



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: October 26, 2005
RE: DaimlerChrysler- Kokomo / 067-218401-00065
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

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October 27, 2005

Mr. Kenneth R. Moore
DaimlerChrysler Kokomo Casting Plant
1001 E. Boulevard
Kokomo, Indiana 46904

Re: Interim Minor Source Modification Approval
067-21840I-00065

Dear Mr. Moore:

On September 28, 2005, the Office of Air Quality (OAQ) received an interim minor source modification petition from DaimlerChrysler Kokomo Casting Plant, 1001 E. Boulevard, Kokomo, Indiana 46904. The interim minor source modification petition was supplemented by additional information on October 6, and October 18, 2005. Based on the data and information submitted in the petition and the provisions in 326 IAC 2-13-1, this interim minor source modification petition is hereby approved for:

- (1) Two shot blast machines, with a maximum shot blast rate of 174,760 pounds per hour each, and each shot blast machine controlled by a cartridge style dry filter

Detailed conditions will be specified in the final minor source modification 067-21840-00065. This interim minor source modification expires on the effective date of the final minor source modification approval. This interim minor source modification may be revoked after its effective date upon a written finding by OAQ that any of the reasons for denial in 326 IAC 2-13-1(h) exist or if the final minor source modification is denied. The facilities subject to this approval may operate when the final minor source modification is issued by OAQ.

Sincerely,
Original signed by

Paul Dubenetzky
Assistant Commissioner
Office of Air Quality

TPS

Enclosure: Interim Permit Evaluation (3 pages)
Petition for Interim Minor Source Modification
cc: File – Howard County
Howard County Health Department
Air Compliance Section – Mark Goldman
Permit Tracking

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

Interim Minor Source Modification Evaluation Sheet

Company Name: DaimlerChrysler Kokomo Casting Plant, Kokomo, Indiana 46904
Location: 1001 E. Boulevard, Kokomo, Indiana, Permit No: 067-21840I-00065
Permit Reviewer: Dr. Trip Sinha Date Receipt of Application: 09-28-05, additional info on October 6, and October 18, 2005 Date of review: 10-18-05
Description of the interim construction: Two shot blasters with a maximum capacity of shot blast rate of 174,760 pounds per hour each, and controlled by the cartridge style dry filters
Date the Application was received + 19 days = 11-06-05

Interim Petition Applicability: 326 IAC 2-13-1

- (a) Existing source with valid permit;
- (b) Exemptions:
- (1) construction of a PSD source or PSD modification;
 - (2) construction or modification in nonattainment area that would emit those pollutants for which the nonattainment designation is based.
 - (3) any modification subject to 326 IAC 2-4.1.

Instructions: Check () appropriate answers and make a recommendation.

1. Did the applicant submit a written petition for an interim permit?
 Yes Go to question 2.
 No Ignore verbal request.
2. Did the applicant pay the \$500 interim permit fee?
 Yes Go to question 3.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(1).
3. Did the applicant state acceptance of federal enforceability of an interim permit?
 Yes Go to question 4.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(D).
4. Did the applicant or its authorized agent sign the application?
 Yes Go to question 5.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(E).
5. Did the applicant submit a notarized affidavit stating that the applicant will proceed at its own risk (if the interim permit is issued), including, but not limited to:
 - (a) Financial risk,
 - (b) Risk that additional emission controls may be required,
 - (c) Risk that the final permit may be denied. Yes Go to question 6.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(F).
6. Did the applicant begin construction prior to submitting the interim permit application?

- Yes Deny the application, pursuant to 326 IAC 2-13-1(h)(6).
 No Go to question 7.
7. What is the type of the interim construction?
 New Source Deny the application, pursuant to 326 IAC 2-13-1(a)
 Modification to an existing source Go to question 8.
8. Did the applicant present data in the interim permit that is sufficient to determine PSD, NSPS, NESHAP, and state rule compliance?
 Yes Go to question 9.
 No Deny the application pursuant to:
326 IAC 2-13-1(c)(2)(B), for PSD ;
326 IAC 2-13-1(c)(2)(C), for NSPS or NESHAP;
326 IAC 2-13-1(c)(2)(C), for state rules.
9. Is the proposed modification to be located in a nonattainment area?
 Yes Go to question 10.
 No Go to question 11. County: Tipton County
10. Will the proposed modification emit the pollutant for which the area is nonattainment in quantities greater than the significant levels?
 Yes Deny the application, pursuant to 326 IAC 2-13-1(a)(2).
NA No Go to question 11.
11. Did the petition include a complete description of the process?
 Yes Go to question 12.
 No Deny the petition, pursuant to 326 IAC 2-13-1(c)(2).
12. Did the interim permit petition contain conditions accepting either emission controls (baghouse, afterburners, scrubbers, etc.) or enforceable limits or other suitable restriction to avoid PSD applicability; as well as control parameters (incinerator operating temperature, baghouse pressure drop, etc.)? The specific limits must be explicitly spelled out (i.e.: The gas consumption of the boiler shall not exceed 29 million cubic feet per month.) A statement such as that the company agrees to conditions such that PSD rules are not applicable is not acceptable.
 Yes Go to question 13.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(B).
13. Do the emission controls and/or throughput limits prevent PSD applicability?
 Yes Go to question 14.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(B).
14. Will the modification, after application of all emission controls and/or throughput limitations comply with all applicable New Source Performance Standards (NSPS) (40 CFR 60)?
 Yes Go to question 15.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(C).
15. Will the modification, after application of all emission controls and/or throughput limitations comply with all applicable National Emission Standards for Hazardous Air Pollutants (NESHAP)?
NA Yes Go to question 16.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(C).
16. Will the modification, after application of all emission controls and/or throughput limitations, comply with all applicable state rules?
 Yes Go to question 17.
 No Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(C).

17. Does the applicant dispute applicability of any applicable state or federal rule?
 Yes Deny the application, pursuant to 326 IAC 2-13-1(c)(2)(C).
 No Go to question 18.
18. Is there good reason to believe that the applicant does not intend to construct in accordance with the interim permit petition?
 Yes Deny the application, pursuant to 326 IAC 2-13-1(h)(1).
 No Go to question 19.
19. Is there good reason to believe that information in the petition has been falsified?
 Yes Deny the application, pursuant to 326 IAC 2-13-1(h)(7).
 No Approve the interim permit petition.
20. Has the petition been adequately public noticed? A proof of publication copy is necessary.
 NA Yes Go to question 21.
 No Deny the application, pursuant to 326 IAC 2-13-1(e).
21. Issue the final interim permit approval.

Comments:

Recommendation: Approve Interim Petition

Date the applicant was informed of the decision: 10-21-05

Method of informing the applicant: By Phone

067-21840I-10065

RECEIVED

SEP 28 2005

State of Indiana
Department of Environmental Management
Office of Air Quality

Appendix B

Interim Construction Permit Application

Affidavit of Construction

I, Kenneth R. Moore, being duly sworn upon my oath, depose and say:

1. I live in Hamilton County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of Plant Manager for DaimlerChrysler Kokomo Casting Plant.
3. By virtue of my position with DaimlerChrysler Kokomo Casting Plant, I have personal knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of DaimlerChrysler Kokomo Casting Plant.
4. I, the undersigned, have submitted an interim (minor permit revision, significant permit revision, minor source modification, significant source modification) petition to the Office of Air Management for the construction of 2 Shotblast Units.
5. DaimlerChrysler Kokomo Casting Plant recognizes the following risks:
 - (a) Own financial risk, (b) that IDEM may require additional or different control technology for the final approval, (c) that IDEM may deny issuance of the final approval, and (d) any additional air permitting requirements.

Further Affiant said not.

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

Signature: *Kenneth R. Moore*
 Printed Name: Kenneth R. Moore
 Phone: (765) 454-1235
 Date: 9/27/05

(STATE OF INDIANA)
 (COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____, 20_____.
 My Commission expires: _____

Signature: _____

Printed Name: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT**

**PETITION FOR INTERIM SIGNIFICANT PERMIT REVISION, SIGNIFICANT SOURCE
MODIFICATION, MINOR PERMIT REVISION, OR MINOR SOURCE MODIFICATION**

Source Name: DaimlerChrysler Kokomo Casting Plant
Source Address: 1001 E. Boulevard, Kokomo, IN 46904
Mailing Address: 1001 E. Boulevard, Kokomo, IN 46904
SIC Code: 3363

Description of the Operation or Equipment:

DaimlerChrysler Corporation (DaimlerChrysler) is considering the installation of the following equipment at its Kokomo Transmission Plant (KTP). Two (2) shotblast operations are proposed to be installed. They will utilize abrasive shotblast media to shotblast various aluminum parts. The potential criteria pollutant emissions from this equipment would be comprised mainly of particulate matter less than 10 microns (PM10) from the shotblast operations. Potential Hazardous Air Pollutant (HAP) emissions are minimal.

The allowable emissions are equal to the potential emissions from the shotblast units.

2 Shotblast Units

Potential To Emit:

The above listed equipment will emit criteria pollutants. Potential emissions from the equipment are presented below in tons per year (TPY).

Criteria Pollutants		
Pollutant	Potential Emissions (TPY)	PSD Permit Threshold (TPY)
NOx	-	40
CO	-	100
VOC	-	40
PM10	3.44	15
SO2	-	40

PSD Requirements:

KTP is located in Howard County, which is currently considered an attainment or unclassifiable area for all criteria pollutants. Potential emissions of criteria pollutants have been considered in

accordance with U.S. Environmental Protection Agency (EPA) guidance. The estimated emissions of criteria pollutants from the installation under consideration will be less than the threshold which would trigger the need for review under the federal PSD program.

NSPS Requirements:

There are no NSPS applicable to these types of processes as referenced in 326 IAC 12 or 40 CFR 60.

NESHAP Requirements:

The installation under consideration is not subject to NESHAPs (40 CFR 61 and 40 CFR 43, which are incorporated by reference in 326 IAC 14) or the Clean Air Act (CAA) 112(g) case by case Maximum Achievable Control Technology (MACT) requirements. The potential HAP emissions expected from the installation under consideration are well below individual and combined HAP emissions thresholds of 10 TPY and 25 TPY, respectively.

State Rules & Requirements:

The State of Indiana does not have an air toxics program other than that required by federal regulations (i.e., 112(g) for HAPs). PM emissions are limited by 326 IAC 6-1-2(a) to 0.03 grains/dscf and by 326 IAC 6-3-2(e) to 50.16 lbs PM/hr. The facility will comply with these limitations.

Federal Enforceability:

The company consents to the federal enforceability of this interim petition.

Signature: 

Printed Name: Kenneth R. Moore

Title or Position: Plant Manager

Phone No.: (765) 454-12345

Date: 9/27/05

**DaimlerChrysler Kokomo Casting Plant
Proposed Permit Conditions
Shotblast Units Installation**

Suggested Construction Conditions

1. That the data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect potential emissions, this change must be approved by the Office of Air Management (OAM).
2. That this permit to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Department of Environmental Management Law (IC 13-7), Air Pollution Control Law (IC 13-1-1) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. That the equipment shall be installed in accordance with the manufacturer's specifications and as stated in the application.
4. That pursuant to 326 IAC 2-1.1-9 (5) the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is discontinued for a period of one (1) year or more.
5. That notwithstanding Condition No.6, all requirements and conditions of this construction permit shall remain in effect unless modified consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2.
6. That this document shall become the first-time operation permit pursuant to 326 IAC 2-5.1-4 when, prior to start of operation, the following requirements are met:
 - a. The attached affidavit shall be submitted to the OAM, verifying that the facilities were constructed as proposed in the application.
 - b. The permittee shall receive an Operation Permit Validation Letter from the Chief of the Air Compliance Section and attach it to this document.
 - c. Each facility shall certify separately at start-up of operations.

The first-time operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7.

The permittee shall apply for an operation permit renewal at least ninety (90) days prior to the renewal date established in the validation letter.

7. That when the facility is constructed and placed into operation the following operation conditions shall be met:

**DaimlerChrysler Kokomo Casting Plant
Proposed Permit Conditions
Shotblast Units Installation**

Suggested Operation Conditions

1. That the data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in potential emissions exceeding those specified in *326 IAC 2-5.5-6*, this change must be approved by the OAM.
2. That the permittee shall comply with the provisions of the Indiana Environmental Management Law (IC 13-7), Air Pollution Control Law (IC 13-1-1) and the rules promulgated thereunder.
3. That the equipment shall be operated and maintained in consultation with the manufacturer's specifications.
4. That the associated particulate matter control devices shall be in operation at all times when the shotblast units are in operation.
5. That records necessary to document annual emissions shall be maintained. These records shall be kept for at least 60 months and made available upon request to the OAM.

Appendix C

PSD Non-Circumvention Analysis

APPENDIX C

Introduction. DCC is submitting complete application materials to secure IDEM approval to install two new shotblast units at the Kokomo Casting Plant ("KCP"). Provided are the Part 70 Minor Modification/Permit to Construct Applications and Interim Construction Permit Application. As noted in the application materials, the KCP facility is located on property adjacent to the DCC Kokomo Transmission Plant ("KCP"). While the KCP and KTP facilities are treated by IDEM as a single source for permitting purposes, they are operated as individual facilities, have independent management and administration, separate work forces and hold separate Part 70 Operating Permits.

During the permitting process for other improvements at the KCP and KTP facilities, IDEM has inquired as to the relationship between proposed projects and improvements at the facilities. Recognizing that IDEM considers KCP and KTP to be contiguous for permitting purposes, DCC has included an analysis of the factors considered by IDEM (and identified as determinative by USEPA), to demonstrate that the proposed installation of new shot blast units at the KCP facility should not be considered as a component of a much larger project being implemented at KCP, KTP or both facilities, in an effort to circumvent applicability of the PSD permitting requirements. The analysis is being provided as an Attachment to the permit applications to eliminate any delay in IDEM's review and approval process.

PSD "Circumvention" Analysis. A modification to an existing "major source" such as KCP is subject to PSD review only if the net emissions increase of any pollutant emitted by the source, as a result of the modification, is greater than specified "significant" thresholds. If the proposed emissions increase is, by itself, less than "significant" the PSD regulations prohibit accumulation of previous contemporaneous small (i.e. less than "significant") emissions increases at the source.

A related analysis focuses on whether a source operator has made a deliberate decision to split an otherwise "significant" project into two or more smaller projects for the purpose of avoiding PSD review. USEPA interpretive guidance refers to this as "circumvention" of PSD applicability. Circumvention of PSD requirements by artificially separating a single large project (that would be subject to PSD as a "major modification" of an existing source), into two or more smaller projects (that are not subjected to PSD because the emissions increases are less than "significant"), is prohibited.

A. USEPA Criteria for Conducting "Circumvention" Analysis. Through its interpretive rulings, USEPA has established five criteria that should be considered in making a determination of whether a source operator is attempting to circumvent PSD applicability by artificially splitting a single, major modification into two or more minor projects.

The circumvention analysis was first applied by USEPA in evaluating multiple small projects undertaken by the 3M Company at its Maplewood, Minnesota research facility. During an 18-month period, 3M received 12 synthetic minor permits for modifications at the facility and had applied for several other minor permits. USEPA investigated whether 3M had circumvented

PSD by artificially separating one or more larger projects (subject to PSD), into the twelve "minor" projects permitted and implemented during that 18-month period.

Expanding on its 1989 "sham permitting" guidance (entitled "Limiting Potential to Emit in New Source Permitting"), USEPA established five criteria to be considered when making a determination of whether a source is circumventing PSD applicability through multiple minor modifications. Those criteria are set forth below:

#1 - Timing and Relationship to Same Process or Unit. Filing of more than one minor source or minor modification application associated with emissions increases at a single plant within a short time period. Under this criterion, USEPA advises the permitting authority to scrutinize applications that "relate to the same process or units."

#2 - Application for Funding. Evaluate whether one minor project would be economically viable if operated on an extended basis without proceeding with a second or third minor project. In other words, is a minor modification economically viable independent of any other changes at the facility? USEPA also advises permitting authorities to look at the documentation for funding the projects, to see if the source has treated the projects as one modification for financial purposes.

#3 - Reports of Consumer Demand and Projected Production Levels. Consider projected production levels and compare them to permitted levels. This criterion relates to increases in overall production added in small increments through permitted minor projects.

#4 - Public Statements. Review any statements of authorized representatives of the source regarding plans for operation of the proposed modification.

#5 - Economic Realities and "Reasonableness" of Considering Projects Together. USEPA suggests a holistic view of the particular facility where the proposed projects will be undertaken to determine whether it would be "reasonable" for company management to plan and coordinate two minor projects as one major project. This determination should consider the "intrinsic relationship (of the projects) with each other" as well as the impact of the projects on "economic viability of the plant."

B. Application of USEPA's "Circumvention" Criteria to the Proposed Project. DCC has applied the "circumvention" criteria to the proposed project to verify that PSD is not applicable.

#1A - Timing of the Projects. One of the circumvention criteria considers the length of time between the permit applications or requests to proceed with projects at the same stationary source. Permit applications submitted within a

one-year period may indicate an intention to split artificially a single major project into two or more smaller projects.

In July of 2004, DCC submitted an application to install wet machining equipment at the nearby KTP facility to process parts for the 62TE and 41 TE short transmissions. Although the proposed shot blast units will be used, in part, to process parts for the 62 TE transmission product that is assembled at KTP, the units will not be used solely for processing 62TE parts. Moreover, the increased efficiency to be gained with operation of the new shot blast units (due to the capability for simultaneous blasting both sides of a part and fewer damaged parts resulting from reduced handling), will match future levels of production of the 62TE product that were not anticipated at the time the 62TE product was launched. While the timing of the two projects is within an approximate one year period, they can not be considered as two parts of a single larger project.

The new wet machining operations implemented at KTP (Permit to Construct issued 11/23/04), were a component of a comprehensive modernization effort referred to as the "Best In Class" or "BIC Project". The decision by DCC to invest millions of dollars in a comprehensive modernization effort such as the "BIC Project" involved a significant amount of internal planning, scheduling and preliminary decision-making.

The initial Appropriation Request for the "BIC Project" for the improvements to be made at the KTP facility was made on May 24, 2002. The Appropriation Request for the proposed new shot blast units to be installed at the KCP facility was issued very recently on June 29, 2005.

(Note: Copies of the internal DCC corporate Appropriation Request for the proposed new shot blast units at KCP are included for your review. The Appropriation Requests associated with the "BIC Project" were previously provided and should be available in IDEM's permitting files. Confidential business information has been deleted from the enclosed documentation, but that information can be provided under guarantees of strict confidential protection.)

#1B -Relationship to the Same Process or Unit. The USEPA's interpretive guidance directs the permitting authority to look at whether or not the multiple minor projects involve the "same process or units." As applied to DCC's proposed projects, this criterion is one of the strongest in favor of not aggregating the proposed new shot blast unit for KCP with the wet machining operations installed at KTP as part of the "BIC" project.

The "BIC Project" encompassed multiple improvements designed to respond to upgrades planned for the transmission products and the increased complexity of transmission and drive train products to be manufactured at KTP. The goal of implementing the "BIC Project" was to increase the quality of components and parts used to assemble the final products by modernizing and improving key

machining and fabricating operations. The BIC Project also involved installation of new robotics and automated systems, including the new Front and Rear Carrier automated assembly machines.

In contrast, the proposed shot blast units will be installed and operated at the KCP facility and will be used to process or treat components for a number of the transmission products assembled at the nearby KTP facility, including the 62TE product. The new equipment will allow shot blasting on both sides of a component part which will avoid manual manipulation to process both sides of a part. The new shot blast units will reduce labor costs by eliminate manual handling of those parts requiring treatment on both sides and fewer parts will be damaged due to the reduced need for handling. The additional shot blasting capacity to be provided by the proposed new units will allow DCC to retain this work in-house and eliminate the costs associated with an outside contractor. While it is true that the proposed shot blast units will accommodate the increased production of the 62TE product in-house, those levels of production are based on future sales forecasts and were not anticipated back in 2002 when the "BIC Project" was being planned and funded.

#2 - Economic Viability/Application for Funding. As noted above, the decision to proceed with the comprehensive "BIC" project, including the new machining operations at KTP, represented a significant financial commitment. In contrast, the proposed new shot blast unit to be installed at KCP will allow simultaneous shot blasting on both sides of a component part which will reduce labor costs and increase quality. By keeping the shot blasting processes at KCP, the costs associated with an outside contractor will be avoided and DCC can keep a tighter control on quality. The proposed new shot blast unit will provide better performance than the older "rotoblast" shot blasting units. The proposed equipment represents new technology and helps to achieve DCC's goals of reduced labor costs and continuous quality improvements to produce the highest quality product.

As noted above, the internal funding or appropriation requests for the KTP "BIC Project" and the proposed new shot blast units for KCP were independent business decisions separated by a period of over three years. The initial "BIC Project" funding request is dated May 24, 2002 while the Appropriation Request for the proposed new shot blast units is dated June 29, 2005. The decisions by DCC corporate management to approve and fund these two projects were unrelated and done with no intent by DCC to artificially divide a single major project to circumvent PSD review. Moreover, these two separate projects are economically viable independent of each other and any other changes at the KCP facility.

#3 - Reports of Consumer Demand and Projected Production Levels. As noted above, the "BIC Project" is designed to modernize the KTP manufacturing processes to respond to planned changes in the design and complexity of the

transmission and drive train products produced at KTP. The "BIC Project" is also being pursued by DCC to increase the quality of components and parts used to assemble the final products by modernizing and improving key machining and fabricating operations.

The different phases of the "BIC Project" are all related to modernization of KTP operations and a comprehensive quality improvement project. Therefore DCC included all phases of the overall "BIC Project" in the permit applications submitted to IDEM. The application materials for the "BIC Project" request authorization to install and operate 100 new individual wet machining units, 11 laser welders and 7 atmosphere generators together with air pollution controls and support systems. DCC did not attempt to permit as individual projects the separate phases of the overall "BIC Project" because that would have been contrary to regulatory requirements and USEPA directives.

The proposed shot blast unit was not a component of the "BIC Project" because sufficient shot blasting capacity existed at KCP to support the modernization effort. While some of the component parts for the 62TE transmissions will be processed in the proposed shot blast unit, it is not and was not an integral part of the BIC Project.

#4 - Public Statements. Any public statements concerning the "BIC Project" were previously provided to the IDEM during the permitting process for those new emissions sources associated with the KTP modernization effort. Since the proposed new shot blast units represent a minor plant improvement in comparison to the "BIC Project" and constitutes a fairly common practice of implementing new technology, improving production rates/efficiency and reducing manual labor costs, there are no public statements that relate specifically to the proposed new shot blast units.

#5 - Economic Realities and "Reasonableness" of Considering Projects Together. This last factor has already been addressed in large part in the foregoing discussion. With respect to whether or not "it is reasonable to expect that company management would coordinate the planning and execution" of the "BIC Project" with the proposed new shot blast unit, the answer is clear. Not only is it unreasonable to expect these two projects to be lumped together; it would have been impossible for DCC to coordinate the planning and implementation of these two projects. The respective corporate decisions to approve and fund the "BIC Project" and the proposed new shot blast units were made over three years apart.

The "BIC Project" was a comprehensive modernization and quality improvement effort for the KTP facility to achieve significant upgrades in the quality, complexity and sophistication of transmission and power train products produced at KTP. The planning, scheduling and engineering efforts required to launch the "BIC Project" were completed several years before DCC considered acquisition

of "new generation" shot blasting units that could process both sides of a component part at the same time.

The "economic reality" is that DCC would pursue either project independently of the other project. Installation of new shot blasting technology was not essential for the "BIC Project" to be financially successful.

C. Conclusion. In summary, the applicable PSD regulations, as interpreted and implemented by USEPA, prohibit the accumulation of emissions from a series of small (i.e. less than significant) emissions increases at a regulated source. Such accumulation is only allowed if it is demonstrated that a proposed "major" project has been artificially split into two or more smaller projects for the purpose of circumventing PSD review. Accordingly, emissions from the proposed new shot blast units to be installed and operated at the KCP facility should not be accumulated with the emissions associated with the comprehensive quality improvements implemented at KTP that were designated the "BIC Project". This would only be allowed if DCC deliberately attempted to split a major modification for the purpose of avoiding PSD applicability.

The tests established by USEPA to evaluate whether a facility owner/operator is attempting to circumvent the PSD requirements (through artificially dividing a "major modification" into multiple minor projects), clearly demonstrate that DCC has not attempted to circumvent PSD requirements. The documentation demonstrates that the "BIC Project at KTP and the proposed new shot blast units for KCP were planned and funded as completely separate projects based on independent business justifications. IDEM has been provided with all relevant background information that supports a reasonable, supported determination that the proposed shot blast units may be permitted as a minor modification at the KCP facility.

DAIMLERCHRYSLER

Appropriation Request

06/29/2005

Location: KOKOMO CASTING PLANT

Organization: Manufacturing Operations

Operating Group: NA Mfg Powertrain Oper

Request #: 5111-2003-0230 PC01

Title: 2006 3/4 62TE Facilities and Equipment

Program Key: 2007 CS Powertrain Trans A6-62TE Derive FV CS

Req. Type: Implementing PC

Budget Coverage: Yes

Priority: Normal

Reason Code: 1 - New Model Product

Fund Code:

	Appropriation Request		Current Request	Prior	Current Request by Calendar Year			
	Previously Authorized	Change Amount			2005	2006	2007	2008
Capital Spending								
Capital Facilities Project Expense								
Total Capital:								
Total Request:								

Exchange Rates: Effective Date: 8 - 2003 USD/\$USD 1.000 1.000 1.000 1.000 1.000 1.000

Financial Indicators: IRR: NPV: Work Start Date: Work End Date: Initial Cash Outflow: Month: 1 Year: 2004 Payback: Years: Months: T/F Close Date: Month: 4 Year: 2007

Operations Contact: James L. Brown 8-838-1970
Local Finance Contact: Marsha Frink 8-838-1412

Summary Description

The Kokomo Casting Plant (KCP) is requesting an additional \$ to support the manufacture of 435K transmissions for the 62TE program beginning in the 2006 3/4 M.Y. The funding is required to purchase and install shot blast equipment necessary to meet production process requirements. This change is required due to a change in the valve body configuration. Funding will purchase shot blast equipment and installation and die cast machine modifications for hot oil unit additions.

Narrative Detail

The 62TE is a six speed FWD automatic transmission that will be manufactured at the Kokomo Transmission Plant (KTP). With present timing, it is critical to begin the manufacture of the machinery and equipment to support the new 435K annual volume.

FUNDING:

The PEC approved funding 5/5/05. As part of the overall program, the Powertrain Product Team obtained funding approval for \$. This request represents the Casting Plant facility requirements from this fund.

MANPOWER REQUIREMENTS:

Manpower requirements were submitted with the facility project in the 62TE, 5111-2003-231F

LABOR REQUIREMENTS:

The work has been allocated between outside vendors and the local workforce to take advantage of

DAIMLERCHRYSLER

Appropriation Request

06/29/2005

Location: KOKOMO CASTING PLANT

Organization: Manufacturing Operations

Operating Group: NA Mfg Powertrain Oper

Request #: 5111-2003-0230 PC01

Title: 2006 3/4 62TE Facilities and Equipment

Program Key: 2007 CS Powertrain Trans A6-62TE Derive FV CS

Req. Type: Implementing PC

Budget Coverage: Yes

Priority: Normal

Reason Code: 1 - New Model Product

Fund Code:

those activities that may be performed in-house.

PROTECTED EMPLOYEES:

This project will have no impact on protected employees.

ALTERNATIVE STATEMENT:

If the requested funding is not approved, KCP will be unable to support the requested volumes. There are no alternatives because machine capacity does not currently exist to support the program.

CONSEQUENCES:

KCP will be unable to support the 62TE program if this funding is not approved.

HEALTH AND SAFETY:

This project meets all EPA and OSHA requirements.

PREPRODUCTION AND LAUNCH:

Preproduction funds of \$ and launch funds of \$ will be required for this request.

SURPLUS EQUIPMENT:

No surplus assets are available for this use.

DISPOSAL:

No disposal is required for this project.

DaimlerChrysler

Fax

To: TRIP SINHA - IDEM From: MARK WENTHAM

Fax: (317) 232-6749 Pages: 2

Phone: (317) 233-3031 Date: 10/6/05

Re: SHOT BLAST APPLICATION CC:

Urgent For Review Please Comment Please Reply Please Recycle

• Comments:

Notarized Affidavit of construction
for your review.

Mark L. Wentham

Affidavit of Construction

I, Kenneth R. Moore, being duly sworn upon my oath, depose and say:

1. I live in Hamilton County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of Plant Manager for DaimlerChrysler Kokomo Casting Plant.
3. By virtue of my position with DaimlerChrysler Kokomo Casting Plant, I have personal knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of DaimlerChrysler Kokomo Casting Plant.
4. I, the undersigned, have submitted an interim (minor permit revision, significant permit revision, minor source modification, significant source modification) petition to the Office of Air Management for the construction of 2 Shotblast Units.
5. DaimlerChrysler Kokomo Casting Plant recognizes the following risks:
 - (a) Own financial risk, (b) that IDEM may require additional or different control technology for the final approval, (c) that IDEM may deny issuance of the final approval, and (d) any additional air permitting requirements.

Further Affiant said not.

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

Signature: *Kenneth R. Moore*
 Printed Name: Kenneth R. Moore
 Phone: (765) 454-1235
 Date: 9/27/05

(STATE OF INDIANA)
(COUNTY OF Howard)

Subscribed and sworn to me, a notary public in and for Tipton County and State of Indiana on this 6th day of October, 2005.
 My Commission expires: August 26, 2006

Signature: *Patricia A. Cohee*
 Printed Name: Patricia A. Cohee



VISION ENVIRONMENTAL, INC.

October 18, 2005

Dr. Trip Sinha
Indiana Department of Environmental Management
100 N. Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

RE: Interim Construction Permit DaimlerChrysler - Kokomo Casting Plant, ID No. 067-00065

Dear Dr. Sinha:

This correspondence is in regards to the Interim Construction Permit for the installation of two (2) shotblast operations, with emissions controlled by cartridge style, dry filter control devices at the DaimlerChrysler Corporation Kokomo Casting Plant (KCP) located in Kokomo, Indiana.

In a telephone call earlier today you indicated that KCP needed to propose and agree to a short term particulate matter limit that would confirm the proposed source's status as minor with respect to federal Prevention of Significant Deterioration (PSD) regulations. I discussed this request with Mr. Mark C. Werthman of KCP and he indicated that KCP agrees to accept a limit in the Interim Construction Permit of 3.4 pounds of particulate matter less than 10 microns (PM10) per hour from the 2 shotblast operations combined. This serves to limit annual PM10 emissions to 14.9 tons per year from the proposed shotblast operations (based upon 8,760 hours per year) which is less than the PSD applicability threshold of 15 tons per year.

If you have questions regarding this submittal, do not hesitate to contact me at 248.926.1199.

Regards,
Vision Environmental, Inc.

A handwritten signature in black ink, appearing to read 'John A. Schneider', is written over a white background.

John A. Schneider, P.E.
Principal

cc: Mark C. Werthman, Kokomo Casting Plant

RECEIVED

OCT 18 2005



Vision Environmental, Inc.

8585 PGA Drive Suite 101 Walled Lake, MI 48390

Phone (248) 926-1199

State of Indiana
Department of Environmental Management
Office of Air Quality
Fax (248) 926-6749

DATE: 18-October-2005 Number of Pages (including cover sheet): 2

TO: Dr. Trip Sinha

OF: IDEM-AOD-Permits Branch

FAX Number: 317-232-6749

FROM: John A. Schneider

RE: **DaimlerChrysler Kokomo Casting ICP Particulate Matter Limits**

Dr. Trip Sinha:

Please see the attached correspondence regarding DaimlerChrysler Kokomo Casting Plant's acceptance of an hourly particulate matter emission limit for the interim construction permit that you are currently processing.

Regards,

John

Please Note: The information contained in this facsimile message is intended for the personal and confidential use of the designated recipient(s) named above. If you have received this correspondence in error, please call at (248) 926-1199, followed by return of the original facsimile to the address specified above.

**Kokomo Casting Plant
Shot Blasting Installation**

**Part 70 Minor Modification/Permit to Construct Application
&
Interim Construction Permit Application**

Prepared For:

DAIMLER CHRYSLER

**KOKOMO CASTING PLANT
1001 E. BOULEVARD
KOKOMO, INDIANA 46904**

Prepared By:

**VISION ENVIRONMENTAL, INC.
8585 PGA DRIVE SUITE 101
WALLED LAKE, MI 48390**

September 2005

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Appendix A	Permit to Construct Application Forms
Appendix B	Interim Construction Permit Application
Appendix C	PSD Non-Circumvention Analysis

1.0 INTRODUCTION AND FACILITY DESCRIPTION

DaimlerChrysler Corporation owns and operates the Kokomo Casting Plant (KCP) in Kokomo, Howard County, Indiana. The KCP facility produces aluminum castings for automobile and truck engines and transmissions, and currently operates under Part 70 Operating Permit T067-5246-00065, which was issued on June 30, 2003.

KCP is planning to install two pneumatic shot blasting machines and associated dust collectors for the surface treatment (de-burring) of production parts for the 62TE line, as well as other aluminum production parts manufactured at KCP. The proposed installation will reduce production costs by simultaneously blasting both sides of a part (as opposed to running each part through the existing shot blast units twice to blast both sides) and will allow for increased shot blasting of aluminum valve bodies or other small production parts. Overall facility production will not increase, but the installation of the proposed shot blast operation will allow the parts to be processed in-house rather than being outsourced. This application is based upon the maximum hours of operation under consideration for the proposed equipment and therefore, represents a “worst case” emission estimate.

KCP is contiguous with DaimlerChrysler’s Kokomo Transmission Plant (KTP) and produces certain aluminum cast parts for the KTP facility. While KCP and KTP are considered contiguous facilities, they are managed by separate plant managers, are operated as individual facilities, and hold separate Part 70 operating permits. There are no changes or new installations of processes/equipment being installed at KTP as a result of the proposed installation of new shot blasting machines at KCP.

KCP considers this installation to be a minor modification to KCP’s Part 70 Operating Permit per Rule 326 IAC 2-7-10.5(d)(9) because the proposed installation adds an emission unit of the same type that is already permitted and that will comply with the same applicable requirements and permit terms and conditions as the existing emission units. KCP considers this process to be separate from the 62TE wet machining operations, for which a permit application was submitted to IDEM in July of 2004. Appendix C provides an analysis of the USEPA criteria to demonstrate the proposed project should be considered a separate source and associated emissions from the project should not be aggregated with any other projects at KCP or KTP.

KCP is currently a major source with respect to the Prevention of Significant Deterioration (PSD) (i.e., federal New Source Review). As demonstrated in Section 5.1 of this document, this modification does not constitute a major modification with respect to federal New Source Review (i.e., PSD) pursuant to Rule 326 IAC 2-2-1 (xx).

Certain information required by forms GSD-02 through GSD-10 is presented in the tables of this report and is referenced on the forms.

KCP is submitting an Interim Construction Permit (ICP) concurrently. A copy of the application is attached.

2.0 PROCESS DESCRIPTION

KCP manufactures two primary product types: large transmission cases and smaller component parts. These parts are processed through steel shot blasting systems to remove minor flashing and improve the surface finish. KCP currently operates six (6) permitted shot blast units under Part 70 Operating Permit No. T067-5246-00065.

KCP is proposing to install two wire mesh shotblast units manufactured by Pangborn, with each unit controlled by a single or its own dedicated dust collector. Normal operations are expected to be 7,200 hours per year based upon a schedule of 24 hours per day, 6 days per week, 50 weeks per year with a maximum operating schedule of 8,760 hours per year. The proposed units will be used to debur aluminum valve bodies or other small parts, and will each be exhausted to a cartridge filter type dust collector for the control of particulate matter from the process. The controlled process exhaust will be vented either to the general in-plant atmosphere or to an associated stack. The maximum shot blast rate of each unit is 174,760 pounds per hour (lb/hr). The proposed installation will allow increased processing of the facility's smaller component parts to accommodate the rising fraction of component parts produced at the facility, as well as to allow for the simultaneous blasting of certain parts on both sides. The installation will not cause or allow an increase in overall facility production because the output of the die casting operations at KCP is not dependant upon the shot blast capacity. In addition to shot blasting of die cast parts at KCP they can be sourced to an outside vendor or they can be shot blast by the facility utilizing the parts.

3.0 CRITERIA POLLUTANT EMISSION ESTIMATES

The proposed shot blast units will emit particulate matter less than 10 microns in diameter (PM10), primarily as a result of the breakdown of the abrasive blasting media (i.e., shot). A pre-control emission factor for PM10 of 0.000225 pounds of PM per pound of shot (lb/lb) was based on stack tests performed in March of 1996 for an existing shot blast unit at KCP. This emission factor has been utilized in previous construction permit applications for shot blasting operations at various DaimlerChrysler facilities in Indiana and other states.

3.1 Annual Emission Estimates

To estimate potential emissions after control from the installation of the proposed shot blast operations, KCP utilized the emission factor stated above, an hourly shot blast rate of 174,760 lbs/hour, an estimated 99% control efficiency and maximum annual hours of operation (8,760 hours). The hourly PM10 emission rates are presented in Table 4, which is included as an attachment to this report and also in the application forms included as Appendix A.

An example calculation for potential controlled PM10 emissions from the proposed shot blast unit is provided below on a ton per year (TPY) basis:

Potential Controlled Annual PM10 Emissions

PM/PM10
 uncontrolled = 344 tpy

Wire Mesh Shot Blast Emission Rate (per unit):

$$\left(\frac{174,760 \text{ lbs}}{\text{hr}}\right) * \left(\frac{0.000225 \text{ lb}}{\text{lb shot}}\right) = 0.393 \text{ lb/hr}$$

PM10 Calculation:

$$\left(\frac{0.393 \text{ lb/unit}}{\text{hr}}\right) * (2 \text{ unit}) * \left(\frac{8,760 \text{ hr}}{\text{yr}}\right) * \left(\frac{\text{ton}}{2,000 \text{ lb}}\right) = 3.44 \text{ TPY} \text{ controlled}$$

4.0 HAZARDOUS AIR POLLUTANT (HAP) EMISSION ESTIMATES

The shot blast units will emit HAPs, primarily as a result of the breakdown of the abrasive blasting media (i.e., shot). Emission factors for manganese and chromium are 0.90% and 0.25% of total PM10 emissions respectively. These factors are based upon the chemical composition of shot blast media currently in use at KCP.

4.1 Annual Emission Estimates

To estimate potential emissions after control from the installation of the proposed shot blast operations, KCP utilized the hourly PM10 emission rate estimated in Section 3.1, HAP concentration and annual hours of operation (8,760 hours). The hourly PM10 emission rates and HAP concentrations are presented in Table 4.

Calculations for potential controlled HAP emissions from the proposed shot blast units are provided below on a ton per year (TPY) basis:

Potential Controlled Annual HAP Emissions

Total PM10 Emission Rate (per unit):	0.393 lbs/hr
Manganese Concentration:	0.9 %
Chromium Concentration:	0.25 %

Calculations:

Manganese

$$\left[\left(\frac{0.393 \text{ lb}}{\text{hr}}\right) * (2 \text{ unit}) * \left(\frac{0.9}{100}\right)\right] = 0.0071 \frac{\text{lb}}{\text{hr}} * \left(\frac{8,760 \text{ hr}}{\text{yr}}\right) * \left(\frac{\text{ton}}{2,000 \text{ lb}}\right) = 0.031 \text{ TPY}$$

$$\frac{\text{Chromium}}{\left[\left(0.393 \frac{\text{lb}}{\text{hr}} \right) * (2\text{unit}) * \left(\frac{0.25}{100} \right) \right]} = 0.0020 \frac{\text{lb}}{\text{hr}} * \left(8,760 \frac{\text{hr}}{\text{yr}} \right) * \left(\frac{\text{ton}}{2,000\text{lb}} \right) = 0.0086\text{TPY}$$

5.0 REGULATORY ANALYSIS

The proposed installation was evaluated for applicable federal and state rules as outlined below.

5.1 Federal Rule Applicability

5.1.1 New Source Performance Standards (NSPS)

There are no NSPS applicable to the proposed processes referenced in 40 CFR 60, which is incorporated by reference in 326 IAC 12.

5.1.2 New Source Review (NSR)

Howard County is currently considered attainment or unclassifiable for all criteria pollutants. KCP is considered a major source with respect to Prevention of Significant Deterioration (PSD). As previously mentioned, the proposed installation is not a component of a larger project and is not linked to any other projects at KCP (see Appendix C for additional detail). In accordance with US EPA guidance, allowable emissions from other projects were not evaluated when determining PSD regulation applicability. Therefore, only PM10 emissions from the proposed installation were considered in determining federal NSR applicability. Since, as shown in Table 4, controlled emissions and the requested allowable emissions are less than the 15 TPY significance threshold for PM10, the shotblasting unit installation is not considered a major modification under federal NSR and therefore, is not subject to the PSD permitting requirements.

5.1.3 Hazardous Air Pollutants 112(g) MACT Applicability

Section 112(g) of the Clean Air Act (case-by-case MACT) mandates that any newly constructed or reconstructed major source of hazardous air pollutants (HAP) is subject to the maximum achievable control technology (MACT) requirements.

Under State and Federal law, any new or reconstructed "process or production unit" which is potentially a major source of hazardous air pollutants (HAPs) must go through a facility specific maximum achievable control technology (MACT) determination prior to construction. KCP has reviewed the proposed installations and determined that "case-by-case" MACT is not applicable because the maximum potential HAP emissions are well below the major source thresholds of 10 tons per year for an individual HAP or 25 tons per year for any combination of HAPs. See Table 4 for a summary of HAP emissions.

5.1.4 Hazardous Air Pollutants 112(d) MACT Applicability

There are no Maximum Achievable Control Technology (MACT) standards promulgated pursuant to Section 112(d) that are applicable to HAP emissions from the proposed project.

5.2 State Rule Applicability

5.2.1 Opacity Limitations – Visible Emissions Limitations (326 IAC 5-1-2(1))

This regulation applies to the shot blast units. Pursuant to 326 IAC 5-1-2, visible emissions from a source or facility located in an attainment area for particulate matter (PM) shall not exceed an average (40%) opacity in any one (1) six (6) minute averaging period. Also, visible emissions shall not exceed sixty per cent (60%) opacity 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.

5.2.2 Particulate Limitations (326 IAC 6-1)

KCP is located in Howard County, which is one of the listed counties in Rule 326 IAC 6-1-7, and KCP's potential PM emissions are greater than 100 tons per year. As such, Rule 326 IAC 6-1 applies to this source. Pursuant to Rule 326 IAC 6-1-2(a), the controlled PM emissions from the proposed new shot blast units shall be limited to 0.03 grains per dry standard cubic feet (gr/dscf) of exhaust gas.

As indicated in Table 4, the estimated outlet grain loadings are less than or equal to 0.03 gr/dscf of exhaust gas.

Based upon the grain loading limitation of 0.03 gr/dscf and the nominal air flow rate of 4,996 dscfm for each shotblast unit, PM emissions are limited to 1.28 lbs/hour as shown by the following calculation:

$$(4,996 \text{ ft}^3/\text{min}) * (60\text{min}/\text{hr}) * (0.03 \text{ gr}/\text{ft}^3) / (7,000\text{gr}/\text{lb}) = 1.28 \text{ lbs}/\text{hour}$$

5.2.3 Particulate Limitations (326 IAC 6-3)

The shot blasting operations are subject to Rule 326 IAC 6-3-2. Pursuant to Rule 326 IAC 6-3-2(e), the particulate matter emissions from the shot blasting operations must comply with the following equation:

$$E = 55P^{0.11} - 40$$

where E = rate of emission in pounds per hour

P = process weight in tons per hour, for P greater than 60,000 lbs/hr
(30 tons/hr)

$$E = 55 * \left[\left(\frac{4,000 \text{ lb parts} + 174,760 \text{ lb shot}}{\text{hr}} \right) * \left(\frac{\text{ton}}{2,000 \text{ lb}} \right) \right]^{0.11} - 40 = 50.16 \text{ lb PM / hr}$$

As shown in Table 4, the estimated hourly emissions are less than those allowed per 326 IAC 6-3-2(e). In addition, stack testing performed on similar shotblast units at the facility in June of 2002 show actual PM/PM10 emissions of less than 0.10 lb/hr.

5.2.4 State Air Toxics Program

The State of Indiana does not have an air toxics program other than that which is required by federal regulations.

6.0 TITLE V IMPLICATIONS AND PROPOSED CONDITIONS

As stated in Section 1.0, KCP is a major source with respect to Title V, and has received a Part 70 Operating Permit (No. T067-5246-00065) from IDEM. Note that certain terms and conditions of the final Part 70 Operating Permit were challenged in the administrative appeal currently pending with the Office of Environmental Adjudication as Case No. 03-A-J-3146. Since the plant is a major Title V source, the proposed installation discussed in this submittal would be considered a Minor Modification per Rule 326 IAC 2-7-10.5(d)(8). In addition, this application should also be considered an application to amend KCP's Part 70 permit as KCP agrees to operate under the terms and condition of the construction permit issued pursuant to this application. Therefore, the pertinent Part 70 forms have been used for this application.

6.1 Proposed Conditions

KCP proposes the following addition to Section A.3 of Part 70 Operating Permit No. T067-5246-00065:

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

- “(t) one Wire Mesh machine used for deburring of parts, identified as DC7, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour, with emissions controlled by a cartridge filter;*
- “(u) one Wire Mesh machine used for deburring of parts, identified as DC8, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour, with emissions controlled by a cartridge filter;”*

KCP proposes the following additions to Section D.3 of Part 70 Operating Permit No. T067-5246-00065.

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

- “(g) one Wire Mesh machine used for deburring of parts, identified as DC7, constructed in*

- 2005, with a maximum shotblast rate of 174,760 pounds per hour, with emissions controlled by a cartridge filter;
- (h) *one Wire Mesh machine used for deburring of parts, identified as DC7, constructed in 2005, with a maximum shotblast rate of 174,760 pounds per hour, with emissions controlled by a cartridge filter;”*

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

D.3.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- “(i) The PM emissions from the DC7 wire mesh shotblast machine shall be vented through a dedicated cartridge filter and shall not exceed 0.393 pounds per hour.*
- (j) The PM10 emissions from the DC7 wire mesh shotblast machine shall be vented through a dedicated cartridge filter and shall not exceed 0.393 pounds per hour.*
- (k) The PM emissions from the DC8 wire mesh shotblast machine shall be vented through a dedicated cartridge filter and shall not exceed 0.393 pounds per hour.*
- (l) The PM10 emissions from the DC8 wire mesh shotblast machine shall be vented through a dedicated cartridge filter and shall not exceed 0.393 pounds per hour.”*

D.3.2 Particulate Matter (PM) [326 IAC 6-1-2]

- “(i) The particulate matter (PM) emissions from the cartridge filter controlling the shotblast machine identified as DC7 wire mesh shotblast machine shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.*
- (j) The particulate matter (PM) emissions from the cartridge filter controlling the shotblast machine identified as DC8 wire mesh shotblast machine shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.”*

D.3.5 Emission Controls

- “(f) The cartridge filter for PM and PM10 control shall be in operation and control emissions from the DC7 wire mesh shotblast machine at all times that the shotblast machine is in operation.*
- (g) The cartridge filter for PM and PM10 control shall be in operation and control emissions from the DC8 wire mesh shotblast machine at all times that the shotblast machine is in operation.”*

7.0 CONCLUSION

This submittal should be considered a Permit to Construct application and Minor Part 70 Modification application for the proposed installation of two shotblasting units at DaimlerChrysler's KCP facility. As discussed above, estimated emissions from the proposed emission units are presented in Table 4. Because potential emissions are below the PSD significance threshold, the proposed project is not considered a major modification under the PSD program.

Tables

DAIMLERCHRYSLER CORPORATION
KOKOMO CASTING PLANT

Table 1 - Check List

Required Forms

Source Description	Source ID	Form												
		CD-05	GSD-01	GSD-02	GSD-03	GSD-04	GSD-05	GSD-06	GSD-07	GSD-08	GSD-09	GSD-10	GSD-11	
Entire Facility		X	X	X	X	X	X	X	X	X	X	N/AP	X	N/AP

Source Description	Source ID	Form					
		CD-01	CD-02	CD-03	CD-04	PI-23	CE-01
Entire Facility							
Wire Mesh Shot Blast System	DC7/DC8	X	N/AP	X	X	X	X

Note: for Form GSD-10, no new types of trivial or insignificant sources are being added as a result of this installation.

DAIMLERCHRYSLER CORPORATION
KOKOMO CASTING PLANT

Table 2 - Shot Blast Unit Source Identification

Source Description	Process Information			
	Number of Proposed Units	Type of Material Used	Normal Rate (lb/hr)	Maximum Rate (lb/hr)
Wire Mesh Shot Blast System	2	Small Transmission Parts	2,000	4,000

Source Description	Control Equipment Data			
	Particulate Control Device Type	Particulate Control Device ID	Process Exhaust (SCFM)	Efficiency (%)
Wire Mesh Shot Blast System	cartridge filter	Pangborn PC02-8	4,996	99

Source Description	Estimated Hours of Operation				Max Hours of Operation/ Year
	Hours/ Day	Days/ Week	Weeks/ Year	Hours/ Year	
Wire Mesh Shot Blast System	24	6	50	7,200	8,760

Source Description	Stack Data				
	Stack ID	Height Above Gnd (ft)	Inside Diameter (ft)	Temp °F	Stack Gas Flow Rate (acfm)
Wire Mesh Shot Blast System	DC7/DC8	TBD	TBD	70	4,996

Form Q-1

Source Description	Cartridge Data				
	Emission Point ID	Gas/Air Flow Rate (acfm)	Actual Collection Efficiency (%)	Inlet grain loading (gr/dscf)	Outlet grain loading (gr/dscf)
Wire Mesh Shot Blast System	DC7/DC8	4,996	99	0.92	0.0092

Source Description	Media Data			
	Media	Media Density (lb/ft ³)	Blasting (Open or Enclosed)	Blast Rate (lb/hr)
Wire Mesh Shot Blast System	Steel Shot	474	Enclosed	174,760

Source Description	Unit Identification			
	Company/ Source ID BTN (brass tag #)	Serial Number	Make	Model Number
Wire Mesh Shot Blast System	DC7/DC8	TBD	Pangborn	TBD

Table 3 - Permits

Kokomo Casting Plant

Facility and Permit Type	Permit Number	Permit Date	Description
Kokomo Casting Plant - Title V-Part 70 Operating Permit	067-5246-00065	30-Jun-03	Part 70 Operating Permit
KCP - Part 70 Permit Amendment/Modification	067-16594-00065	12-Feb-03	Minor Source Modification
KCP - Part 70 Permit Amendment/Modification	067-11163-00065	30-Sep-99	1 Natural gas-fired boiler with low-NOx burners (77.9 mmBtu)
KCP - Part 70 Permit Amendment/Modification	067-11508-00065	8-Dec-99	1 Portable natural gas-fired boiler with low-NOx burner (75 MMbtu)

Permits not Applicable to KCP	Permit Number	Permit Date	Description
Kokomo Transmission Plant - Title V Part 70 Operating Permit	067-6504-00065	2-Sep-99	Part 70 Operating Permit
KTP - Part 70 Permit Amendment/Modification	067-11399-00065	9-Nov-99	Change responsible official, correct typos, remove 1 shot blasting unit and modify the oil sampling language
KTP - Part 70 Permit Amendment/Modification	067-11981-00065	27-Apr-00	Stack test language
KTP and KCP - Part 70 Permit Amendment/Modification	067-11990-00065	1-Sep-00	#4 Reverb PM/PM10 limit
KTP and KCP - Part 70 Permit Amendment/Modification	067-12243-00065	4-Jan-01	Construction of 16 die cast machines and 149 wet machines (41 TE)
KTP - Part 70 Permit Amendment/Modification	067-13661-00065	26-Mar-01	Administrative amendment to incorporate CP 12243 and dynos from CP (10711-July 23, 1999)
KTP - Part 70 Permit Amendment/Modification	067-14232-00065	2-May-01	105 wet machines (42 RLE)
KTP - Part 70 Permit Amendment/Modification	067-15176-00065	15-Mar-02	Dyno CO emission factor and annual fuel usage mod
KTP - Part 70 Permit Amendment/Modification	067-15918-00065	17-Oct-02	Capacity increase for 2 dyno test cells w/ addition of catalytic converter
KTP - Part 70 Permit Amendment/Modification	067-16442-00065	6-Jan-03	Administrative amendment for dyno temp range
KTP - Part 70 Permit Amendment/Modification	067-16664-00065	24-Apr-03	Administrative amendment for dyno temp range
KTP - Part 70 Permit Amendment/Modification	067-16686-00065	3-Jun-03	Shot blast control device changes
KTP - Part 70 Permit Amendment/Modification	067-16788-00065	8-Jul-03	BIC Construction Permit
KTP Construction Permit			BIC part 70 mod.
KTP - Part 70 Permit Amendment/Modification	067-17714-00065	16-Sep-03	NCMF equipment move Construction Permit
KTP - Part 70 Permit Amendment/Modification	067-17799-00065	16-Sep-03	NCMF equipment move Part 70 mod.
KTP - Part 70 Permit Amendment/Modification	067-18500-00065	18-May-04	Minor Permit Modification
KTP - Part 70 Permit Amendment/Modification	067-19417-00065	23-Nov-04	Minor Source Modification
KTP - Part 70 Permit Amendment/Modification	067-19500-00065	19-Aug-04	Administrative Amendment
KTP - Part 70 Permit Amendment/Modification	067-19553-00065	26-Jan-05	Minor Permit Modification
KTP - Part 70 Permit Amendment/Modification	067-19555-00065	29-Apr-05	Significant Permit Modification
KTP - Part 70 Permit Amendment/Modification	067-19756-00065	14-Apr-05	Significant Source Modification
KTP - Part 70 Permit Amendment/Modification	067-20879-00065	31-Mar-05	Administrative Amendment

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Table 4 - Emissions from Shotblasting Operations

Source Description	Allowable Emissions per Shotblast unit per 326 IAC 6-1-2 (lb PM/hr)	Allowable Emissions per Shotblast unit per 326 IAC 6-3-2** (lb PM/hr)	Allowable Emissions per unit to render PSD not applicable [326 IAC 2-2] (lb PM/hr)	Allowable Emissions per unit to render PSD not applicable [326 IAC 2-2] (lb PM10/hr)	Total Allowable Annual PM Emissions (TPY)	PM Significance Level (TPY)	Total Allowable Annual PM10 Emissions (TPY)	PM10 Significance Level (TPY)
Wire Mesh Shot Blast System	1.28	50.16	0.39	0.39	3.44	25	3.44	15

Source Description	Pre-Control Emission Factor (lb PM/lb shot)	Shotblast Recirculation Rate per Unit (lb/hr)
Wire Mesh Shot Blast System	0.000225	174,760

Source Description	Maximum PM Emissions from Shotblast Machines						
	Number of Units	Control Efficiency (%)	Pre-Control Emission (lb PM/hr)	Controlled Emission (lb PM/hr)	Controlled Emission (TPY)	Inlet Grain Loading (gr/cf)	Outlet Grain Loading (gr/cf)
Wire Mesh Shot Blast System	2	99	78.64	0.786	3.44	0.92	0.0092

Source Description	Maximum HAPs Emissions (Manganese)				Maximum HAPs Emissions (Chromium)			
	Shot Composition (%)	Pre-Control Emission (lb/hr)	Controlled Emission (lb/hr)	Allowable Emission (lb/hr)	Shot Composition (%)	Pre-Control Emission (lb/hr)	Controlled Emission (lb/hr)	Allowable Emission (lb/hr)
Wire Mesh Shot Blast System	0.9	0.35	0.0035	0.004	0.25	0.098	0.00098	0.001

* Allowable exhaust grain loading is 0.03 gr/dscf

** Allowable emissions calculated using the following equation:

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

Where E = Allowable emission (lb/hr)

P = Maximum Process Weight Rate (ton/hr)

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Table 5 - Summary of Potential Emissions

UNCONTROLLED POTENTIAL EMISSIONS

Emissions Sources	POLLUTANTS - Tons per Year (TPY)							
	Criteria Pollutants							Total HAPs
	NOx	CO	VOC	PM	PM-10	SOx	Lead	
DC7/DC8				344.45	344.45			1.981
Total Emissions	0.0	0.0	0.0	344.5	344.5	0.0	0.0	1.981
PSD Significance Threshold	40	100	40	25	15	40	0.6	n/ap
Exemption Threshold	< 10	< 25	< 10	< 5	< 5	< 10	< 0.2	< 1 indiv < 2.5 combined
Registration Threshold	< 25	< 100	< 25	< 25	< 25	< 25	< 5	

PROPOSED ALLOWABLE EMISSIONS

Emissions Sources	POLLUTANTS - Tons per Year (TPY)							
	Criteria Pollutants							Total HAPs
	NOx	CO	VOC	PM	PM-10	SOx	Lead	None
DC7/DC8				3.44	3.44			0.020
Total Emissions	0.0	0.0	0.0	3.4	3.4	0.0	0.0	0.020