
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, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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 [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

#### **C.7 Compliance Monitoring [326 IAC 2-1.1-11]**

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. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

#### **C.8 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

- (a) 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.
- (b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument 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) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

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

#### **C.9 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]**

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this approval;
  - (3) The Compliance Monitoring Requirements in Section D of this approval;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of :
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied;
  - (3) An automatic measurement was taken when the process was not operating;
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, 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 response actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the response actions taken are deficient. The Permittee shall submit a description of additional response actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ 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, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

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

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

**C.11 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]**

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- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

**C.12 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]**

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- (a) Records of all required data, reports 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, OAQ, 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) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

**C.13 General Reporting Requirements [326 IAC 2-7-5(3)(C)]**

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

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

- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

## SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) Seven (7) atmosphere generators, identified as Atmos Gen 7 - 13, each with a maximum heat input capacity of 6 MMBtu/hr, and each exhausting through one (1) stack;
- (b) eleven (11) shotblast machines, identified as Shotblast 16 - 26, each using a maximum of 7700 pound per hour of cut steel wire shot, each controlled by dust collector for particulate matter control, and exhausting inside the building.

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

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

#### D.1.1 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Particulate Emission Limitations), each shotblast machine (Shotblast 16-26) shall not allow or permit discharge to the atmosphere particulate matter in excess of 0.03 grains per dry standard cubic foot (gr/dscf). The particulate (PM) and particulate matter less than 10 microns (PM10) shall be limited to 0.017 lb/hr per unit.

#### D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform CO testing on one of the seven (7) atmosphere generators utilizing Method 10, or other methods as approved by the Commissioner to verify the emission factors submitted by the source. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### D.1.4 Particulate Matter (PM)

The dust collectors for PM control shall be in operation at all times when the eleven (11) shot blasting units are in operation, in order to comply with the requirements of 326 IAC 6-1-2.

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

#### D.1.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collectors used in conjunction with the eleven (11) shot blasting units, at least once per shift when the eleven (11) shot blasting units are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collectors shall be maintained within the range of 0.5 and 2.5 inches of water or a range recommended by manufacturer. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

#### D.1.6 Dust Collector Inspections

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An inspection shall be performed each calendar quarter of all bags controlling the eleven (11) shot blasting units when venting to the atmosphere. A dust collector 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 or Failed Bag Detection

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In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B - Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment dust collectors, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

#### D.1.8 Record Keeping Requirements

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- (a) To document compliance with Condition D.1.4, the Permittee shall maintain the following:
  - (1) Once per shift records of the differential static pressure during normal operation when venting to the atmosphere:
  - (2) 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 inspections required under Condition D.1.4 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2 FACILITY OPERATION CONDITIONS

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

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment:
  - (1) Eight (8) laser welding stations, identified as Welder 13 thru 19, and exhausting inside the building;
- (b) Activities or categories not previously identified with emissions less than or equal to insignificant thresholds:
  - (1) Eleven (11) high pressure deburring units, identified as Deburr 2 thru 12, each with a maximum oil usage of 90 gallons per year, and exhausting within the building.
  - (2) Machining operations consisting of two hundred (200) wet machines, and eighteen (18) dry hobbing units, identified as Mach & Hob 21-38.

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

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

#### D.2.1 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Particulate Emission Limitations), facilities shall not allow or permit discharge to the atmosphere particulate matter in excess of 0.03 grains per dry standard cubic foot (gr/dscf).

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

There are no Compliance Monitoring Requirements applicable to this emission unit.



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

**PART 70 SOURCE MODIFICATION  
CERTIFICATION**

Source Name: DaimlerChrysler Corporation - Indiana Transmission Plant  
Source Address: 3660 North US Highway 31, Kokomo, Indiana 46901  
Mailing Address: 3660 North US Highway 31, Kokomo, Indiana 46901  
Source Modification No.: 067-12802-00058

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

Please check what document is being certified:

- 9 Test Result (specify) \_\_\_\_\_  
9 Report (specify) \_\_\_\_\_  
9 Notification (specify) \_\_\_\_\_  
9 Other (specify) \_\_\_\_\_

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

Signature:

Printed Name:

Title/Position:

Date:

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Significant Source Modification, to a Part 70 Operating Permit

#### Source Background and Description

<b>Source Name:</b>	DaimlerChrysler Corporation - Indiana Transmission Plant
<b>Source Location:</b>	3660 North US Highway 31, Kokomo, Indiana 46901
<b>County:</b>	Howard
<b>SIC Code:</b>	3714
<b>Operation Permit No.:</b>	T067-10704-00058
<b>Operation Permit Issuance Date:</b>	Still Pending
<b>Source Modification No.:</b>	SSM 067-12802-00058
<b>Permit Reviewer:</b>	Adeel Yousuf / EVP

The Office of Air Quality (OAQ) has reviewed a modification application from DaimlerChrysler Corporation - Indiana Transmissions Plant relating to the construction of the following emission units and pollution control devices:

#### New Emission Units and Pollution Control Equipment Receiving Prior Approval

The application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-7-5(16):

- (a) Seven (7) atmosphere generators, identified as Atmos Gen 7 - 13, each with a maximum heat input capacity of 6 MMBtu/hr, and each exhausting through one (1) stack;
- (b) eleven (11) shotblast machines, identified as Shotblast 16 - 26, each using a maximum of 7,700 pound per hour of cut steel wire shot, each controlled by a dust collector for particulate matter control, and exhausting inside the building.

#### Insignificant Activities for the Modification

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (b) The following VOC and HAP storage containers:
  - (1) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (c) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (d) Machining where an aqueous cutting coolant continuously floods the machining interface.

- (e) Cleaners and solvents characterized as:
  - (1) Having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38EC (100EF) or;
  - (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (f) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment:
  - (1) Eight (8) laser welding stations, identified as Welder 13 thru 19, and exhausting inside the building;
- (g) Closed loop heating and cooling systems.
- (h) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (i) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (j) Noncontact cooling tower systems with either of the following:
  - (a) Natural draft cooling towers not regulated under a NESHAP.
  - (b) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (k) Quenching operations used with heat treating processes.
- (l) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (m) Heat exchanger cleaning and repair.
- (n) Paved and unpaved roads and parking lots with public access.
- (o) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (p) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (q) Stationary fire pumps.
- (r) A laboratory as defined in 326 IAC 2-7-1(20)(C).
- (s) Activities or categories not previously identified with emissions less than or equal to insignificant thresholds:
  - (1) Eleven (11) high pressure deburring units, identified as Deburr 2 thru 12, each with a maximum oil usage of 90 gallons per year, and exhausting within the building.
  - (2) Machining operations consisting of two hundred (200) wet machines, and eighteen (18) dry hobbing units, identified as Mach & Hob 21-38.

## History

On October 6<sup>th</sup>, 2000, DaimlerChrysler - Indiana Transmission Plant submitted applications to the OAQ requesting to add seven (7) atmosphere generators, eleven (11) shotblast machines, and various insignificant activities to their existing plant. An application for a Part 70 permit (T-067-10704-00058) for the existing source was received on March 3, 1999 and is currently being reviewed by IDEM. This emission source has since received two significant source modifications, and three construction interims since March 3, 1999. These approvals and the proposed modification will be incorporated into the pending Part 70 permit.

## Source Definition

The DaimlerChrysler - Indiana Transmission Plant (ITP) will be considered a separate source from the DaimlerChrysler - Kokomo Casting Plant (KCP) and the DaimlerChrysler - Kokomo Transmission Plant (KTP) (which have been determined by OAQ to be one source) because it is approximately six (6) miles from KCP and KTP. Furthermore, approximately 0.1 percent and 23 percent of supplies from KTP and KCP, respectively, are sent to ITP.

## Existing Approvals

The source applied for a Part 70 permit (T067-10704-00058) on March 3, 1999. The source has been operating under previous approvals including, but not limited to, the following:

- (a) Construction Permit No.: 067-6837, issued on December 23, 1996;
- (b) Construction Permit No.: 067-9336, issued on May 7, 1998;
- (c) First Administrative Amendment No.: 067-10362-00058, issued on April 18, 2000;
- (d) Second Administrative Amendment No.: 067-10453-00058, issued on April 30, 1999;
- (e) First Significant Source Modification No.: 067-11050-00058, issued on July 13, 1999;
- (f) Second Significant Source Modification No.: 067-11093-00058, issued on October 20, 1999;
- (g) First Construction Interim No.: 067-11093I-00058, issued on November 17, 1999;
- (h) Second Construction Interim No.: 067-11050I-00058, issued on September 6, 1999;
- (j) Title V Interim No.: 067-12802I-00058, issued on November 1, 2000.

## Enforcement Issue

There are no enforcement actions pending.

## Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
TBD	Atmosphere Generator	TBD	TBD	TBD	TBD
TBD	Heat treat Furnace	TBD	TBD	TBD	TBD

## Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on October 6, 2000.

## Emission Calculations

See Appendix A of this document for detailed emissions calculations (eleven (11) pages).

## Potential To Emit Before Controls (Modification)

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

Pollutant	Potential To Emit (tons/year)
PM	202.93
PM-10	208.63
SO <sub>2</sub>	0.85
VOC	6.33
CO	204.73
NO <sub>x</sub>	113.46

HAP's	Potential To Emit (tons/year)
Benzene	less than 10
Cadmium	less than 10
Chromium	less than 10
Formaldehyde	less than 10
Hexane	less than 10
Lead	less than 10
Manganese	less than 10
Nickel	less than 10
Toluene	less than 10
Total	less than 25

## Justification for Modification

The Title V permit is being modified through a Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4), where any modification with a potential to emit greater than or equal to twenty-five (25) tons per year of any of the criteria pollutants.

**County Attainment Status**

The source is located in Howard County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> 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 and NO<sub>x</sub> 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.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

**Source Status**

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

Pollutant	Emissions (tons/year)
PM	0.0
PM-10	0.0
SO <sub>2</sub>	0.0
VOC	0.0
CO	39.0
NO <sub>x</sub>	2.0

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon the Annual Air Emission Inventory and Emission Statement for 1999.

**Potential to Emit After Controls for the Modification**

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

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	Total HAPs
Atmosphere Generators (7 thru 13)	0.81	0.81	0.06	0.58	120.12	10.61	0.00
Shotblast Machines (16 thru 26)	0.83	0.83	0.00	0.00	0.00	0.00	1.24E-3
*Deburring units (2 thru 12)	0.31	0.31	0.00	0.00	0.00	0.00	0.00
*Natural Gas Combustion Units	1.90	7.60	0.60	5.50	84.00	100.00	1.89
*Heat Treat Quench Operations	0.18	0.18	0.00	0.00	0.00	0.00	0.00
*Machining Operations (consisting of 200 wet machines and 18 dry hobbing units)	105.43	105.43	0.00	0.02	0.00	0.00	0.02
*Laser Welders (13 thru 19)	10.51	10.51	0.00	0.00	0.00	0.00	0.00
*Maintenance Welding Operation	0.10	0.10	0.00	0.00	0.00	0.00	0.00
*Emergency Fire Engine	0.20	0.20	0.19	0.23	0.61	2.85	0.00
*Cooling Towers (6 thru 11)	0.03	0.03	0.00	0.00	0.00	0.00	0.00
<b>Total Emissions</b>	<b>120.30</b>	<b>126.0</b>	<b>0.85</b>	<b>6.33</b>	<b>204.73</b>	<b>113.46</b>	<b>1.91</b>
<b>PSD Significance Levels</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>

\* These activities qualify as insignificant activities (see Insignificant Activities).

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.

**Federal Rule Applicability**

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

### **State Rule Applicability - Entire Source**

#### 326 IAC 2-4.1-1 (New Source Toxics Control)

326 IAC 2-4.1-1 applies to new or reconstructed facilities with potential emissions of any single HAP equal or greater than ten (10) tons per twelve (12) month period and potential emissions of a combination of HAPs greater than or equal to twenty-five (25) tons per twelve (12) month period. This modification is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control) because it has potential single HAP and total HAPs emission of less than 10 and 25 tons per year, respectively.

#### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year) of PM, PM-10, CO and NOx. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

#### 326 IAC 5-1 (Visible Emissions Limitations)

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

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

### **State Rule Applicability - Individual Facilities**

#### 326 IAC 6-1-2 (Particulate Emission Limitations)

Pursuant to 326 IAC 6-1-2 (Particulate Emission Limitations), facilities shall not allow or permit discharge to the atmosphere particulate matter in excess of 0.03 grains per dry standard cubic foot (gr/dscf). Following are the effected facilities and their corresponding grain loading in grains per dry standard cubic foot (gr/dscf).

- (a) eleven (11) shotblast units, identified as shotblast 16-26, each controlled by a dust collector for particulate matter control, and each with a grain loading of 0.00101 gr/dscf.
- (b) eleven (11) deburring units, identified as Deburr 2-12, each with a grain loading of 0.007 gr/dscf.
- (c) machining operations consisting of two hundred (200) wet machines, and eighteen (18) dry hobbing units, each with a grain loading of 0.0013 gr/dscf.
- (d) eight (8) laser welding operations, identified as Welder 13-19, each with a grain loading of 0.029 gr/dscf.

The dust collectors shall be in operation at all times when the eleven (11) shot blast units (Shotblast 16-26) are in operation, in order to comply with the grain loading limit of 0.03 (gr/dscf). All other facilities will comply with 326 IAC 6-1-2 (Particulate Emission Limitations).



### 326 IAC 6-3-2 (Process Operations)

The process operations at the source are subject to the requirement of 326 IAC 6-1-2. Pursuant to 326 IAC 6-1-2, the requirements of 326 IAC 6-3-2 do not apply.

### 326 IAC 9-1-2 (Carbon Monoxide Emission Rules)

The seven (7) atmosphere generators are not subject to the requirement of 326 IAC 9-1-2 because these facilities are not used for petroleum refining, ferrous metal smelter or refuse incineration.

## Compliance Requirements

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

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

1. The eleven (11) shot blasting units have applicable compliance monitoring conditions as specified below:
  - (a) The Permittee shall record the total static pressure drop across the dust collectors controlling the eleven (11) shot blasting units, at least once per shift when the eleven (11) shot blasting units are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collector shall be maintained within the range of 0.5 to 2.5 inches of water or a range recommended by manufacturer. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the dust collectors for the eleven (11) shot blasting units must operate properly to ensure compliance with 326 IAC 6-1-2 (Particulate Emission Limitations) and 326 IAC 2-7 (Part 70).

## Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed **Part 70 Significant Source Modification No. 067-12802-00058**.

**Indiana Department of Environmental Management  
Office of Air Quality**

**Addendum to the  
Technical Support Document (TSD) for a Part 70 Significant Source Modification**

<b>Source Name:</b>	DaimlerChrysler Corporation - Indiana Transmission Plant
<b>Source Location:</b>	3660 North US Highway 31, Kokomo, Indiana 46901
<b>SIC Code:</b>	3714
<b>County:</b>	Howard
<b>Operation Permit No.:</b>	T067-10704-00058
<b>Operation Permit Issuance Date:</b>	Still Pending
<b>Source Modification No.:</b>	SSM 067-12802-00058
<b>Permit Reviewer:</b>	Adeel Yousuf /EVP

On February 26, 2001, the Office of Air Quality (OAQ) had a notice published in the Kokomo Tribune in Kokomo, Indiana, stating that DaimlerChrysler Corporation had applied for a Part 70 Significant Source Modification to construct seven (7) atmosphere generators, eleven (11) shot blasting units, and various insignificant activities. The notice also stated that OAQ proposed to issue a Part 70 Significant Source Modification for this installation and provided information on how the public could review the proposed Part 70 Significant Source Modification 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 Part 70 Significant Source Modification should be issued as proposed.

On Mach 28, 2001, Sandra L. Minniear, Environmental Coordinator at DaimlerChrysler - Indiana Transmission Plant submitted comments on the proposed Title V permit. The summary of the comments and corresponding responses is as follows (bolded language has been added and the language with a line through it has been deleted):

**Comment 1**

A.1 - General Information

“Responsible official: Joseph LaManna”

The responsible official at ITP has recently changed and DaimlerChrysler is requesting this change be reflected in the final permit as follows:

“Responsible official: ~~Joseph LaManna~~ Kenneth Moore”

**Response 1**

The following change has been made to Section A.1.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary transmission production facility.

Responsible Official:	<del>Joseph LaManna</del> <b>Kenneth Moore</b>
Source Address:	3660 North US Highway 31, Kokomo, Indiana 46901
Mailing Address:	3660 North US Highway 31, Kokomo, Indiana 46901
<b>General Source Phone Number:</b>	<b>(765) 854-4183</b>
SIC Code:	3714
County Location:	Howard
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

**Comment 2**

D.1.3 – Atmosphere Generators Testing Requirements

*“(a) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform CO testing on one of the seven (7) atmosphere generators utilizing Method 10, or other methods as approved by the Commissioner to verify the emission factors submitted by the source. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.”*

As stated in correspondence dated January 23, 2001, DaimlerChrysler believes that CO testing is unnecessary for this type of source and there are no applicable emission limits to compare the test results to. Therefore, DaimlerChrysler is requesting that this condition be eliminated from the permit modification. However, should this condition remain in the final permit modification, testing should be required within 36 months and to maintain consistency, Condition C.7 (a) should be revised to be “Compliance testing on new emission units shall be conducted ~~within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up~~ as specified in Section D of this approval.”

**Response 2**

The seven (7) atmosphere generators at the source are considered significant activities and have combined PTE of 120 TPY of Carbon monoxide. For the purpose of this permit reviewing process, the calculations of PTE for atmosphere generators were based on the emission factors provided by the source. DaimlerChrysler Corporation is required to conduct tests to verify the CO emission factors. Tested emission factors shall be compared to the ones provided by the source to determine the accuracy. There were no changes made to Condition D.1.3 due to this comment. To maintain consistency, Condition C.7 (now C.6) is revised as follows.

**C.76** Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

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

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

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
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, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

### Comment 3

#### D.1.5 – Shotblast Machines Parametric Monitoring

*"The Permittee shall record the total static pressure drop across the dust collectors used in conjunction with the eleven (11) shot blasting units, at least once per shift when the eleven (11) shot blasting units are in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the dust collectors shall be maintained within the range of 0.5 to 2.5 inches of water or a range recommended by a manufacturer. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure drop or flow rate readings are outside of the normal range for any one reading. Failure to take response steps in accordance with Section C – Compliance Monitoring Plan – Failure to Take Response Steps, shall be considered a violation of this permit."*

Pursuant to correspondence dated January 23, 2001, DaimlerChrysler believes that the requirement to monitor the pressure drop on a per shift basis is overly burdensome and unnecessary. Weekly pressure drop readings are adequate to provide a reasonable assurance of compliance with the underlying applicable requirement (i.e., the particulate matter (PM) limit for the shotblast machines).

We are not aware of any published IDEM guidance that would require the imposition of such stringent requirements without considering technical feasibility of the monitoring method, economic burden and safety issues imposed on the facility operator and without a direct correlation to predicting, maintaining or documenting compliance. It is agreed that monitoring required by an "applicable requirement" must be included in the modification. However, where no monitoring is specified however, the modification needs to include only that level and type of "...periodic monitoring specifications sufficient to yield reliable data from the relevant time period that are representative of the source's compliance." Pursuant to 326 IAC 2-7-5 (3), the monitoring must assure only that "reasonable information is provided" to evaluate compliance. DaimlerChrysler believes that the monitoring requirements proposed by IDEM to be included in the draft modification are in excess of what is required by the controlling state regulation, and go beyond the scope of IDEM's authority. Therefore, as stated above, DaimlerChrysler believes that a *per-shift* frequency for pressure drop readings is overly burdensome and does not improve the effectiveness of the monitoring program in this particular case.

The shotblast operations have very little variability and are designed as "steady state" operations. They are expected to exhaust into the plant atmosphere and any failure in the control device would be immediately evident without the need to monitor pressure drop. Therefore, the pressure drop readings should be required only when the shotblast machines exhaust outside the plant.

Based upon the above, DaimlerChrysler is requesting the following revision to the frequency of pressure drop readings:

*“The Permittee shall record the total static pressure drop across the dust collectors used in conjunction with the eleven (11) shot blasting units, at least ~~once per shift~~ weekly when the eleven (11) shot blasting units are ~~in operation~~ venting to the outside atmosphere. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the dust collectors shall be maintained within the range of 0.5 to 2.5 inches of water or a range recommended by a manufacturer. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure drop or flow rate readings are outside of the normal range for any one reading. Failure to take response steps in accordance with Section C – Compliance Monitoring Plan – Failure to Take Response Steps, shall be considered a violation of this permit.”*

### Response 3

OAQ decided that, to adequately demonstrate continuous compliance to the requirements of D.1.1, once per shift frequency of parametric monitoring is required for the operation of dust collector. Exhausting inside the building does not assure that no PM will be emitted to the atmosphere as the building is not completely enclosed or confined. There has been no changes made to this condition as a result of this comment.

### Comment 4

#### D.1.8 – Shotblast Machines Record Keeping Requirements

##### D.1.8 (a) (1)

- “(a) To document compliance with Condition D.1.4, the Permittee shall maintain the following:*
- (1) Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:*
    - (A) Inlet and outlet differential static pressure; and*
    - (B) Cleaning cycle operation*

Pursuant to correspondence, dated January 23, 2001, differential static pressure by definition is the difference between the inlet and outlet static pressure and therefore it is inappropriate to reference the “inlet and outlet differential static pressure”.

DaimlerChrysler believes *weekly* pressure drop readings provide a reasonable assurance of compliance for the reasons stated above. Further DaimlerChrysler believes pressure drop recordings are adequate and the requirement for cleaning cycle operation is vague and unclear as to what should be monitored and recorded. Therefore, DaimlerChrysler is requesting the following revision:

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain the following:*
- (1) ~~Once per shift~~ Weekly records of the following operational parameters during normal operation when venting to the outside atmosphere:*
    - ~~(A) Inlet and Outlet~~ differential static pressure, and*
    - ~~(B) Cleaning cycle operation~~*

### Response 4

Since the frequency of the parametric monitoring on the baghouse is required once per shift, as noted in response # 3 above, no changes are made to condition D.1.8 (a)(1). Also, the record keeping is required regardless of venting inside the building or to the outside atmosphere. OAQ has decided to remove the terms ‘Inlet and outlet’ and cleaning cycle operation requirements from condition D.1.8(a)(1). The following changes are made to condition D.1.8 as a result of this comment.

#### D.1.8 Record Keeping Requirements

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- (a) To document compliance with Condition D.1.4, the Permittee shall maintain the following:
  - (1) Once per shift records of the ~~following operational parameters~~ **differential static pressure** during normal operation when venting to the atmosphere:
    - ~~(A) Inlet and outlet differential static pressure; and~~
    - ~~(B) Cleaning cycle operation.~~
  - (2) 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 inspections required under Condition D.1.4 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### Comment 5

Part 70 Source Modification Certification

*"Source Modification No: 067-11093-00058"*

DaimlerChrysler is requesting that the modification number be corrected as indicated below:

*"Source Modification No: 067-~~44093~~12808-00058"*

#### Response 5

The following change has been made to Part 70 Source Modification Certification.

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

**PART 70 SOURCE MODIFICATION  
CERTIFICATION**

Source Name: DaimlerChrysler Corporation - Indiana Transmission Plant  
Source Address: 3660 North US Highway 31, Kokomo, Indiana 46901  
Mailing Address: 3660 North US Highway 31, Kokomo, Indiana 46901  
Source Modification No.: 067-~~11093~~ 12802-00058

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

Please check what document is being certified:

- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

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

Signature:

Printed Name:

Title/Position:

Date:

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

**C.87 Compliance Monitoring [326 IAC 2-1.1-11]**

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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. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

**C.98 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

- 
- (a) 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.
- (b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument 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) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

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

**C.409 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]**

- 
- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
- (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this approval;
  - (3) The Compliance Monitoring Requirements in Section D of this approval;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of :
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and



- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied;
  - (3) An automatic measurement was taken when the process was not operating;
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

**C.140** Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, 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 response actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the response actions taken are deficient. The Permittee shall submit a description of additional response actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ 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, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

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

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

**C.121 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]**

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- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

**C.132 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]**

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- (a) Records of all required data, reports 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, OAQ, 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) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

**C.143 General Reporting Requirements [326 IAC 2-7-5(3)(C)]**

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

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

- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

**Appendix A: Emissions Calculations  
Atmosphere Generators**

**Company Name: Daimler Chrysler Corporation - Indiana Transmission Plant  
Address City IN Zip: 3660 North US Highway 31, Kokomo, Indiana 46901  
CP: 067-12802  
Plt ID: 067-00058  
Reviewer: Adeel Yousuf/EVP  
Date: 05/01/2001**

A. Emission Calculation for atmosphere generator (Atmos Gen 7 - 13)  
Number of units: 7

Pollutant	Maximum Rate (MMBtu/hr)	Emission Factor (lb/MMBtu)	Emission Rate (lb/hr)	Potential emissions per unit (TPY)	Potential emissions total for 7 units(TPY)	Control Efficiency (%)	Maximum controlled emissions per unit (TPY)	Maximum controlled emissions total for 7 units (TPY)
NOx-Atmos	3.46	0.1000	0.3460	1.52	10.61	0	1.52	10.61
NOx-Rxn	2.54	NA		0.00	0.00	0	0	0
<b>Total Nox</b>			<b>0.3460</b>	<b>1.52</b>	<b>10.61</b>	<b>0</b>	<b>1.52</b>	<b>10.61</b>
CO-Atmos	3.46	0.0840	0.2906	1.27	8.91	0	1.27	8.91
CO-Rxn	2.54	1.4280	3.6271	15.89	111.21	0	15.89	111.21
<b>Total CO</b>			<b>3.9178</b>	<b>17.16</b>	<b>120.12</b>	<b>0</b>	<b>17.16</b>	<b>120.12</b>
VOC Atmos	3.46	0.0055	0.0190	0.08	0.58	0	0.08	0.58
VOC Rxn	2.54	NA		0.00	0.00	0	0.00	0.00
<b>Total VOC</b>			<b>0.0200</b>	<b>0.08</b>	<b>0.58</b>	<b>0</b>	<b>0.08</b>	<b>0.58</b>
PM-Atmos	3.46	0.0076	0.0263	0.12	0.81	0	0.12	0.81
PM-Rxn	2.54	NA		0.00	0.00	0	0.00	0.00
<b>Total PM</b>			<b>0.0263</b>	<b>0.12</b>	<b>0.81</b>	<b>0</b>	<b>0.12</b>	<b>0.81</b>
SO2-Atmos	3.46	0.0006	0.0021	0.01	0.06	0	0.01	0.06
SO2-Rxn	2.54	NA		0.00	0.00	0	0.00	0
<b>Total SO2</b>			<b>0.0021</b>	<b>0.01</b>	<b>0.06</b>	<b>0</b>	<b>0.01</b>	<b>0.06</b>

- Note: 1) There are two components to atmosphere generators: atmosphere generation or natural gas combustion (Atmos) and reaction gas (Rxn). Each component has separate emission factors  
 2) Emissions from the reaction gas are determined based on 1% of the CO generated is consumed in the furnace and 98% is combusted in the flare.  
 3) Emission factors for natural gas are from AP-42, Table 1-4-2; emission factors from reaction are based upon stoichiometric conversion to the heat treat atmosphere

Methodology:

Potential Emissions, lbs/hr = Max. Rate (MMBtu/hr) x Emissions Factor (lb/MMBtu)

Potential Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Controlled Emissions, lbs/hr = Potential Emissions (lb/hr) x (100 - efficiency (%))

Controlled Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations  
Shotblast Units**

**Company Name: Daimler Chrysler Corporation - Indiana Transmission Plant**  
**Address City IN Zip: 3660 North US Highway 31, Kokomo, Indiana 46901**  
**CP: 067-12802**  
**Plt ID: 067-00058**  
**Reviewer: Adeel Yousuf / EVP**  
**Date: 04/30/2001**

**A. Shotblast unit (Shotblast 16 - 26)**

Number of Units: 11

Shotblast Media	Media Density (lb/cu.ft)	No. of Nozzles	Nozzle I.D. (inch)	Nozzle Pressure (psig)	Emission Factor (lb PM/lb shot)	Max. Blast Rate (lb/hr)
Cut Steel Wire Shot	200	8	0.25	47	0.000225	7700

Pollutant	Maximum Rate (lb shot/hr)	HAP Content (%)	Emission Factor (lb/lb shot)	Emission Rate (lb/hr)	Potential emissions per unit (TPY)	Total Potential Emission for 11 units (TPY)	Control Efficiency (%)	Controlled Emissions per unit (TPY)	Total Controlled Emissions for 11 units (TPY)
PM	7700	NA	0.000225	1.73	7.59	83.47	99	0.08	0.83
Mn	7700	0.09	2.0E-07	0.0015	0.0067	0.074	99	6.75E-05	7.42E-04
Ni	7700	0.05	1.1E-07	8.47E-04	3.71E-03	4.08E-02	99	3.71E-05	4.08E-04
Pb	7700	0.01	2.3E-08	1.77E-04	7.76E-04	8.53E-03	99	7.76E-06	8.53E-05
<b>Total HAPs</b>				<b>2.56E-03</b>	<b>1.12E-02</b>	<b>1.24E-01</b>		<b>1.12E-04</b>	<b>1.24E-03</b>

Note: 1) Emission factor for PM (0.000225 lb PM/lb shot) based on stack test at Kokomo Casting Plant

2) PM consists of 10% Aluminum and 90% shotblast media

3) Shotblast media contains 0.1% Mn; aluminum parts contain 0.5% Ni, and 0.1% Pb.

Methodology:

Potential Emissions, lbs/hr = Max. Rate (lb shot/hr) x Emissions Factor (lb/lb shot)

Potential Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Controlled Emissions, lbs/hr = Potential Emissions (lb/hr) x (100 - efficiency (%))

Controlled Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations**  
**Machining Operations (including Wet Machining and Dry Hobbing)**

**Company Name:** Daimler Chrysler Corporation - Indiana Transmission Plant  
**Address City IN Zip:** 3660 North US Highway 31, Kokomo, Indiana 46901  
**CP:** 067-12802  
**Plt ID:** 067-00058  
**Reviewer:** Adeel Yousuf / EVP  
**Date:** 04/30/2001

**A. Potential PM emissions from Wet Machining operation**

Number of Wet Machines: 200

Pollutant	Maximum fluid usage per machine (lb/hr)	PM Emission Factor (%)	Potential emission rate per wet machine (lb/hr)	Potential emission rate per wet machine (TPY)	Total Potential emissions for 200 machines (TPY)
PM	0.79	3.5	0.028	0.121	24.221

**B. VOC emissions from Wet Machining Operation**

Number of Wet Machines: 200

Pollutant	Maximum fluid usage per machine (lb/hr)	VOC Emission Factor (%)	VOC Content (%)	Potential emission rate per wet machine (lb/hr)	Potential emission rate per wet machine (TPY)	Total Potential emissions for 200 machines (TPY)
VOC (HAP)*	0.79	25	0.01	0.000020	0.000087	0.0173

\* Formaldehyde is emitted as both VOC and HAP

**C. Potential PM emissions from Dry Hobbing**

Number of Dry Hobbing Machines: 18

Pollutant	PM emission factor per machine (lb/hr)	Potential emission rate per machine (lb/hr)	Potential emission rate per machine (TPY)	Total PM emissions for 18 machines (TPY)
PM	1.03	1.03	4.51	81.21

**D. Potential and Controlled Emissions from Machining Operations**

Pollutant	Potential Emissions (lb/hr)	Potential Emissions (TPY)	Controlled Emissions (lb/hr)	Controlled Emissions (TPY)
PM- wet machines	5.53	24.22	N/A	N/A
PM - dry hobbing	18.54	81.21	N/A	N/A
PM Total	24.07	105.43	24.07	105.43
VOC	0.0040	0.017	0.0040	0.017
HAP	0.0040	0.017	0.0040	0.017

Note: 1) Formaldehyde is emitted as both VOC and HAP

2) All emission factors are provided by the source

**METHODOLOGY**

Potential Emissions, lbs/hr = Max. Rate (lb/hr) x Emission Factor (%)

Potential Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations  
Deburring Units**

**Company Name: Daimler Chrysler Corporation - Indiana Transmission Plant**  
**Address City IN Zip: 3660 North US Highway 31, Kokomo, Indiana 46901**  
**CP: 067-12802**  
**Plt ID: 067-00058**  
**Reviewer: Adeel Yousuf / EVP**  
**Date: 05/01/2001**

Potential Emissions for Deburr Units (Deburr 2-12)

**A. PM emissions from one Deburring Unit**

Density of Oil Solution = 8.1 lb/gal

Pollutant	Maximum Rate per unit (gal/yr)	Maximum Rate per unit (lb/hr)	Emission Factor (%)	Potential Emissions per unit (lb/hr)	Potential emissions per unit (TPY)	Control Efficiency (%)	Controlled emissions per unit (lb/hr)	Controlled Emissions per unit (TPY)
PM	90	0.182	3.5	0.0064	0.028	0	0.0064	0.028

**B. PM emissions from 11 Deburring Units**

Pollutant	Maximum Rate (gal/yr)	Maximum Rate (lb/hr)	Emission Factor (%)	Potential Emissions (lb/hr)	Potential emissions (TPY)	Control Efficiency (%)	Controlled emissions (lb/hr)	Controlled Emissions (TPY)
PM	990	2.005	3.5	0.070	0.307	0	0.070	0.307

- Note: 1) Average operating hours = 4000 hrs/ year  
 2) Emission Factor provided by the source (based upon stack test)

Methodology:

Maximum Rate per unit (lb/hr) = Max. Rate per unit (gal/yr) x Density of oil (lb/gal) x (1 yr/ 4000 hrs)

Potential Emissions, lbs/hr = Max. Rate (lb/hr) x Emissions Factor (%)

Potential Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Controlled Emissions, lbs/hr = Potential Emissions (lb/hr) x (100 - efficiency (%))

Controlled Emissions, tons/yr = Potential Emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations**

**Natural Gas Combustion Only**

**MMBTU/HR >100**

**Natural Gas Fired Equipment**

**Company Name:** Daimler Chrysler Corporation - Indiana Transmission Plant  
**Address City IN Zip:** 3660 North US Highway 31, Kokomo, Indiana 46901  
**CP:** 067-12802  
**Plt ID:** 067-00058  
**Reviewer:** Adeel Yousuf/EVP  
**Date:** 04/30/2001

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

228.3

2000.0

Natural Gas Fired Equipments, each with less than 10 MMBtu/hr of heat input capacity

**Pollutant**

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	1.9	7.6	0.6	100.0	5.5	84.0

\*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 280 (pre-NSPS) or 190 (post-NSPS), Low NOx Burner = 140, Flue gas recirculation = 100 (See Table 1.4-1)

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, 1-01-006-04 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.



**Appendix A: Emission Calculations**

**Natural Gas Combustion Only**

**MMBTU/HR >100**

**Natural Gas Fired Equipment**

**HAPs Emissions**

**Company Name: Daimler Chrysler Corporation - Indiana Transmission Plant**

**Address City IN Zip: 3660 North US Highway 31, Kokomo, Indiana 46901**

**CP: 067-12802**

**Plt ID: 067-00058**

**Reviewer: Adeel Yousuf/EVP**

**Date: 04/30/2001**

**HAPs - Organics**

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.10E-03	1.20E-03	7.50E-02	1.80E+00	3.40E-03

**HAPs - Metals**

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emission Calculations  
Laser Welders**

**Company Name: Daimler Chrysler Corporation - Indiana Transmission Plant  
Address City IN Zip: 3660 North US Highway 31, Kokomo, Indiana 46901  
CP: 067-12802  
Plt ID: 067-00058  
Reviewer: Adeel Yousuf / EVP  
Date: 04/30/2001**

Potential and controlled emissions from one Laser Welder (Welder 13-19)  
Number of units: 8 (Welder 13-19)

Unit	Control Efficiency (%)	Air Flow (acfm)	Inlet Grain Loading (grain/acf)	Inlet PM per one unit (lb/hr)	Outlet Grain Loading (grain/acf)	Outlet PM per unit (lb/hr)
Laser Welder with Dust Collector	0	1200	0.029	0.300	0.029	0.300

Total Potential and controlled emissions for 8 units

Pollutant	Potential Emissions (lb/hr)	Potential Emissions (TPY)	Controlled Emissions (lb/hr)	Controlled Emissions (TPY)
PM	2.40	10.51	2.40	10.51

Note: Emission factor of 0.005 gr/dscf is provided by the manufacturer of the equipment

**Methodology:**

Potential Emissions, lbs/hr = Inlet Grain Loading (gr/acf) x Air Flow (acfm) x 60 (min/hr) x 1/7000 (lb/gr)

Potential Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Controlled Emissions, lbs/hr = Outlet Grain Loading (gr/acf) x Air Flow (acfm) x 60 (min/hr) x 1/7000 (lb/gr)

Controlled Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations  
Maintenance Welding Operations**

**Company Name: Daimler Chrysler Corporation - Indiana Transmission Plant**  
**Address City IN Zip: 3660 North US Highway 31, Kokomo, Indiana 46901**  
**CP: 067-12802**  
**Plt ID: 067-00058**  
**Reviewer: Adeel Yousuf / EVP**  
**Date: 05/01/2001**

Potential and controlled emissions from Maintenance Welding Operations (Maint Weld)

Unit	Maximum Usage (lb/hr)	Emission Factor (%)	Control Efficiency (%)	Potential PM emissions (lb/hr)	Potential PM emissions (TPY)	Controlled PM emissions (TPY)
Maint. Welding Operation	1.14	2	0	0.023	0.100	0.100

Note: 1) Source of emission factor: Daimler Chrysler Emission Estimation Manual

**Methodology:**

Potential Emissions, lbs/hr = Max. Rate (lb/hr) x Emission Factor (%)

Potential Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Controlled Emissions, lbs/hr = Potential emissions (lb/hr) x (100 - efficiency (%))

Controlled Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations  
Internal Combustion Engines - Diesel Fuel  
Turbine (>250 and <650 HP)**

**Company Name:** Daimler Chrysler Corporation - Indiana Transmission Plant  
**Address City IN Zip:** 3660 North US Highway 31, Kokomo, Indiana 46901  
**CP#:** 067-12802  
**Plt ID:** 067-00058  
**Reviewer:** Adeel Yousuf/EVP  
**Date:** 05/01/2001

Heat Input Capacity  
Horsepower (hp)

Potential Throughput  
hp-hr/yr

368.0

184000.0

One (1) emergency fire generator

Emission Factor in lb/hp-hr	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.0022	0.00220	0.0021	0.031	0.00247	0.00668
Potential Emission in tons/yr	0.20	0.20	0.19	2.85	0.23	0.61

**Methodology**

Potential Throughput (hp-hr/yr) = hp \* 500 hr/yr

Emission Factors are from AP 42 (Supplement B 10/96) Table 3.4-1 and Table 3.4-2

1 hp-hr = 7000 Btu, AP42 (Supplement B 10/96), Table 3.3-1, Footnote a.

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] \* 8760 hr/yr / (2,000 lb/ton )

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton )

\*No information was given regarding which method was used to determine the PM emission factor or whether condensable PM is included. The PM10 emission factor is filterable and condensable PM10 combined.

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

**Appendix A: Emission Calculations  
Cooling Towers**

**Company Name: Daimler Chrysler Corporation - Indiana Transmission Plant  
Address City IN Zip: 3660 North US Highway 31, Kokomo, Indiana 46901  
CP: 067-12802  
Pit ID: 067-00058  
Reviewer: Adeel Yousuf / EVP  
Date: 04/30/2001**

**A. Potential and Controlled emissions for one Cooling Tower**

Number of Units: 6 (Cooling 6 - 11)

Unit	Maximum Capacity (gal/hr)	Total Liquid Drift (%)	PM Emission Factor (lb/1000 gal)	Potential PM emissions (lb/hr)	Control Efficiency (%)	Controlled PM Emissions (lb/hr)
Cooling Tower	252000	0.02	0.019	0.0010	0	0.001

**B. Total Potential and Controlled emissions from six Cooling Towers**

Pollutant	Potential Emissions (lb/hr)	Potential Emissions (TPY)	Controlled Emissions (lb/hr)	Controlled Emissions (TPY)
PM	0.0057	0.0252	0.0057	0.0252

Note: Emission Factors for Cooling Towers are from AP 42, Chapter 13.4, Table 13.4-1

Methodology:

Potential Emissions, lbs/hr = Max. Rate (lb/hr) x Total Liquid Drift (%) x Emission Factor (%)

Potential Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Controlled Emissions, lbs/hr = Potential emissions (lb/hr) x (100 - efficiency (%))

Controlled Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations  
Heat Treat-Quench Operations**

**Company Name: Daimler Chrysler Corporation - Indiana Transmission Plant  
Address City IN Zip: 3660 North US Highway 31, Kokomo, Indiana 46901  
CP: 067-12802  
Plt ID: 067-00058  
Reviewer: Adeel Yousuf / EVP  
Date: 04/30/2001**

Potential Emissions from Heat Treat-Quench Operations (Heat Treat)

**A. PM emissions from Quench oil**

Density of Oil Solution = 7.45 lb/gal

Pollutant	Maximum Rate (gal/yr)	Maximum Rate (gal/hr)	Emission Factor (%)	Potential Emissions (lb/hr)	Potential emissions (TPY)	Control Efficiency (%)	Controlled emissions (lb/hr)	Controlled Emissions (TPY)
PM	14400	4 000	1	0 0400	0 175	0	0 0400	0 175

- Note: 1) Average operating hours = 4000 hrs/ year  
 2) Emission Factor provided by the source; emission factor of 1 % is an engineering estimate based on plant operations  
 3) PM emission are oil mist from the quench oil

**Methodology:**

Maximum Rate per unit (lb/hr) = Max. Rate per unit (gal/yr) x Density of oil (lb/gal) x (1 yr/ 4000 hrs)

Potential Emissions, lbs/hr = Max. Rate (lb/hr) x Emissions Factor (%)

Potential Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Controlled Emissions, lbs/hr = Potential Emissions (lb/hr) x (100 - efficiency (%))

Controlled Emissions, tons/yr = Potential Emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

**Appendix A: Emission Calculations**

Company Name: Daimler Chrysler Corporation - Indiana Transmission Plant  
 Address City IN Zip: 3660 North US Highway 31, Kokomo, Indiana 46901  
 Operating Permit No.: 067-12802  
 Pit ID: 067-00058  
 Reviewer: Adeel Yousuf / EVP  
 Date: 04/30/2001

**Potential Emissions (tons/year)**

Pollutant	Emissions Generating Activity										Total
	Atmosphere Generator	Shotblast Units	Deburring Units	Natural Gas Combustion	Heat Treat Quench	Machining Operations	Laser Welders	Maintenance Welding	Internal Combustion Eng.	Cooling Towers	
	(Atmos. Gen 7-13)	(shotblast 16-26)	(Deburr 2-12)	Units	Operations	(Wet Mach., Dry Hobbs)	(Welder 13-19)	Operation	(Emerg. Fire Gen)	(Cooling 6-11)	
PM	0.81	83.47	0.31	1.90	0.18	105.43	10.51	0.10	0.20	0.03	202.93
PM10	0.81	83.47	0.31	7.60	0.18	105.43	10.51	0.10	0.20	0.03	208.63
SO2	0.06	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.19	0.00	0.85
NOx	10.61	0.00	0.00	100.00	0.00	0.00	0.00	0.00	2.85	0.00	113.46
VOC	0.58	0.00	0.00	5.50	0.00	0.02	0.00	0.00	0.23	0.00	6.33
CO	120.12	0.00	0.00	84.00	0.00	0.00	0.00	0.00	0.61	0.00	204.73
total HAPs	0.00	0.12	0.00	1.89	0.00	0.02	0.00	0.00	0.00	0.00	2.03
worst case single HAP	0	0.074 (Manganese)	0	1.8 (Hexane)	0	0.017 (Formaldehyde)	0	0	0	0	1.80 (Hexane)

Total emissions based on rated capacity at 8,760 hours/year.

**Controlled Emissions (tons/year)**

Pollutant	Emissions Generating Activity										Total
	Atmosphere Generator	Shotblast Units	Deburring Units	Natural Gas Combustion	Heat Treat Quench	Machining Operations	Laser Welders	Maintenance Welding	Internal Combustion Eng.	Cooling Towers	
	(Atmos. Gen 7-13)	(shotblast 16-26)	(Deburr 2-12)	Units	Operations	(Wet Mach., Dry Hobbs)	(Welder 13-19)	Operation	(Emerg. Fire Gen)	(Cooling 6-11)	
PM	0.81	0.83	0.31	1.90	0.18	105.43	10.51	0.10	0.20	0.03	120.30
PM10	0.81	0.83	0.31	7.60	0.18	105.43	10.51	0.10	0.20	0.03	126.00
SO2	0.06	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.19	0.00	0.85
NOx	10.61	0.00	0.00	100.00	0.00	0.00	0.00	0.00	2.85	0.00	113.46
VOC	0.58	0.00	0.00	5.50	0.00	0.02	0.00	0.00	0.23	0.00	6.33
CO	120.12	0.00	0.00	84.00	0.00	0.00	0.00	0.00	0.61	0.00	204.73
total HAPs	0.00	1.24E-03	0.00	1.89	0.00	0.02	0.00	0.00	0.00	0.00	1.91
worst case single HAP	0	0.000742 (Manganese)	0	1.8 (Hexane)	0	0.017 (Formaldehyde)	0	0	0	0	1.80 (Hexane)

Total emissions based on rated capacity at 8,760 hours/year, after control.