



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: July 23, 2007
RE: Kamic Corporation / 005-24719-00082
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Registration

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 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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
FN-REGIS.dot 03/23/06



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
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Mr. Rick Minor
Kamic Corporation
6345 South Inwood Drive
Columbus, IN 47201

July 23, 2007

Re: Registered Operation Status,
005-24719-00082

Dear Mr. Minor:

The application from Kamic Corporation, received on May 2, 2007, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following metal automotive parts manufacturing plant, located at 6345 South Inwood Drive, Columbus, Indiana 47201, is classified as registered:

- (a) Machining/metal fabrication, constructed in 1996, except as noted below, capable of processing a maximum throughput of 3,613 pounds of metal per hour. This operation consists of the following:
 - (1) two (2) cutting machines, identified as 2 Tsune TK5C-100GL;
 - (2) eight (8) lathes identified as Mori-Seki DL-15-01, DL-15-02, DL-15-03, DL-15-04, DL-15-06, DL-15-05, DL-15-07, DL-15-08, constructed in 1997, each with a maximum cutting oil usage rate of 0.04 gallons per hour;
 - (3) three (3) lathes, identified as Muratec MW120 -9, -10, -11, constructed in 2000, each with a maximum cutting oil usage rate of 0.04 gallons per hour;
 - (4) Two (2) CNC lathes, identified as Nomura (2) NN20 -1 and -2, constructed in 2006, with a combined maximum throughput of 723 pounds of metal per hour, each with a maximum cutting oil usage rate of 0.04 gallons per hour
 - (5) four (4) broaches, identified as Sanjo 3096 3, 3096 4, 3093 5, and 3093 6;
 - (6) one (1) burnishing machine, identified as KJK Ball Burnisher;
 - (7) four (4) centerless grinders, identified as Micron Grinder #1 Model 1116, Grinder #2 Model 1104, Grinder #3 1093, and Grinder #4 Model MPC600-4W-15-D, constructed in 2005; and
 - (8) one (1) finishing operation, which includes a metal coating line for rust prevention.
- (b) One (1) electric tempering furnace, constructed in 1996, identified as TF-1, with a heat input capacity of 2.04 mmBtu/hr;

- (c) Three (3) electric tempering furnaces, constructed in 2002, each with a heat input capacity of 2.04 MMBtu/hr, identified as TF-02, TF-03, and TF-04, venting to stacks ST-02, ST-03 and ST-04, respectively;
- (d) Two (2) natural gas-fired carburizing furnaces, constructed in 1996, each with a heat input of 2.036 mmBtu/hr;
- (e) Four (4) natural gas fired carburizing furnaces, constructed in 2002, each with a heat input rate of 2.036 MMBtu/hr each, identified as CF-03, CF-04, CF-05, and CF-06, venting to stacks SF-03, SF-04, SF-05, and SF-06, respectively;
- (f) One (1) natural gas fired carburizing furnace, identified as CF-07, constructed in 2006, with a heat input rate of 2.036 MMBtu/hr, venting to SF-07;
- (g) Natural gas-fired HVAC units, with a combined heat input rate of 2.5 million British Thermal Units per hour (mmBtu/hr);
- (h) One washer, constructed in 1997, with a 1.06 mmBtu/hr natural gas-fired furnace;
- (i) One endothermic gas generator, constructed in 1997, with a gas flow rate of 38 cubic meter per hour (m^3/hr), which involves the following:
 - (1) Carburizing process with a maximum gas flow rate of $18 m^3/hr$, and
 - (2) Carbonitriding process with a maximum gas flow rate of $18 m^3/hr$.
- (j) Two (2) electric induction hardening furnaces, constructed in 2002, each with a heat input capacity of 2.04 MMBtu/hr, identified as HF-1 and HF-2, venting to stack SHF-1 and SHF-2, respectively; and
- (k) One (1) high temperature batch tempering process, constructed in 2002, identified as HTP-1, with a heat input capacity of 2.04 MMBtu/hr and a maximum capacity of 480 pounds of metal per hour, venting to stack HTP-1.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:
 - (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 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.
2. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).
3. Pursuant to 326 IAC 8-3-2 (Cold cleaner operation), The owner or operator of a cold cleaning facility shall:
 - (a) Equip the cleaner with a cover;

- (b) Equip the cleaner with a facility for draining cleaned parts;
 - (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
 - (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (e) Provide a permanent, conspicuous label summarizing the operation requirements;
 - (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.
4. Pursuant to 326 IAC 8-3-5 (Organic Solvent Degreasing Operations)
- (a) The owner or operator of the cold cleaner degreaser shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) the solvent is agitated; or
 - (C) the solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

- (b) The owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.
5. Any change or modification which may increase the actual emissions of VOC from the rust coating of metal parts to fifteen (15) pounds per day or greater before controls shall be subject to 326 IAC 8-2-9 (Miscellaneous Metal Coating) and must be approved by the Office of Air Quality before any such change may occur.

6. Pursuant to 326 IAC 2-1.1-11 (General Provisions; Compliance Requirements):

- (a) No more than 180 days after issuance of this Registration, the Permittee shall perform VOC, PM and PM10 testing for the high temperature batch tempering process, HTP-1, utilizing methods as approved by the Commissioner.
- (b) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing 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 permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Pursuant to 326 IAC 3-6-4(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 IDEM, OAQ if the Permittee 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.
7. Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking facilities shall not exceed 1.57 pounds per hour when operating at a process weight rate of 480 pounds per hour.

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

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

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

where E = rate of emission in pounds per hour;
and P = process weight rate in tons per hour

This is a Registration issued to this source, pursuant to 326 IAC 2-5.5. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Data Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely/Original Signed By:

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

JH/EVP

cc: File - Bartholomew County
Bartholomew County Health Department
Air Compliance - Vaughn Ison
Permit Tracking
Compliance Data Section

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	Kamic Corporation
Address:	6345 South Inwood Drive,
City:	Columbus, Indiana 47201
Phone #:	(812) 342-8000
Registration #:	005-24719-00082

Certification by the Authorized Individual
I hereby certify that Kamic Corporation, Seals Division is still in operation and is in compliance with the requirements of Registration 005-24719-00082.
Name (typed):
Title:
Signature:
Date:

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

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Kamic Corporation
Source Location:	6345 South Inwood Drive, Columbus IN 47201
County:	Bartholomew
SIC Code:	3714
Registration No.:	R005-24719-00082
Permit Reviewer:	Julia Handley/EVP

The Office of Air Quality (OAQ) has reviewed an application from Kamic Corporation relating to the operation of an existing stationary metal automotive parts manufacturing plant.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) Machining/metal fabrication, constructed in 1996, except as noted below, capable of processing a maximum throughput of 3,616 pounds of metal per hour. This operation consists of the following:
 - (1) two (2) cutting machines, identified as 2 Tsune TK5C-100GL;
 - (2) eight (8) lathes identified as Mori-Seki DL-15-01, DL-15-02, DL-15-03, DL-15-04, DL-15-06, DL-15-05, DL-15-07, DL-15-08, constructed in 1997, each with a maximum cutting oil usage rate of 0.04 gallons per hour;
 - (3) three (3) lathes, identified as Muratec MW120 -9, -10, -11, constructed in 2000, each with a maximum cutting oil usage rate of 0.04 gallons per hour;
 - (4) four (4) broaches, identified as Sanjo 3096 3, 3096 4, 3093 5, and 3093 6;
 - (5) one (1) burnishing machine, identified as KJK Ball Burnisher;
 - (6) four (4) centerless grinders, identified as Micron Grinder #1 Model 1116, Grinder #2 Model 1104, Grinder #3 1093, and Grinder #4 Model MPC600-4W-15-D, constructed in 2005; and
 - (7) one (1) finishing operation, which includes a metal coating line for rust prevention.
- (b) One (1) electric tempering furnace, constructed in 1996, identified as TF-1, with a heat input capacity of 2.04 mmBtu/hr;
- (c) Two (2) natural gas-fired carburizing furnaces, constructed in 1996, each with a heat input of 2.036 mmBtu/hr;
- (d) Natural gas-fired HVAC units, with a combined heat input rate of 2.5 million British Thermal Units per hour (mmBtu/hr);

- (e) One washer, constructed in 1997, with a 1.06 mmBtu/hr natural gas-fired furnace;
- (f) One endothermic gas generator, constructed in 1997, with a gas flow rate of 38 cubic meter per hour (m^3/hr), which involves the following:
 - (1) Carborizing process with a maximum gas flow rate of $18 m^3/hr$, and
 - (2) Carbonitriding process with a maximum gas flow rate of $18 m^3/hr$.

Emission Units and Pollution Control Equipment Constructed and Operated without a Permit

The source also consists of the following emission units that were constructed and are operating without a permit:

- (a) One (1) high temperature batch tempering process, constructed in 2002, identified as HTP-1, with a heat input capacity of 2.04 MMBtu/hr and a maximum capacity of 480 pounds of metal per hour, venting to stack HTP-1.

The source also consists of the following new emission units and pollution control devices that qualify as exempt, pursuant to 326 IAC 2-1.1-3:

- (b) Three (3) electric tempering furnaces, constructed in 2002, each with a heat input capacity of 2.04 MMBtu/hr, identified as TF-02, TF-03, and TF-04, venting to stacks ST-02, ST-03 and ST-04, respectively;
- (c) Four (4) natural gas fired carburizing furnaces, constructed in 2002, each with a heat input rate of 2.036 MMBtu/hr each, identified as CF-03, CF-04, CF-05, and CF-06, venting to stacks SF-03, SF-04, SF-05, and SF-06, respectively;
- (d) One (1) natural gas fired carburizing furnace, identified as CF-07, constructed in 2006, with a heat input rate of 2.036 MMBtu/hr, venting to SF-07;
- (e) Two (2) electric induction hardening furnaces, constructed in 2002, each with a heat input capacity of 2.04 MMBtu/hr, identified as HF-1 and HF-2, venting to stack SHF-1 and SHF-2, respectively; and
- (f) Two (2) CNC lathes, identified as Nomura (2) NN20 -1 and -2, constructed in 2006, with a combined maximum throughput of 723 pounds of metal per hour, each with a maximum cutting oil usage rate of 0.04 gallons per hour.
Note: the addition of these lathes increased the maximum throughput to the machining/metal fabrication operations from 2,893 to 3,616 pounds of metal per hour

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Exemption No. 005-13788-00082 issued on May 2, 2001.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled "Emission Units and Pollution Control Equipment Constructed and Operated without a Permit".

- (a) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
SHF-1	HF-1	45	1	5,500	250
SHF-2	HF-2	45	1	5,500	250
ST-2	TF-3	45	1	5,500	250
ST-3	TF-3	45	1	5,500	250
ST-4	TF-4	45	1	5,500	250
SF-3	CF-3	45	1	5,500	400
SF-4	CF-4	45	1	5,500	400
SF-5	CF-5	45	1	5,500	400
SF-6	CF-6	45	1	5,500	400
SF-7	CF-7	45	1	5,500	400
HTP-1	HTP-1	45	1	5,500	250

Recommendation

The staff recommends to the Commissioner that the operation 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.

A complete application for the purposes of this review was received on May 2, 2007.

Emission Calculations

See Appendix A, pages 1 through 4, of this document for detailed emission calculations.

Potential to Emit of the Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit 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, the department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/yr)
PM	1.92
PM ₁₀	2.32
SO ₂	0.05
VOC	19.14
CO	11.03
NO _x	7.80

HAPs	Potential to Emit (tons/yr)
Hexane	0.14
Diethanolamine	1.33
Total	1.90

Note: The potential to emit of this source includes the potential to emit of the existing units permitted in Exemption No. 005-13788-00082, issued May 2, 2001, and the new units added as part of this Registration.

- (a) The potential to emit of all criteria pollutants are less than 25 tons per year and the potential to emit of VOC is greater than levels listed in 326 IAC 2-1.1-3(e) (Exemptions). Therefore, the source is subject to the provisions of 326 IAC 2-5.5 (Registrations). A registration will be issued.
- (b) The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

County Attainment Status

The source is located in Bartholomew County.

Pollutant	Status
PM ₁₀	Attainment
PM _{2.5}	Attainment
SO ₂	Attainment
NO _x	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Bartholomew County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions. See the State Rule Applicability – Entire Source section.

- (b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx emissions are considered when evaluating the rule applicability relating to ozone. Bartholomew County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (c) Bartholomew County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

Source Status

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

Pollutant	Emissions (tons/yr)
PM	0.08
PM ₁₀	0.08
SO ₂	0.02
VOC	9.50
CO	7.01
NO _x	4.23
Single HAP	0.41
Combination HAPs	0.41

- (a) This existing source is not a major stationary source under 326 IAC 2-2 (PSD), because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) These emissions were based on the potential to emit of the existing units from the TSD for Exemption No. 005-13788-00082.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this Registration No. 005-24719-00082, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This status is based on all the air approvals issued to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this Registration for this source.
- (b) The parts washing operating is not subject to the requirements of National Emission Standards for Hazardous Air Pollutants Halogenated Solvent Cleaning (40 CFR 63.460, Subpart T), because it does not use any halogenated solvents. Therefore, the requirements of this rule have not been included in the permit.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in this Registration for this source.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The source was constructed in 1995 and modified in 2001 and 2002. The source is not in 1 of 28 source categories defined in 326 IAC 2-2-1(gg)(1) and the potential to emit of all criteria pollutants is less than 250 tons per year. Therefore, 326 IAC 2-2 (PSD) does not apply.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake or Porter counties, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this automotive parts manufacturing operation will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 5-1 (Opacity Limitations)

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

- (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.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

State Rule Applicability – Individual Facilities

326 IAC 8-2-9 (Miscellaneous Metal Coating)

326 IAC 8-2-9 is not applicable to machining/metal fabricating process because the materials (Yumate SC-820, Yumate S-83, Shell Tonna Oil T68, Yuman UB-65N) being applied in the machining/metal fabrication process are not coatings. They do not leave any film on the substrate. "Coating" means the application of protective, functional or decorative films. Rustcoat is the only coating used in the machining/metal fabrication. It is not subject to 326 IAC 8-2-9, because it does not have actual VOC emissions of 15 pounds per day or greater before add-on control.

326 IAC 8-3-2 (Cold cleaner operation)

Pursuant to 326 IAC 8-3-1(a)(2), the parts washer, is subject to the requirements of 326 IAC 8-3-2 (Cold cleaner operation) since it was constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2 the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Organic Solvent Degreasing Operations)

Pursuant to 326 IAC 8-3-1(b)(2), 326 IAC 8-3-5 applies to the cold cleaner degreaser without remote solvent reservoir constructed after July 1, 1990 located any county.

"Cold cleaner degreaser" means a tank containing organic solvent at a temperature below the boiling point of the solvent which is used to spray, brush or immerse an article for the purpose of cleaning or degreasing the article.

Kamic Corporation parts washer/degreaser is maintained at 90°C, which is below 100°C, the boiling point of the solvent used. Therefore, it is a cold cleaner degreaser and is subject 326 IAC 8-3-5:

- (a) The owner or operator of the cold cleaner degreaser shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) the solvent is agitated; or
 - (C) the solvent is heated.

- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{EC}) (one hundred degrees Fahrenheit (100^{EF})), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{EC}) (one hundred degrees Fahrenheit (100^{EF})), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{EC}) (one hundred twenty degrees Fahrenheit (120^{EF})):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) The owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

326 IAC 8-3 is not applicable to the parts washer/degreaser when it is used to clean parts prior to heat treatment, because the liquid being used does not contain VOC.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the high temperature batch tempering process, HTP-1, shall not exceed 1.57 pounds per hour when operating at a process weight rate of 480 pounds per hour. The pound per hour limitation was calculated with the following equation:

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

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

The machining/metal fabrication operations are not subject to the requirements of 326 IAC 6-3-2 because they have no potential PM emissions.

326 IAC 2-1.1-11 (General Provisions; Compliance Requirements):

Pursuant to 326 IAC 2-1.1-11(General Provisions; Compliance Requirements), no more than 180 days after issuance of this Registration, the Permittee shall perform VOC, PM and PM10 testing for high temperature batch tempering process, HTP-1, utilizing methods as approved by the Commissioner.

Testing Requirements

The Permittee shall perform VOC, PM, and PM10 testing at stack HTP-1 to confirm the VOC, PM, and PM10 emission factors for the high temperature batch tempering process, HTP-1.

Conclusion

The operation of this metal automotive parts manufacturing plant shall be subject to the conditions of the Registration No. 005-24719-00082.

**Appendix A: Emission Calculations
Summary**

Company Name: Kamic Corporation
Address City IN Zip: 6345 South Inwood Drive, Columbus IN 47201
Permit Number: R005-24719-00082
Permit Reviewer: JH/EVP

Uncontrolled Potential Emissions (tons/year)

Emissions Generating Activity						
Pollutant	High Temperature Tempering Process HTP-1	Machining & Metal Fabrication	Parts Washer	Endothermic Generator	Natural Gas Combustion	TOTAL
PM	1.79	0.00	0.00	0.00	0.15	1.94
PM10	1.79	0.00	0.00	0.00	0.59	2.38
SO2	0.00	0.00	0.00	0.00	0.05	0.05
NOx	0.00	0.00	0.00	0.00	7.80	7.80
VOC	6.89	11.78	0.04	0.00	0.43	19.14
CO	1.00	0.00	0.00	3.47	6.55	11.03
total HAPs	0.00	1.33	0.00	0.00	0.15	1.47
worst case single HAP	0.00	1.33	0.00	0.00	0.14	0.00

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

**Appendix A: Emission Calculations
High Temperature Batch Tempering Process HTP-1**

Company Name: Kamic Corporation
Address City IN Zip: 6345 South Inwood Drive, Columbus IN 47201
Permit Number: R005-24719-00082
Reviewer: JH/EVP

lbs VOC/lb metal

0.0033

lbs PM/lb metal

0.0009

PTE from Tempering Oven

Maximum Hours per year of Operation	8760		
Maximum lbs metal per year	4,204,800.00		
Maximum VOC Emissions per year (tons)	6.89		Maximum PM Emissions per year (tons) 1.79

Note:

The typical tempering process has no emissions. There is a high temperature tempering process specific to a set of parts that are required by customers. This high temperature process heats parts up to a temperature that drives the quench oils out of the pores of the parts in both particulate and VOC form (no HAP's). This batch process is run twice a day, with each batch lasting approximately 2 hrs. A stack test was performed on this process to characterize emissions.

VOC and PM/PM10 emission factors from stack test performed January 14, 2005 and assuming that the operation can operate 24 hours per day instead of only about 4 hours per day.

Methodology:

Maximum lbs metal per year = 480 lbs/hr (max capacity)*8760 hours per year

Maximum Pollutant emissions per year = (maximum lbs metal per year*lbs Pollutant/lb metal)/2000 lbs/ton

Appendix A: Emission Calculations
Machining/metal fabrication operations and Parts Washing

Company Name: Kamic Corporation
Address City IN Zip: 6345 South Inwood Drive, Columbus IN 47201
Permit Number: R005-24719-00082
Reviewer: JH/EVP

The addition of two CNC Lathes with a combined maximum throughput of 723 pounds of metal per hour will increase the maximum capacity of the Machining/metal fabrication operations from 2,893 pounds of metal per hour to 3,616 pounds of metal per hour.

Machining/metal fabrication operations Emission calculations based on 3,616 pounds of metal per hour

Operation	Material Name	Usage Rate (gal/hr)	Usage Rate (gal/yr)	Density (lb/gal)	VOC Weight Percent (%)	HAP (Diethanolamine) Weight Percent (%)	Percent (%) Flash Off	VOC Emissions (tons/yr)	HAP Emissions (tons/year)
Burnishing and CNC lathes	Yumate SC-820	0.43	3766.8	8.92	35.0%	0.00%	100.00%	5.88	0.00
Broaching and Cutting	Yuman UN-65N	0.5	4380	No VOC or HAP				0.00	0.00
Centerless Grinding	Yumate S-83	0.11	990.756	8.92	45.0%	30.00%	100.00%	1.99	1.33
CNC Lathe and Grinding	Shell Tonna Oil T68	0.37	3241.2	No VOC or HAP				0.00	0.00
Finishing	Rustcoat 310	0.25	2172.48	7.2	50.0%	0.00%	100.00%	3.91	0.00
Total Emission based on 3,616 pounds of metal per hour								11.78	1.33
Total Emissions based on metal parts process rate of 2,893 lbs/hr (from Exemption 005-13788-0082)								9.35	0.41
Increase in Emissions								2.43	0.92

Note:

1. The % Flash off of the cutting oil depends upon its consistency. Although there is a recovery made to the cutting oil (Yumate SC-820 & S-83), and a certain % of the VOC may be bound (didn't flash off) in the recovered oil, the worst case flash off of 100% will be assumed.
2. Diethanolamine is the only HAP being emitted by the source.
3. Material usage based on information submitted by the source.
4. Aqueous cutting coolant continuously floods the machining interface in the machining operations, resulting in negligible PM/PM10 emissions.

**Appendix A: Emission Calculations
Endothermic Generator,
Parts Washing/Degreasing Process**

Company Name: Kamic Corporation
Address City IN Zip: 6345 South Inwood Drive, Columbus IN 47201
Permit Number: R005-24719-00082
Reviewer: JH/EVP

Operation	Usage Rate (gal/hr)	Usage Rate (gal/yr)	Density (lb/gal)	VOC Weight Percent (%)	HAP (Diethanolamine) Weight Percent (%)	Percent (%) Flash Off	VOC Emissions (tons/yr)	HAP Emissions (tons/year)
Parts Washing	0.04	324	1.05	25.0%	0.00%	100.00%	0.04	0.00

Emission Parts Washing/Degreasing Process from Exemption No. 005-13768-00082.

**Appendix A: Emission Calculations
Endothermic Generator,
Carborizing and Carbonitriding Processes**

Company Name: Kamic Corporation
Address City IN Zip: 6345 South Inwood Drive, Columbus IN 47201
Permit Number: R005-24719-00082
Reviewer: JH/EVP

Source	Gas Flow (m ³ /hr)	Mol CO/Mol Gas	FT ³ /m ³	CO Density (lb/ft ³)	CO loading (lb/hr)	CO Emissions (lb/hr)	CO Emissions (ton/year)
Endothermic Gas Generator	38	0.205	35.31	0.074	20.35	0.41	1.78
Carborizing Process	18	0.205	35.31	0.074	9.64	0.19	0.84
Carbonitriding Process	18	0.205	35.31	0.074	9.64	0.19	0.84
					Total	0.79	3.47

Emission Calculations for Endothermic Generator, Carborizing and Carbonitriding Processes from Exemption No. 005-13768-00082.
 Note: Endothermic - involves the absorption of heat that destroys 98% CO.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

Company Name: Kamic Corporation
Address City IN Zip: 6345 South Inwood Drive, Columbus IN 47201
Permit Number: R005-24719-00082
Reviewer: JH/EVP

**Heat Input Capacity
MMBtu/hr**

7 Furnace @ 2.036 MMBTU Each
 HVAC units @ 2.5 MMBtu/hr
 Degreaser Furnace @ 1.06 MMBtu/hr

17.812

**Potential Throughput
MMCF/yr**

156.033

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.15	0.59	0.05	7.80	0.43	6.55

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

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 are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 Small Boilers
 HAPs Emissions**

Company Name: Kamic Corporation
Address City IN Zip: Sec 7 T8N R9W, Sullivan County, IN
Permit Number: R005-24719-00082
Reviewer: JH/EVP

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	1.638E-04	9.362E-05	5.851E-03	0.14	2.653E-04

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	3.901E-05	8.582E-05	1.092E-04	2.965E-05	1.638E-04

Total HAPs 0.15 tons per year

Methodology is the same as previous page.

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: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 Small Boilers
 HAPs Emissions**

Company Name: Kamic Corporation
Address City IN Zip: Sec 7 T8N R9W, Sullivan County, IN
Permit Number: R005-24719-00082
Reviewer: JH/EVP

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	1.638E-04	9.362E-05	5.851E-03	0.14	2.653E-04

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	3.901E-05	8.582E-05	1.092E-04	2.965E-05	1.638E-04

Total HAPs 0.15 tons per year

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.