



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: March 25, 2009

RE: NTK Precision Axle Corporation / 023-27165-00038

FROM: Matthew Stuckey, Branch 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, Suite N 501E, 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.dot12/03/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

## Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**NTK Precision Axle Corporation  
741 South County Road 200 West  
Frankfort, Indiana 46041**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

Operation Permit No.: M023-27165-00038	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: March 25, 2009  Expiration Date: March 25, 2019

## TABLE OF CONTENTS

<b>A. SOURCE SUMMARY.....</b>	<b>4</b>
A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]	
A.2 Emission Units and Pollution Control Equipment Summary	
<b>B. GENERAL CONDITIONS .....</b>	<b>6</b>
B.1 Definitions [326 IAC 2-1.1-1]	
B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]	
B.3 Term of Conditions [326 IAC 2-1.1-9.5]	
B.4 Enforceability	
B.5 Severability	
B.6 Property Rights or Exclusive Privilege	
B.7 Duty to Provide Information	
B.8 Certification	
B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]	
B.10 Preventive Maintenance Plan [326 IAC 1-6-3]	
B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]	
B.13 Permit Renewal [326 IAC 2-6.1-7]	
B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]	
B.15 Source Modification Requirement	
B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-17-3-2][IC 13-30-3-1]	
B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]	
B.18 Annual Fee Payment [326 IAC 2-1.1-7]	
B.19 Credible Evidence [326 IAC 1-1-6]	
<b>C. SOURCE OPERATION CONDITIONS .....</b>	<b>11</b>
<b>Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]</b>	
C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]	
C.2 Permit Revocation [326 IAC 2-1.1-9]	
C.3 Opacity [326 IAC 5-1]	
C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.6 Fugitive Dust Emissions [326 IAC 6-4]	
C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
<b>Testing Requirements [326 IAC 2-6.1-5(a)(2)]</b>	
C.8 Performance Testing [326 IAC 3-6]	
<b>Compliance Requirements [326 IAC 2-1.1-11]</b>	
C.9 Compliance Requirements [326 IAC 2-1.1-11]	
<b>Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]</b>	
C.10 Compliance Monitoring [326 IAC 2-1.1-11]	
C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]	
C.12 Instrument Specifications [326 IAC 2-1.1-11]	
<b>Corrective Actions and Response Steps</b>	
C.13 Response to Excursions or Exceedances	
C.14 Actions Related to Noncompliance Demonstrated by a Stack Test	

**Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]**

- C.15 Malfunctions Report [326 IAC 1-6-2]
- C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]
- C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2][IC 13-14-1-13]

**D.1. EMISSIONS UNIT OPERATION CONDITIONS - Production Lines..... 17**

**Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]**

- D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
- D.1.2 VOC Clean-up requirements [326 IAC 8-2-9]

**Compliance Determination Requirements**

- D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-2][326 IAC 8-1-4]

**Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]**

- D.1.4 Record Keeping Requirements

**D.2. EMISSIONS UNIT OPERATION CONDITIONS - Cold Cleaners..... 20**

**Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]**

- D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
- D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

**D.3. EMISSIONS UNIT OPERATION CONDITIONS - Boiler ..... 22**

**Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]**

- D.3.1 Particulate [326 IAC 6-2-4]

Certification ..... 23  
Annual Notification ..... 24  
Malfunction Report ..... 25

## SECTION A SOURCE SUMMARY

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

### A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

---

The Permittee owns and operates a stationary automotive components manufacturing plant.

Source Address:	741 South County Road 200 West, Frankfort, IN 46041
Mailing Address:	741 South County Road 200 West, Frankfort, IN 46041
General Source Phone Number:	(765) 656-1026
SIC Code:	3714
County Location:	Clinton
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary

---

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

- (a) Metal Hub ring manufacturing operations consisting of:
- (1) Two (2) metal hub ring turning facilities (identified as EU-01 and EU-03), with particulates controlled via wet turning, using a maximum of 7,817 gallons of VOC-containing coating material per year.
  - (2) One (1) induction heat treatment facility (identified as EU-02), using a maximum of 3,152 gallons of VOC-containing coating material per year, and exhausting to Stacks EP-01 through 18, and EP-35 through EP-52.
  - (3) One (1) broaching facility (identified as EU-04), with particulates controlled via wet broaching, using a maximum of 9,360 gallons of VOC-containing coating material per year.
  - (4) One (1) rust proofing facility (identified as EU-05), using a maximum of 4,032 gallons of VOC-containing coating material per year.
- (b) Metal Shaft manufacturing operations consisting of:
- (1) One (1) sawing facility (identified as EU-06), with particulates controlled via wet sawing, using a maximum of 1,575 gallons per year.
  - (2) One (1) CVJ shaft turning and spline facility (identified as EU-07), with particulates controlled via wet turning, using a maximum of 11,040 gallons of coating material per year.
  - (3) One (1) induction heat treatment facility (identified as EU-08), with a maximum throughput rate of 3,960 gallons of non-VOC containing material per year.

- (4) One (1) Parkerizing facility (identified as EU-09), with a maximum throughput rate of 294,000 pounds rust-retardant coating per year, and exhausting at stacks EP-29 and 30.
- (5) One (1) electrodeposition coating line (identified as EU-10), with a maximum throughput rate of 10,689 gallons of coating per year, and exhausting at stacks EP31 through 33.
- (c) Two (2) cold cleaner tanks (identified as EU-13), each with a storage capacity of 78 gallons and maximum solvent consumption of 0.50 gallons per day. These units are used for facility maintenance purposes.
- (d) One (1) degreaser tank used in conjunction with the Parkerizing facility, with a storage capacity of 78 gallons and maximum consumption of 1.39 gallons of non-VOC containing material per hour.
- (e) One (1) natural gas-fired boiler (identified as EU-11), with a maximum heat input capacity of 1.67 MMBtu per hour and exhausting at Stack EP-34.
- (f) Natural gas-fired combustion units (identified as EU-12), with a total maximum heat input capacity of 11.0 MMBtu per hour.
- (g) One (1) wastewater treatment facility (identified as EU-14).

## SECTION B GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-1.1-1]

---

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

### B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

---

- (a) This permit, M023-27165-00038, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

### B.3 Term of Conditions [326 IAC 2-1.1-9.5]

---

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

### B.4 Enforceability

---

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### B.5 Severability

---

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.6 Property Rights or Exclusive Privilege

---

This permit does not convey any property rights of any sort or any exclusive privilege.

### B.7 Duty to Provide Information

---

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

#### B.8 Certification

---

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

#### B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

---

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

#### B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

---

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

---

- (a) All terms and conditions of permits established prior to M023-27165-00038 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

**B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]**

---

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

**B.13 Permit Renewal [326 IAC 2-6.1-7]**

---

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
  - (1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

**B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]**

---

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

**B.15 Source Modification Requirement**

---

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

**B.16 Inspection and Entry**

[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

---

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

**B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]**

---

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.18 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due within thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.19 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source

### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

#### C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

#### C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

#### C.3 Opacity [326 IAC 5-1]

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, unless otherwise stated in this 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.

#### C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

#### C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

C.6 Fugitive Dust Emissions [326 IAC 6-4]

---

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

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

---

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
- (A) Asbestos removal or demolition start date;
- (B) Removal or demolition contractor; or
- (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three

(3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Demolition and Renovation  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Licensed Asbestos Inspector  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

### **Testing Requirements [326 IAC 2-6.1-5(a)(2)]**

#### **C.8 Performance Testing [326 IAC 3-6]**

---

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing 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 and Enforcement Branch, 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).

- (b) 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).
- (c) 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.

### **Compliance Requirements [326 IAC 2-1.1-11]**

#### **C.9 Compliance Requirements [326 IAC 2-1.1-11]**

---

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

### **Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]**

#### **C.10 Compliance Monitoring [326 IAC 2-1.1-11]**

---

Compliance with applicable requirements shall be documented as required by this permit. The

Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

**C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

---

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

**C.12 Instrument Specifications [326 IAC 2-1.1-11]**

---

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

**Corrective Actions and Response Steps**

**C.13 Response to Excursions or Exceedances**

---

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (e) The Permittee shall maintain the following records:
  - (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

**C.14 Actions Related to Noncompliance Demonstrated by a Stack Test**

---

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]**

**C.15 Malfunctions Report [326 IAC 1-6-2]**

---

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description: Production Lines

- (a) Metal Hub ring manufacturing operations consisting of:
- (1) Two (2) metal hub ring turning facilities (identified as EU-01 and EU-03), with particulates controlled via wet turning, using a maximum of 7,817 gallons of VOC-containing coating material per year.
  - (2) One (1) induction heat treatment facility (identified as EU-02), using a maximum of 3,152 gallons of VOC-containing coating material per year, and exhausting to Stacks EP-01 through 18, and EP-35 through EP-52.
  - (3) One (1) broaching facility (identified as EU-04), with particulates controlled via wet broaching, using a maximum of 9,360 gallons of VOC-containing coating material per year.
  - (4) One (1) rust proofing facility (identified as EU-05), using a maximum of 4,032 gallons of VOC-containing coating material per year.
- (b) Metal Shaft manufacturing operations consisting of:
- (1) One (1) sawing facility (identified as EU-06), with particulates controlled via wet sawing, using a maximum of 1,575 gallons per year.
  - (2) One (1) CVJ shaft turning and spline facility (identified as EU-07), with particulates controlled via wet turning, using a maximum of 11,040 gallons of coating material per year.
  - (3) One (1) induction heat treatment facility (identified as EU-08), with a maximum throughput rate of 3,960 gallons of non-VOC containing material per year.
  - (4) One (1) Parkerizing facility (identified as EU-09), with a maximum throughput rate of 294,000 pounds rust-retardant coating per year, and exhausting at stacks EP-29 and 30.
  - (5) One (1) electrodeposition coating line (identified as EU-10), with a maximum throughput rate of 10,689 gallons of coating per year, and exhausting at stacks EP31 through 33.

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

### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9, the Permittee shall not allow the discharge into the atmosphere of VOC in excess of three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator, for extreme performance coatings. Therefore, the surface coating lines at this source shall each be limited to three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

#### D.1.2 VOC Clean-up Requirements [326 IAC 8-2-9]

---

Pursuant to 326 IAC 8-2-9(f), all solvents sprayed from the application equipment of the surface coating facilities during cleanup or color changes shall be directed into containers. Said containers shall be closed as soon as the solvent spraying is complete. In addition, all waste solvent shall be disposed of in such a manner that minimizes evaporation.

### Compliance Determination Requirements

#### D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-1-4]

---

In order to comply with Condition D.1.1, surface coating operations performed by the hub ring turning (EU-01, EU-03), broaching (EU-04), induction heat treatment (EU-02), rust proofing (EU-05), sawing (EU-06), CVJ Shaft turning (EU-07), electrodeposition coating (EU-10), and Parkerizing (EU-09) operations shall use either compliant coatings or, when non-compliant coatings are used, the daily volume-weighted average VOC content.

- (a) When compliant coatings are used, the VOC content shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer copies of "as supplied" and "as applied" VOC data sheets.
- (b) When non-compliant coatings are used, the daily volume-weighted average VOC content shall be calculated pursuant to 326 IAC 8-1-2(a)(7), using the following equation:

Where:

$$A = \left( \sum C \times U \right) / \left( \sum U \right)$$

A = Volume weighted average (pounds VOC/gallon, less water as applied);

C = VOC content of the coating (pounds VOC/gallon, less water as applied); and

U = Usage rate of the coating (gallons/day).

IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

### Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

#### D.1.4 Record Keeping Requirement

---

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.1.1.
  - (1) The VOC content of each coating material and solvent used less water.
  - (2) The amount of coating material and solvent used on monthly basis.
    - (A) Records shall include purchase orders, invoices, calculations, and material safety data sheets (MSDS) necessary to verify the type and amount used.
    - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description: Cold Cleaners

- (c) Two (2) cold cleaner tanks (identified as EU-13), each with a storage capacity of 78 gallons and maximum solvent consumption of 0.50 gallons per day. These units are used for facility maintenance purposes.

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

### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

#### D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, 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.

#### D.2.2 VOC Clean-up Requirements [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee 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 is 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) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), for cold cleaning facility construction of which commenced after July 1, 1990, the Permittee 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.

## SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description: Boiler

- (e) One (1) natural gas-fired boiler (identified as EU-11), with a maximum heat input capacity of 1.67 MMBtu per hour and exhausting at Stack EP-34.

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

### Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

#### D.3.1 Particulate [326 IAC 6-2-4]

---

Pursuant to 326 IAC 6-2-4 (a) (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the 1.67 MMBtu per hour natural gas-fired boiler (identified as EU-11) shall not exceed 0.60 pounds of particulate matter per million British thermal units heat input (lbs per MMBtu heat input).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH

# MINOR SOURCE OPERATING PERMIT (MSOP) CERTIFICATION

Source Name: NTK Precision Axle Corporation  
Source Address: 741 South County Road 200 West, Frankfort, IN 46041  
Mailing Address: 741 South County Road 200 West, Frankfort, IN 46041  
MSOP No.: M023-27165-00038

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)\_\_\_\_\_
- Report (specify)\_\_\_\_\_
- Notification (specify)\_\_\_\_\_
- Affidavit (specify)\_\_\_\_\_
- Other (specify)\_\_\_\_\_

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

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH

# MINOR SOURCE OPERATING PERMIT (MSOP) ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

<b>Company Name:</b>	NTK Precision Axle Corporation
<b>Address:</b>	741 South County Road 200 West
<b>City:</b>	Frankfort, Indiana 46041
<b>Phone #:</b>	(765) 656-1026
<b>MSOP #:</b>	M023-27165-00038

I hereby certify that NTK Precision Axle Corporation is :  still in operation.  
 no longer in operation.

I hereby certify that NTK Precision Axle Corporation is :  in compliance with the requirements of MSOP M023-27165-00038.  
 not in compliance with the requirements of MSOP M023-27165-00038.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<b>Noncompliance:</b>

# MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
FAX NUMBER: (317) 233-6865

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES?\_\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_\_, 100 TONS/YEAR CARBON MONOXIDE ?\_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?\_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?\_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: \_\_\_\_\_ PHONE NO. ( ) \_\_\_\_\_  
LOCATION: (CITY AND COUNTY) \_\_\_\_\_  
PERMIT NO. M023-27165-00038 AFS PLANT ID: 023-00038 AFS POINT ID: \_\_\_\_\_ INSP: \_\_\_\_\_  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/20\_\_\_\_ \_\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/20\_\_\_\_ \_\_\_\_\_ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_

INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

\*SEE PAGE 2

**Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

---

---

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

Addendum to the Technical Support Document (ATSD) for a  
Minor State Operating Permit (MSOP)

**Source Background and Description**

Source Name: NTK Precision Axle Corporation  
Source Location: 741 South County Road 200 West, Frankfort, IN 46041  
County: Clinton  
SIC Code: 3714  
Operation Permit No.: M023-27165-00038  
Permit Reviewer: Sandra Carr

On February 21, 2009, the Office of Air Quality (OAQ) had a notice published in The Times, Inc., Frankfort, Indiana, stating that NTK Precision Axle Corporation had applied for a renewal of their Minor Source Operating Permit (MSOP), issued on June 10, 2004. The notice also stated that the OAQ proposed to issue a renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

**Comments and Responses**

No comments were received during the public notice period.

**Additional Changes**

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. IDEM, OAQ has decided to make additional revisions to the permit as described below, with deleted language as ~~strikeouts~~ and new language **bolded**.

- (a) Several of IDEM's Branches and sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to Permit Administration and Development Section and the Permits Branch have been changed to Permit Administration and Support Section. References to Asbestos Section, Compliance Data Section, Air Compliance Section, and Compliance Branch have been changed to Compliance and Enforcement Branch.

**Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251**

**Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251**

<b>IDEM Contact</b>
---------------------

- (a) Questions regarding this proposed permit can be directed to Sandra Carr at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) (234-5372) or toll free at 1-800-451-6027 extension (45372).
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

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

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal

**Source Background and Description**

Source Name:	NTK Precision Axle Corporation
Source Location:	741 South County Road 200 West, Frankfort, IN 46041
County:	Clinton
SIC Code:	3714
Operation Permit No.:	M023-27165-00038
Permit Reviewer:	Sandra Carr

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from NTK Precision Axle Corporation relating to the continued operation of an existing stationary automotive metal components manufacturing plant.

**History**

On November 19, 2008, NTK Precision Axle Corporation submitted an application to the OAQ requesting to renew its operating permit. NTK Precision Axle Corporation was issued a MSOP on June 10, 2004. On July 26, 2007, NTK was issued a minor permit revision to add some additional emission units to increase operating capacity.

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission unit(s):

- (a) Metal Hub ring manufacturing operations consisting of:
  - (1) Two (2) metal hub ring turning facilities (identified as EU-01 and EU-03), with particulates controlled via wet turning, using a maximum of 7,817 gallons of VOC-containing coating material per year.
  - (2) One (1) induction heat treatment facility (identified as EU-02), using a maximum of 3,152 gallons of VOC-containing coating material per year, and exhausting to Stacks EP-01 through 18, and EP-35 through EP-52.
  - (3) One (1) broaching facility (identified as EU-04), with particulates controlled via wet broaching, using a maximum of 9,360 gallons of VOC-containing coating material per year.
  - (4) One (1) rust proofing facility (identified as EU-05), using a maximum of 4,032 gallons of VOC-containing coating material per year.
- (b) Metal Shaft manufacturing operations consisting of:
  - (1) One (1) sawing facility (identified as EU-06), with particulates controlled via wet sawing, using a maximum of 1,575 gallons per year.
  - (2) One (1) CVJ shaft turning and spline facility (identified as EU-07), with particulates controlled via wet turning, using a maximum of 11,040 gallons of coating material per year.

- (3) One (1) induction heat treatment facility (identified as EU-08), with a maximum throughput rate of 3,960 gallons of non-VOC containing material per year.
- (4) One (1) Parkerizing facility (identified as EU-09), with a maximum throughput rate of 294,000 pounds rust-retardant coating per year, and exhausting at stacks EP-29 and 30.
- (5) One (1) electrodeposition coating line (identified as EU-10), with a maximum throughput rate of 10,689 gallons of coating per year, and exhausting at stacks EP31 through 33.
- (c) Two (2) cold cleaner tanks (identified as EU-13), each with a storage capacity of 78 gallons and maximum solvent consumption of 0.50 gallons per day. These units are used for facility maintenance purposes.
- (d) One (1) degreaser tank used in conjunction with the Parkerizing facility, with a storage capacity of 78 gallons and maximum consumption of 1.39 gallons of non-VOC containing material per hour.
- (e) One (1) natural gas-fired boiler (identified as EU-11), with a maximum heat input capacity of 1.67 MMBtu per hour and exhausting at Stack EP-34.
- (f) Natural gas-fired combustion units (identified as EU-12), with a total maximum heat input capacity of 11.0 MMBtu per hour.
- (g) One (1) wastewater treatment facility (identified as EU-14).

### **Existing Approvals**

Since the issuance of the MSOP No. 023-18813-00038 on June 10, 2004, the source has constructed or has been operating under the following approvals as well:

1. Notice-Only Change No. 023-19683-00038, issued on November 12, 2004
2. Minor Permit Revision No. 023-24538-00038, issued on July 26, 2007.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Emission Calculations**

See Appendix A of this document for detailed emission calculations.

### **County Attainment Status**

The source is located in Clinton County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM <sub>2.5</sub> .	

*(Air Pollution Control Board; 326 IAC 1-4-13; filed Dec 26, 2007, 1:43 p.m.: 20080123-IR-326070308FRA)*

(a) Ozone Standards

- (1) 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.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
- (4) 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 and NOx emissions are considered when evaluating the rule applicability relating to ozone. Clinton County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Clinton County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> emissions, and the effective date of these rules was July 15<sup>th</sup>, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants  
 Clinton County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) 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, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

### Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	1.60
PM <sub>10</sub>	1.91
PM <sub>2.5</sub>	1.91
SO <sub>2</sub>	0.03
NO <sub>x</sub>	5.44
VOC	41.0
CO	4.57

HAP	tons/year
Glycol ethers	2.10
Hydrofluoric acid	0.02
Hexane	0.10
Formaldehyde	0.004
<b>Total</b>	<b>2.31</b>

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is still less than one hundred (100) tons per year, however, the PTE of VOC is greater than or equal to twenty-five (25) tons per year. . The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAP is less than twenty-five (25) tons per year.

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.

***Remainder of this page has been intentionally left blank.***

**Potential to Emit After Issuance**

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of MSOP (tons/year)								
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	VOC	CO	Total HAP	Worst Single HAP
Production Lines	-	-	-	-	-	38.80	-	2.20	2.19 (Glycol ethers)
Degreasers	-	-	-	-	-	1.86	-	-	-
Combustion Units (EU 11 and EU 12)	0.10	0.41	0.41	0.03	5.44	0.30	4.57	0.10	0.10 (Hexane)
Paved and Unpaved Roads	1.50	1.50	1.50	-	-	-	-	-	-
<b>Total PTE of Entire Source</b>	<b>1.60</b>	<b>1.91</b>	<b>1.91</b>	<b>0.03</b>	<b>5.44</b>	<b>41.0</b>	<b>4.57</b>	<b>2.31</b>	
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM <sub>10</sub> ), not particulate matter (PM), is considered as a "regulated air pollutant".									

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) 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, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

**Federal Rule Applicability**

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc (326 IAC 12), are not included in the permit, since the 1.67 MMBtu/hr boiler, although constructed after the applicability date of June 9, 1989, has a maximum heat input capacity of less than ten (10) million British thermal units per hour (MMBtu/hr).
- (b) The requirements of the New Source Performance Standard for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60.110b, Subpart Kb (326 IAC 12), are not included in the permit, since the three (3) bulk organic storage tanks each have a maximum capacity of 78 gallons, which is less than the 10,567 gallon minimum specified in the rule.
- (c) There are no other New Source Performance Standards (NSPS)(40 CFR Part 60) included in the permit.

### National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning, 40 CFR 63.460, Subpart T (326 IAC 20-6-1), are not included in the permit, since this source is not a major source of HAPs, and only non-halogenated solvents are used for these operations.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63.3880, Subpart MMMM, (326 IAC 20-80-1), are not included in the permit, this source is not a major source of HAP emissions and does not use 250 gallons (gal) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal parts & products.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63.11169, Subpart HHHHHH, are not included in the permit, since the coatings used at this source are protective or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances and temporary protective coatings, lubricants, or surface preparation materials. These types of materials are specifically excluded from the requirements of this rule under 40 CFR 63.11180.
- (g) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.
- (h) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

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

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

This source is located in Clinton County, is not required to operate under a Part 70 Permit, and does not have the potential to emit greater than or equal to five (5) tons per year of lead. Therefore, this source is subject only to additional information requests under 326 IAC 2-6-5.

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

The operation of NTK Precision Axle Corporation has the potential to emit less than ten (10) tons per year of any individual HAP and less than twenty-five (25) tons per year of any combination of HAP. 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 Exemptions), 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 6-3 (Particulate Emission Limitations for Manufacturing Processes)

The hub ring turning (EU-01, EU-03), broaching (EU-04), induction heat treatment (EU-02), rust proofing (EU-05), sawing (EU-06), CVJ Shaft turning (EU-07), Parkerizing (EU-09), and electrodeposition coating (EU-10) production lines are not subject to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) because each of these facilities utilizes a wet turning, broaching, or sawing process using water-based coolants and oil-based lubricants to control particulate emissions.

326 IAC 8-1-6 (New facilities; general reduction requirements)

Although permitted to construct after January 1, 1980, the hub ring turning (EU-01, EU-03), broaching (EU-04), induction heat treatment (EU-02), rust proofing (EU-05), sawing (EU-06), CVJ Shaft turning (EU-07), Parkerizing (EU-09), and electrodeposition coating (EU-10) production lines are not subject to the provisions of 326 IAC 8-1-6 because each of these facilities have potential VOC emissions less than twenty-five (25) tons per year.

**State Rule Applicability – Boiler**

326 IAC 6-2-4 (Particulate Matter Limitations)

The one (1) natural gas-fired boiler (EU-11), with a maximum capacity of 1.67 million British thermal units per hour (MMBtu/hr) and constructed in 1983, is subject to the particulate matter limitations of 326 IAC 6-2. Pursuant to this rule, particulate emissions from facilities used for indirect heating, which are located in Clinton County, and constructed after September 21, 1983 shall be limited by the following equation: .

$$Pt = \frac{1.09}{Q^{0.26}}$$

where

Pt = Pounds of particulate matter emitted per million Btu (lbs PM/MMBtu) heat input  
Q = total source maximum operating capacity in million Btu per hour (MMBtu/hr) heat input

For Q less than 10 MMBtu/hr, Pt shall not exceed 0.6 pounds PM per million Btu (lbs PM/MMBtu) heat input

For boiler EU-11, constructed in 1983; Q = 1.67 MMBtu/hr.

$$Pt = (1.09)/(1.67^{0.26}) = 0.95 \text{ lbs PM/MMBtu}$$

However, since Q less than 10 MMBtu/hr, Pt = 0.6 lbs PM/MMBtu.

Compliance calculation:

$$(0.41 \text{ tons PM/yr}) * (\text{hr}/1.67 \text{ MMBtu}) * (\text{yr}/8,760 \text{ hrs}) * (2,000 \text{ lbs/ton}) = 0.057 \text{ lbs PM/MMBtu}$$

Actual emission rate for boiler EU-11 is 0.057 lbs PM/MMBtu, which is less than allowable 0.6 lbs PM/MMBtu limit, therefore the boiler will be able to comply with the requirements of 326 IAC 6-2-3 without the use of a control device.

### State Rule Applicability – Manufacturing

#### 326 IAC 8-1-2 (Volatile Organic Compound)

The Permittee shall comply with the emission limitations in 326 IAC 8 as follows:

- (c) Pursuant to 326 IAC 8-1-2(a), the source shall record the manufacturer's product number and the amount of each coating used each day.
- (d) Pursuant to 326 IAC 8-1-2(a)(7), the surface coating operations performed by the hub ring turning (EU-01, EU-03), broaching (EU-04), induction heat treatment (EU-02), rust proofing (EU-05), sawing (EU-06), CVJ Shaft turning (EU-07), electrodeposition coating (EU-10), and Parkerizing (EU-09) operations shall use either compliant coatings or, when non-compliant coatings are used, the daily volume-weighted average VOC content.

The daily volume-weighted VOC content shall be calculated using the following equation:

Where:

$$A = \left( \sum C \times U \right) / \left( \sum U \right)$$

A = Volume weighted average (pounds VOC/gallon, less water as applied);

C = VOC content of the coating (pounds VOC/gallon, less water as applied); and

U = Usage rate of the coating (gallons/day).

#### 326 IAC 8-2-2 (Automobile and Light Duty truck Coating Operations)

This source is not subject to 326 IAC 8-2-2 because the source does not surface coat automobile and/or light duty truck bodies. This source coats automotive components such as hub outer rings used in wheel bearing assemblies and shafts used for constant velocity joints.

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

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of the coatings delivered to the applicator at the surface coating processes at this source shall each be limited to three and five-tenths (3.5) pounds of VOC per gallon of coating less water, for extreme performance coatings..

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the surface coating processes at this source can comply with this requirement using either compliant coatings or the daily volume-weighted average VOC content.

### State Rule Applicability – Cold Cleaning

#### 326 IAC 8-3-2 (Cold Cleaning Operations)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, 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 (Cold Cleaner Degreaser Operation and Control)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee 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 is 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) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), for cold cleaning facility construction of which commenced after July 1, 1990, the Permittee 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.

There are no other 326 IAC 8 Rules that are applicable to the surface coating operations at this source.

326 IAC 12 (New Source Performance Standards)  
See Federal Rule Applicability Section of this TSD.

326 IAC 20 (Hazardous Air Pollutants)  
See Federal Rule Applicability Section of this TSD.

### **Compliance Determination, Monitoring and Testing Requirements**

- (a) IDEM has determined that compliance with the VOC content limits in 326 IAC 8 can be established by using the data contained in the relevant MSDS and through calculations performed by the Permittee. The compliance determination and monitoring requirements applicable to this source are as follows:
  - (1) Compliance shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer copies of "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
  - (2) Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

### **Conclusion and Recommendation**

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on November 19, 2008.

The continued operation of this source shall be subject to the conditions of the attached proposed MSOP No. 023-27165-00038. The staff recommends to the Commissioner that this MSOP be approved.

### **IDEM Contact**

- (a) Questions regarding this proposed permit can be directed to Sandra Carr at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate

Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5372 or toll free at 1-800-451-6027 extension 45372..

- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

**Appendix A: Emissions Calculations  
Summary**

**Company Name:** NTK Precision Axle Corporation

**Address:** 741 South County Road 200 West, Frankfort, Indiana 46401

**MSOP:** 023-27165-00038

**Reviewer:** Sandra Carr

**Date:** January 12, 2009

**Potential to Emit of Entire Source**

<b>Emission Units</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>VOC</b>	<b>CO</b>	<b>Combined HAP</b>
Production Lines (EU-01-EU-07, EU-09-EU-10)	-	-	-	-	-	38.84	-	2.20
Cold Cleaners (EU-13)	-	-	-	-	-	1.86	-	-
Combustion Units (EU 11 and EU 12)	0.10	0.41	0.41	0.03	5.44	0.30	4.57	0.10
Paved and Unpaved Roads *	1.50	1.50	1.50	-	-	-	-	-
<b>TOTAL</b>	<b>1.60</b>	<b>1.91</b>	<b>1.91</b>	<b>0.03</b>	<b>5.44</b>	<b>41.00</b>	<b>4.57</b>	<b>2.31</b>

**Highest Individual HAP = Glycol Ether**

\* PTE of PM/PM<sub>10</sub> from paved and unpaved roads was taken from the Emission Calculations submitted by the source for MSOP permit no. 023-18813-00038 issued 06/10/2004.

**Appendix A: Emissions Calculations  
Production Lines VOC**

**Company Name:** NTK Precision Axle Corporation  
**Address:** 741 South County Road 200 West, Frankfort, Indiana 46401  
**MSOP:** 023-27165-00038  
**Reviewer:** Sandra Carr  
**Date:** January 12, 2009

Compliance

Operation	Emission Unit ID	Material Used	Water (lb water / lb coating)	Density (lb/gal)	Max. Usage		Max. Usage (gal/hour)	Weight % VOC	PTE of VOC (lb/hour)	PTE of VOC (tons/yr)	Pounds VOC / gallon coating less water
					(gallons/yr)	(lbs/yr)					
Hub Ring Turning	EU01, EU03	Ecocool S 725 *		8.31	7,817	64,959	0.89	38.48%	2.85	12.50	3.20
Broaching	EU-04	Ecocut 110		7.51	9,360	70,294	1.07	3.20%	0.26	1.12	0.24
Induction Heat Treatment	EU-02	Renoclean 2762		8.84	3,960	35,006	0.45	18.1%	0.72	3.17	1.60
		Daphane Plastic Quench RP-U *		8.88	3,152	27,990	0.36	9.00%	0.29	1.26	0.80
Rustproofing	EU-05	Rustproofing Material *		8.34	4,032	33,627	0.46	42.0%	1.61	7.06	3.50
Sawing	EU-06	Ecocool S 725		8.31	1,575	13,088	0.18	38.48%	0.58	2.52	3.20
CVJ Shaft Turning and Spline	EU-07	Ecocool S 725		8.31	4,480	37,229	0.51	38.48%	1.63	7.16	3.20
		Spline Rotolube		7.25	6,560	47,560	0.75	3.20%	0.17	0.76	0.23
Parkerizing	EU-09	Parco Cleaner 2053		7.39	12,179	90,000	1.39	0%	0.00	0.0	0.00
		Fixodine M	NA	NA	N/A	4,000	NA	0%	0.00	N/A	N/A
		Parco Lubrite		10.4	1,921	19,998	0.22	0%	0.00	0.0	0.00
Electro-coating	EU-10	Kako Cleaner KC 850		8.58	1,200	10,296	0.14	8.00%	0.10	0.41	0.69
		Globrite 749 ADD (Solid)		NA	-	NA	NA	0.00%	0.00	0.00	N/A
		Globrite 5006 ZP		11.3	267	3,004	0.03	0.00%	0.00	0.00	0.00
		Globrite 745 ADD		10.6	150	1,587	0.02	0.00%	0.00	0.00	0.00
		KG400-F1		11.0	5,250	57,803	0.60	5.00%	0.33	1.45	0.55
		KG400-F2		8.50	3,495	29,708	0.40	5.00%	0.17	0.74	0.43
		20% Acetic Acid (ED Additive)		8.67	380	3,294.60	0.00	25.0%	0.00	0.00	2.17
		Adjustment Medicine E	0	7.51	176	1,322	0.02	100%	0.15	0.66	7.51
Geo-Guard 4008		9.00	147	1,323	0.02	5.00%	0.01	0.03	0.45		
<b>TOTAL</b>										<b>38.84</b>	

\* Baseline material usage contained in MSOP permit no. 023-18813-00038 issued 06/10/2004.

Note: There are no particulate emissions from the above operations.

**METHODOLOGY**

PTE of VOC (lbs/hour) = Density (lb/gal) \* Max. Usage Rate (gal/hour) \* Weight % VOC

PTE of VOC (tons/year) = Density (lb/gal) \* Max. Usage Rate (gal/yr) \* Weight % VOC \* 1 ton/2000 lbs

Pounds of VOC per gallon coating less Water (as applied) = Density (lb/gal) \* Weight % Organics \* 1/ (1-Volume % Water)

**Appendix A: Emissions Calculations  
Production Lines HAP**

**Company Name:** NTK Precision Axle Corporation

**Address:** 741 South County Road 200 West, Frankfort, Indiana 46401

**MSOP:** 023-27165-00038

**Reviewer:** Sandra Carr

**Date:** January 12, 2009

Operation	Emission Unit ID	Material Used	Density (lb/gal)	Max. Usage *		Max. Usage (gal/hour)	Weight % Glycol Ether	Weight % Hydrofluoric Acid	Weight % Manganese Compounds	Weight % Nickel Compounds	PTE of Glycol Ether (tons/year)	PTE of Hydrofluoric Acid (tons/year)	PTE of Mn Compounds (tons/year)	PTE of Ni Compounds (tons/year)
				(gallons/yr)	(lbs/yr)									
Hub Ring Turning	EU01, EU03	Ecocool S 725	8.31	7,817	-	0.89	-	-	-	-	-	-	-	-
Broaching	EU-04	Ecocut 110	7.51	9,360	-	1.07	-	-	-	-	-	-	-	-
Induction Heat Treatment	EU-02	Renoclean 2762	8.84	3,960	-	0.45	-	-	-	-	-	-	-	-
		Daphane Plastic Quench RP-U	8.88	3,152	-	0.36	-	-	-	-	-	-	-	-
Rustproofing	EU-05	Rustproofing Material	8.34	4,032	-	0.46	-	-	-	-	-	-	-	-
Sawing	EU-06	Ecocool S 725	8.31	1,575	-	0.18	-	-	-	-	-	-	-	-
CVJ Shaft Turning and Spline	EU-07	Ecocool S 725	8.31	4,480	-	0.51	-	-	-	-	-	-	-	-
		Spline Rotolube	7.25	6,560	-	0.75	-	-	-	-	-	-	-	-
Parkerizing **	EU-09	Parco Cleaner 2053	7.39	-	90,000	2.03	-	-	-	-	-	-	-	-
		Fixodine M	NA	-	4,000	NA	-	-	50.0%	-	-	-	-	-
		Parco Lubrite	10.4	-	20,000	3.20	-	-	40.0%	1.0%	-	-	-	-
Electro-coating	EU-10	Kako Cleaner KC 850	8.58	1,200	-	0.14	-	-	-	-	-	-	-	-
		Globrite 749 ADD (Solid)	NA	-	1,050	NA	-	-	-	-	-	-	-	-
		Globrite 5006 ZP	11.3	267	-	0.03	-	1.00%	-	-	-	0.02	-	-
		Globrite 745 ADD	10.6	150	-	0.02	-	-	-	-	-	-	-	-
		KG400-F1	11.0	5,250	-	0.60	5.00%	-	-	-	1.45	-	-	-
		KG400-F2	8.50	3,495	-	0.40	5.00%	-	-	-	0.74	-	-	-
		20% Acetic Acid (ED Additive)	8.67	3.80	-	0.00	-	-	-	-	-	-	-	-
		Adjustment Medicine E	7.51	176	-	0.02	-	-	-	-	-	-	-	-
Geo-Guard 4008	9.00	147	-	0.02	-	-	-	-	-	-	-	-		
<b>TOTAL</b>											<b>2.19</b>	<b>0.02</b>	<b>0.00</b>	<b>0.00</b>

Note: There are no particulate emissions from the above operations.

**Highest single HAP = 5.0 (Manganese)**

**Total HAP = 7.30 tons/yr**

\*\* The parkerizing process is a dip tank. The manganese and nickel are physically part of the coating solid and is released with the PM emissions. The transfer efficiency of the surface coating material from the dip tanks is 100%. Therefore, the manganese and nickel emissions from the parkerizing operation are zero.

**METHODOLOGY**

PTE of HAP (tons/year) = Density (lb/gal) \* Max. Usage Rate (gal/yr) \* Weight % VOC \* 1 ton/2000 lbs

**Appendix A: Emission Calculations  
Natural Gas Combustion Only  
Boiler (EU 11) and Comfort Units (Identified as EU 12)**

**Company Name:** NTK Precision Axle Corporation  
**Address:** 741 South County Road 200 West, Frankfort, Indiana 46401  
**MSOP:** 023-27165-00038  
**Reviewer:** Sandra Carr  
**Date:** January 12, 2009

Total Heat Input Capacity  
MMBtu/hour  
12.67

Potential Throughput  
MMCF/year  
109

	<b>Pollutant</b>						
Emission Factor (lb/MMCF)	* PM 1.90	* PM <sub>10</sub> 7.60	* PM <sub>2.5</sub> 7.60	SO <sub>2</sub> 0.60	** NO <sub>x</sub> 100	VOC 5.50	CO 84.0
Potential To Emit (tons/year)	<b>0.10</b>	<b>0.41</b>	<b>0.41</b>	<b>0.03</b>	<b>5.44</b>	<b>0.30</b>	<b>4.57</b>

\* PM emission factor is filterable PM only. PM<sub>10</sub> emission factor is filterable and condensable PM combined.

\*\* Emission factor for NO<sub>x</sub> =100 lb/MMCF (Uncontrolled)

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

**METHODOLOGY**

Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hour) \* 8760 hours/year \* 1 MMCF/1020 MMBtu

Potential To Emit (tons/year) = Potential Throughput (MMCF/year) \* Emission Factor (lb/MMCF) \* 1 ton/2000 lbs

See next page for HAPs emissions calculations.

**Appendix A: Emission Calculations  
Natural Gas Combustion Only  
Boiler (EU 11) and Comfort Units (Identified as EU 12)**

**Company Name:** NTK Precision Axle Corporation  
**Address:** 741 South County Road 200 West, Frankfort, Indiana 46401  
**MSOP:** 023-27165-00038  
**Reviewer:** Sandra Carr  
**Date:** January 12, 2009

**HAPs - Organics**

Emission Factor (lb/MMCF)	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential To Emit (tons/year)	<b>1.14E-04</b>	<b>6.53E-05</b>	<b>4.08E-03</b>	<b>9.79E-02</b>	<b>1.85E-04</b>

**HAPs - Metals**

Emission Factor (lb/MMCF)	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential To Emit (tons/year)	<b>2.72E-05</b>	<b>5.98E-05</b>	<b>7.62E-05</b>	<b>2.07E-05</b>	<b>1.14E-04</b>

**Highest individual HAP = 0.10 (Hexane)  
Total HAP = 0.10**

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors as provided above are from AP-42, Chapter 1.4, Table 1-4.2, 1.4-3 and 1.4-4 (July, 1998). Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
Cold Cleaners**

**Company Name:** NTK Precision Axle Corporation  
**Address:** 741 South County Road 200 West, Frankfort, Indiana 46401  
**MSOP:** 023-27165-00038  
**Reviewer:** Sandra Carr  
**Date:** January 12, 2009

Emission Unit ID	Material	Density (lb/gal)	Solvent Consumption (gal/day)	PTE of VOC (tons/year)
(2 Units total) EU-13	Aquatene GM 330	6.80	0.50	1.86
<b>Total</b>				<b>1.86</b>

**METHODOLOGY**

PTE of HAP (tons/year) = Density (lb/gal) \* Solvent Consumption (gal/day) \* 1 day/24 hours \* 8760 hours/year \* 1 ton/2000 lbs \* 3 units

**Appendix A: Emission Calculations  
Compliance Determination**

**Company Name:** NTK Precision Axle Corporation  
**Address:** 741 South County Road 200 West, Frankfort, Indiana 46401  
**MSOP:** 023-27165-00038  
**Reviewer:** Sandra Carr  
**Date:** January 12, 2009

**326 IAC 8-2-9 Compliance**

Process	Coating component	Mixture (gal/tank)	Mixture %	Density (lbs/gal)	Material (lbs)	Weight % Volatiles (Organics + Water)	Weight % Water	Volume % Water	Weight % Organics (minus water)	VOC (as applied) (lbs/gal)	Usage (gal/day)	Volume weighted Average
Electrodeposition												
	KG400 F-1 (Paste)	0.20	1.22%	11.00	2.19	5.0%	0.0%	0.0%	5.0%	0.55	14.40	0.64
	KG400 F-2 (Liquid)	9.45	41.60%	7.91	74.7	5.0%	0.0%	0.0%	5.0%	0.43	9.60	
	20% Acetic Acid (ED Additive)	0.005	0.02%	8.67	0.04	25.0%	0.0%	0.0%	25.0%	2.17	0.00	
	Adjustment Medicine E	0.60	2.52%	7.51	4.53	100.0%	0.0%	0.0%	100.0%	7.51	0.48	
	Water	11.79	54.70%	8.34	98.3	100.0%	100.0%	100.0%	0.0%	0		
	<b>As Applied:</b>	22.045	100%	8.17	180	59.3%	40.7%	53.5%	4.7%	0.82		
										$\Sigma(C \times U)$ 15.61	$\Sigma(U)$ 24.48	

Allowable 326 IAC 8-2-9 Limit = 3.5 lbs/gal (as applied)

The electrodeposition coatings are able to comply using the volume weighted average.