NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a Significant Revision to a Minor Source Operating Permit (MSOP)

for NTK Precision Axle Corporation in Madison County

Significant Permit Revision No.: 095-41521-00147

The Indiana Department of Environmental Management (IDEM) has received an application from NTK Precision Axle Corporation, located at 7635 South Layton Rd., Anderson, IN 46011, for a significant revision of its MSOP issued on September 20, 2017. If approved by IDEM’s Office of Air Quality (OAQ), this proposed revision would allow NTK Precision Axle Corporation to make certain changes at its existing source. NTK Precision Axle Corporation has applied to add new emission units and existing unpermitted emission units to their current Minor Source Operating Permit (MSOP).

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

IDEM is aware that the two (2) sealed air packaging machines has been constructed prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This draft permit contains provisions to bring unpermitted equipment into compliance with construction and operation permit rules.

A copy of the permit application and IDEM’s preliminary findings are available at:

Pendleton Community Public Library
595 Water Street
Pendleton, IN 46064

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

A copy of the preliminary findings is also available via IDEM’s Virtual File Cabinet (VFC.) Please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is posted on IDEM’s website (https://www.in.gov/idem/5474.htm) marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the air pollution impact of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public
meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM’s mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SPR 095-41521-00147 in all correspondence.

Comments should be sent to:

Luda Lang
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for Luda Lang or (317) 233-0863
Or dial directly: (317) 233-0863
Fax: (317) 232-6749 attn: Luda Lang
E-mail: LLang@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: [http://www.in.gov/idem/airquality/2356.htm](http://www.in.gov/idem/airquality/2356.htm), and the Citizens’ Guide to IDEM on the Internet at: [http://www.in.gov/idem/6900.htm](http://www.in.gov/idem/6900.htm).

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM’s response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM’s decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Luda Lang of my staff at the above address.

Madhurima D. Moulik, Ph.D., Section Chief
Permits Branch
Office of Air Quality
Mr. Morris Claypool  
NTK Precision Axle Corporation  
7635 South Layton Road  
Anderson, IN 46011  

Re: 095-41521-00147  
Significant Revision to  
M095-38642-00147

Dear Mr. Claypool:

NTK Precision Axle Corporation was issued a Minor Source Operating Permit (MSOP) No. M095-38642-00147 on September 20, 2017 for a stationary driveshaft production facility located at 7635 South Layton Rd., Anderson, IN 46011. On June 3, 2019, the Office of Air Quality (OAQ) received an application from the source requesting to add new emission units and existing unpermitted emission units to their current Minor Source Operating Permit (MSOP). Pursuant to the provisions of 326 IAC 2-6.1-6, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-6.1-6(i). Pursuant to the provisions of 326 IAC 2-6.1-6, a Significant Permit Revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

Pursuant to 326 IAC 2-6.1-6, the following emission units are approved for construction at the source:

(a) Two (2) sealed air packaging machines, identified as U-101, constructed in 2019, each with a maximum capacity of 55 units per hour, using no control, and exhausting indoors.

Pursuant to 326 IAC 2-6.1-6, this permit shall be revised by incorporating the Significant Permit Revision into the permit. All other conditions of the permit shall remain unchanged and in effect.

Please find attached the entire MSOP as revised. The permit references the below listed attachment(s). Since this attachment has been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of this attachment with this revision:


Previously issued approvals for this source containing this attachment are available on the Internet at: [http://www.in.gov/ai/appfiles/idem-caats/](http://www.in.gov/ai/appfiles/idem-caats/).

Previously issued approvals for this source are also available via IDEM’s Virtual File Cabinet (VFC.) Please go to: [http://www.in.gov/idem/](http://www.in.gov/idem/) and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. A copy of the permit is also available via IDEM’s Virtual File Cabinet (VFC.) Please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens’ Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions regarding this matter, please contact Luda Lang, 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) 233-08-63 or (800) 451-6027, and ask for Luda Lang or (317) 233-0863.

Sincerely,

Madhurima D. Moulik, Ph.D., Section Chief
Permits Branch
Office of Air Quality

Attachments: Revised permit and Technical Support Document.

cc: File - Madison County
    Madison County Health Department
    U.S. EPA, Region 5
    Compliance and Enforcement Branch
New Source Construction and Minor Source Operating Permit
OFFICE OF AIR QUALITY

NTK Precision Axle Corporation
7635 South Layton Rd.
Anderson, Indiana 46011

(herein known as the Permittee) is hereby authorized to construct and 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 2-5.1, 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.

<table>
<thead>
<tr>
<th>Operation Permit No.: M095-38642-00147</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Agency Interest ID.: 118115</td>
</tr>
</tbody>
</table>

Issued by:
Nathan C. Bell, Section Chief
Permits Branch
Office of Air Quality

Issuance Date: September 20, 2017
Expiration Date: September 20, 2022

Significant Permit Revision No. 095-41521-00147

Issued by:
Madhurima D. Moulik, Ph.D., Section Chief
Permits Branch
Office of Air Quality

Issuance Date:
Expiration Date: September 20, 2022
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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 driveshaft production facility.

<table>
<thead>
<tr>
<th>Source Address:</th>
<th>7635 South Layton Rd., Anderson, Indiana 46011</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Source Phone Number:</td>
<td>765-656-1033</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>3714 (Motor Vehicle Parts and Accessories)</td>
</tr>
<tr>
<td>County Location:</td>
<td>Madison</td>
</tr>
<tr>
<td>Source Location Status:</td>
<td>Attainment for all criteria pollutants</td>
</tr>
<tr>
<td>Source Status:</td>
<td>Minor Source Operating Permit Program</td>
</tr>
<tr>
<td></td>
<td>Minor Source, under PSD and Emission Offset Rules</td>
</tr>
<tr>
<td></td>
<td>Minor Source, Section 112 of the Clean Air Act</td>
</tr>
<tr>
<td></td>
<td>Not 1 of 28 Source Categories</td>
</tr>
</tbody>
</table>

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) parkerizing and rust proofing operation, identified as EU-1, constructed in 2017, with a maximum capacity of 342 parts per hour, using dip coating for application of coatings, and exhausting to stacks PSa and PSb.

The operation is a new affected source under the provisions of 40 CFR 63, Subpart WWWWWW.

(b) Seven (7) zinc phosphate non-electrolytic plating booths, identified as EU-2, constructed in 2017 and 2019, each with a maximum capacity of 171 parts per hour, using dip coating for application of coatings, and exhausting indoors.

The booths are new affected sources under the provisions of 40 CFR 63, Subpart WWWW.

(c) Seven (7) paint lines, identified as EU-3, constructed in 2017 and 2019, each with a maximum capacity of 137 parts per hour, using roll coating and electrodeposition for application of a powdered slurry coating, and exhausting to three stacks per line (CS1a, CS1b, CS1c, CS2a, CS2b, CS2c, CS3a, CS3b, CS3c, CS4a, CS4b, CS4c, CS5a, CS5b, CS5c, CS6a, CS6b, CS6c, CS7a, CS7b, and CS7c).

(d) Seventeen (17) heat treat lines, identified as EU-4, constructed in 2017 and 2019, each with a maximum capacity of 103 parts per hour, using dip coating for application of coatings, and exhausting indoors.

(e) Machining operations, constructed in 2017 and 2019, consisting of the following:

(1) Thirty-one (31) wet turning machines, identified as EU-5a, each with a maximum capacity of 47.2 parts per hour and a maximum usage rate 0.05 gallons per hour of machining oil, and exhausting indoors.
(2) Five (5) wet swaging machines, identified as EU-5b, with a total maximum capacity of 137 parts per hour and a maximum usage rate 0.0057 gallons of machining oil per hour, and exhausting indoors.

(3) Six (6) wet saws, identified as EU-5c, with a total maximum capacity of 1368 parts per hour and a maximum usage rate of 1.19 gallons of machining oil per hour, and exhausting indoors.

(f) Parts washers, identified as EU-6, consisting of:

(1) Four (4) parts washers, each using a maximum of 1.36 gallons per day of solvents that contain no VOCs or HAPs.

(2) One (1) parts washer, using a maximum of 0.30 gallons per day of solvents that contain no VOCs or HAPs.

(3) One (1) parts washer, using a maximum of 1.0 gallon per day of solvents containing VOCs.

(g) Natural gas-fired space heaters, constructed in 2017, consisting of the following:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Number</th>
<th>Capacity per Unit (MMBtu/hr)</th>
<th>Total Capacity (MMBtu/hr)</th>
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<tbody>
<tr>
<td>Hanging Shop Heaters</td>
<td>5</td>
<td>0.25</td>
<td>1.25</td>
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<td>Hanging Shop Heaters</td>
<td>2</td>
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<tr>
<td>Hanging Shop Heaters</td>
<td>3</td>
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<td>0.45</td>
</tr>
<tr>
<td>RTU1</td>
<td>1</td>
<td>0.25</td>
<td>0.25</td>
</tr>
<tr>
<td>RTU2</td>
<td>1</td>
<td>0.60</td>
<td>0.60</td>
</tr>
<tr>
<td>RTU3 to RTU20</td>
<td>18</td>
<td>0.40</td>
<td>7.20</td>
</tr>
<tr>
<td>RTU21</td>
<td>1</td>
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</tr>
<tr>
<td>RTU22</td>
<td>1</td>
<td>0.28</td>
<td>0.28</td>
</tr>
<tr>
<td>RTU23</td>
<td>1</td>
<td>0.60</td>
<td>0.60</td>
</tr>
<tr>
<td>RTU24</td>
<td>1</td>
<td>0.40</td>
<td>0.40</td>
</tr>
<tr>
<td>RTU25 and RTU26</td>
<td>2</td>
<td>0.20</td>
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</tr>
<tr>
<td>RTU27 and RTU28</td>
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<td>0.20</td>
<td>0.40</td>
</tr>
<tr>
<td>RTU29 and RTU30</td>
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<td>0.20</td>
<td>0.40</td>
</tr>
<tr>
<td>RTU31</td>
<td>1</td>
<td>0.28</td>
<td>0.28</td>
</tr>
<tr>
<td>RTU32</td>
<td>1</td>
<td>0.40</td>
<td>0.40</td>
</tr>
</tbody>
</table>

(h) Two (2) sealed air packaging machines, identified as U-101, constructed in 2019, each with a maximum capacity of 55 units per hour, using no control, and exhausting indoors.

(i) One (1) hollow shaft turning machine, identified as T-101, with a maximum capacity of 70 parts per hour.

(j) One (1) hollow shaft heat treat line, identified as H-101, with a maximum capacity of 130 parts per hour.

(k) Seven (7) shot blasters, each with a maximum capacity of 0.9 pounds of abrasive per hour.

(l) One (1) maintenance shot blaster, with a maximum capacity of 0.9 pounds of abrasive per hour.
(m) Paved roads.
**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 Revocation of Permits [326 IAC 2-1.1-9(5)]**

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

**B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4]**

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 when prior to the start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

**B.4 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, M095-38642-00147, is issued for a fixed term of five (5) 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.5 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.6 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.7 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.8 Property Rights or Exclusive Privilege

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

B.9 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. 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.10 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.11 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, 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.
If, due to circumstances beyond the Permittee’s control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The Permittee shall implement the PMPs.

(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.

(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.12 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M095-38642-00147 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.13 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.14 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 an affirmation that the statements in the application are true and complete 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, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.15 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

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.16 Source Modification Requirement

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

B.17 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.18 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 an affirmation that the statements in the application are true and complete 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.19 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees due no later than 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.20 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 construct and operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3  Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 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 except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.
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.

(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) For performance testing required by this permit, 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.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.

(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 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. The analog instrument shall be capable of measuring values outside of the normal range.
(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.12 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to 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 excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning 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 normal or usual manner of operation.

(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 record the reasonable response steps taken.

C.13 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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.

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

C.14 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.15 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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. 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:

(f) Parts washers, identified as EU-6, consisting of:

(3) One (1) parts washer, using a maximum of 1.0 gallon per day of solvents containing VOCs.

(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 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), for each of the parts washers, the Permittee shall comply with the following:

(a) The Permittee shall ensure the following control equipment and operating requirements are met:

(1) Equip the degreaser with a cover.
(2) Equip the degreaser with a device for draining cleaned parts.
(3) Close the degreaser cover whenever parts are not being handled in the degreaser.
(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
(5) Provide a permanent, conspicuous label that lists the operating requirements in (a)(3), (a)(4), (a)(6), and (a)(7) of this condition.
(6) Store waste solvent only in closed containers.
(7) Prohibit the disposal or transfer of waste solvent in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

(b) The Permittee shall ensure the following additional control equipment and operating requirements are met:

(1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
(B) A water cover when solvent used is insoluble in, and heavier than, water.
(C) A refrigerated chiller.
(D) Carbon adsorption.
(E) An alternative system of demonstrated equivalent or better control as those outlined in (b)(1)(A) through (D) of this condition that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

(2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.

(3) If used, solvent spray:

(A) must be a solid, fluid stream; and

(B) shall be applied at a pressure that does not cause excessive splashing.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), on and after January 1, 2015, the Permittee shall not operate a cold cleaner degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for this facility. Section B - Preventive Maintenance Plan contains the Permittee’s obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.4 Record Keeping Requirements

(a) Pursuant to 326 IAC 8-3-8(c)(2), on and after January 1, 2015, the following records shall be maintained for each purchase of cold cleaner degreaser solvent:

(1) The name and address of the solvent supplier.

(2) The date of purchase (or invoice/bill dates of contract servicer indicating service date).

(3) The type of solvent purchased.

(4) The total volume of the solvent purchased.

(5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) Section C - General Record Keeping Requirements of this permit contains the Permittee’s obligation with regard to the records required by this condition.
SECTION E.1 NESHAP

Emissions Unit Description:

(a) One (1) parkerizing and rust proofing operation, identified as EU-1, constructed in 2017, with a maximum capacity of 342 parts per hour, using dip coating for application of coatings, and exhausting to stacks PSa and PSb.

The operation is a new affected source under the provisions of 40 CFR 63, Subpart WWWW.

(b) Seven (7) zinc phosphate non-electrolytic plating booths, identified as EU-2, constructed in 2017 and 2019, each with a maximum capacity of 171 parts per hour, using dip coating for application of coatings, and exhausting indoors.

The booths are new affected sources under the provisions of 40 CFR 63, Subpart WWWW.

(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)]

E.1.1 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-6.1-5(a)(1)]


(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart WWWW.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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 Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart WWWW (included as Attachment A to the operating permit), for the emission unit(s) listed above:

(1) 40 CFR 63.11504(a)
(2) 40 CFR 63.11505(a), (c), and (d)
(3) 40 CFR 63.11506(c)
(4) 40 CFR 63.11507(g)  
(5) 40 CFR 63.11508(a), (b), (c)(7), and (d)(1, 2, and 6)  
(6) 40 CFR 63.11509(a), (b), (c)(6 and 7), (d), (e), and (f)  
(7) 40 CFR 63.11510  
(8) 40 CFR 63.11511  
(9) 40 CFR 63.11512  
(10) Table 1
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

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

Company Name: NTK Precision Axle Corporation
Address: 7635 South Layton Rd.
City: Anderson, Indiana 46011
Phone #: 765-656-1033
MSOP #: M095-38642-00147

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 M095-38642-00147.
☐ not in compliance with the requirements of MSOP M095-38642-00147.

Authorized Individual (typed):

Title:

Signature:

Date:

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.

Noncompliance:
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.

| COMPANY: _______________________________ | PHONE NO. ( ) ____________________ |
| LOCATION: (CITY AND COUNTY) ____________________________________________________________________ | |
| PERMIT NO. _______________________________ | AFS PLANT ID: ________________ | AFS POINT ID: ________________ | INSPEC: __________ |
| 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:
________________________________________________________________________
________________________________________________________________________
NTK Precision Axle Corporation
7635 South Layton Rd.
Anderson, Indiana 46011

Affidavit of Construction

I, ______________________________________, being duly sworn upon my oath, depose and say:

1. I live in _______________________________ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of ______________________ for __________________________.

3. By virtue of my position with __________________________, I have personal knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of __________________________.

4. I hereby certify that NTK Precision Axle Corporation, 7635 South Layton Rd., Anderson, Indiana 46011, completed construction of the driveshaft production facility on __________________________ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on June 1, 2017 and as permitted pursuant to New Source Construction Permit and Minor Source Operating Permit No. M095-38642-00147, Plant ID No. 095-00147 issued on __________________________.

5. Permittee, please cross out the following statement if it does not apply: Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

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

Signature ____________________________________________
Date ________________________________________________

STATE OF INDIANA
) SS
COUNTY OF _____________________________

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

Signature __________________________________________
Name ____________________________ (typed or printed)
Attachment A

Minor Source Operating Permit (MSOP) No: 095-38642-00147

[Downloaded from the eCFR on July 15, 2013]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart WWWW—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations

Source: 73 FR 37741, July 1, 2008, unless otherwise noted.

Applicability and Compliance Dates

§ 63.11504 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a plating and polishing facility that is an area source of hazardous air pollutant (HAP) emissions and meets the criteria specified in paragraphs (a)(1) through (3) of this section.

(1) A plating and polishing facility is a plant site that is engaged in one or more of the processes listed in paragraphs (a)(1)(i) through (vi) of this section.

(i) Electroplating other than chromium electroplating (i.e., non-chromium electroplating).

(ii) Electroless or non-electrolytic plating.

(iii) Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.

(iv) Dry mechanical polishing of finished metals and formed products after plating or thermal spraying.

(v) Electroforming.

(vi) Electropolishing.

(2) A plating or polishing facility is an area source of HAP emissions, where an area source is any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 9.07 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more and any combination of HAP at a rate of 22.68 Mg/yr (25 tpy) or more.

(3) Your plating and polishing facility uses or has emissions of compounds of one or more plating and polishing metal HAP, which means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, as defined in § 63.11511, “What definitions apply to this subpart?” With the exception of lead, plating and polishing metal HAP also include any of these metals in the elemental form.

(b) [Reserved]
§ 63.11505  What parts of my plant does this subpart cover?

(a) This subpart applies to each new or existing affected source, as specified in paragraphs (a)(1) through (3) of this section, at all times. A new source is defined in § 63.11511, “What definitions apply to this subpart?”

(1) Each tank that contains one or more of the plating and polishing metal HAP, as defined in § 63.11511, “What definitions apply to this subpart?”, and is used for non-chromium electroplating; electroforming; electropolishing; electroless plating or other non-electrolytic metal coating operations, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

(2) Each thermal spraying operation that applies one or more of the plating and polishing metal HAP, as defined in § 63.11511, “What definitions apply to this subpart?”

(3) Each dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP, as defined in § 63.11511, “What definitions apply to this subpart?”

(b) An affected source is existing if you commenced construction or reconstruction of the affected source on or before March 14, 2008.

(c) An affected source is new if you commenced construction or reconstruction of the affected source after March 14, 2008.

(d) This subpart does not apply to any of the process units or operations described in paragraphs (d)(1) through (6) of this section.

(1) Process units that are subject to the requirements of 40 CFR part 63, subpart N (National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks).

(2) Research and development process units, as defined in § 63.11511, “What definitions apply to this subpart?”

(3) Process units that are used strictly for educational purposes.

(4) Plating, polishing, coating, or thermal spraying conducted to repair surfaces or equipment.

(5) Dry mechanical polishing conducted to restore the original finish to a surface.

(6) Any plating or polishing process that uses process materials that contain cadmium, chromium, lead, or nickel (as the metal) in amounts less than 0.1 percent by weight, or that contain manganese in amounts less than 1.0 percent by weight (as the metal), as used. Information used to determine the amount of plating and polishing metal HAP in materials used in the plating or polishing process may include information reported on the Material Safety Data Sheet for the material, but is not required. For plating or polishing tanks, the HAP content may be determined from the final bath contents “as used” to plate or to polish.

(e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, “Title V,” provided you are not otherwise required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

§ 63.11506  What are my compliance dates?

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than July 1, 2010.
(b) If you own or operate a new affected source for which the initial startup date is on or before July 1, 2008, you must achieve compliance with the provisions of this subpart no later than July 1, 2008.

(c) If you own or operate a new affected source for which the initial startup date is after July 1, 2008, you must achieve compliance with the provisions of this subpart upon initial startup of your affected source.

Standards and Compliance Requirements

§ 63.11507 What are my standards and management practices?

(a) If you own or operate an affected new or existing non-cyanide electroplating, electroforming, or electropolishing tank (hereafter referred to as an “electrolytic” process tank, as defined in § 63.11511, “What definitions apply to this subpart?”) that contains one or more of the plating and polishing metal HAP and operates at a pH of less than 12, you must comply with the requirements in paragraph (a)(1), (2), or (3) of this section, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(1) You must use a wetting agent/fume suppressant in the bath of the affected tank, as defined in § 63.11511, “What definitions apply to this subpart?” and according to paragraphs (a)(1)(i) through (iii) of this section.

(i) You must initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process.

(ii) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the bath, as in the original make-up of the bath, or in proportions such that the bath contents are returned to that of the original make-up of the bath.

(iii) If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank to comply with this rule.

(2) You must capture and exhaust emissions from the affected tank to any one of the following emission control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator, according to paragraphs (a)(2)(i) and (ii) of this section.

(i) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.

(ii) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(3) You must cover the tank surface according to paragraph (a)(3)(i) or (ii) of this section.

(i) For batch electrolytic process tanks, as defined in § 63.11511, “What definitions apply to this subpart?”, you must use a tank cover, as defined in § 63.11511, over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time.

(ii) For continuous electrolytic process tanks, as defined in § 63.11511, “What definitions apply to this subpart?”, you must cover at least 75 percent of the surface of the tank, as defined in § 63.11511, whenever the electrolytic process tank is in operation.

(b) If you own or operate an affected new or existing “flash” or short-term electroplating tank, as defined in § 63.11511, “What definitions apply to this subpart?”, that uses or emits one or more of the plating and polishing metal HAP, you must comply with the requirements specified in paragraph (b)(1) or (b)(2), and implement the applicable management practices in paragraph (g) of this section, as practicable.
(1) You must limit short-term or “flash” electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(2) You must use a tank cover, as defined in § 63.11511, “What definitions apply to this subpart?” for at least 95 percent of the plating time.

(c) If you own or operate an affected new or existing process tank that is used both for short-term electroplating and for electrolytic processing of longer duration (i.e., processing that does not meet the definition of short-term or flash electroplating) and contains one or more of the plating and polishing metal HAP, you must meet the requirements specified in paragraph (a) or (b) of this section, whichever apply to the process operation, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(d) If you own or operate an affected new or existing electroplating tank that uses cyanide in the plating bath, operates at pH greater than or equal to 12, and contains one or more of the plating and polishing metal HAP, you must comply with the requirements in paragraphs (d)(1) and (2) of this section:

(1) You must measure and record the pH of the bath upon startup of the bath, as defined in § 63.11511, “What definitions apply to this subpart?” No additional pH measurements are required.

(2) You must implement the applicable management practices in paragraph (g) of this section, as practicable.

(e) If you own or operate an affected new or existing dry mechanical polishing machine that emits one or more of the plating and polishing metal HAP, you must operate a capture system that captures particulate matter (PM) emissions from the dry mechanical polishing process and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter, according to paragraphs (e)(1) and (2) of this section.

(1) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.

(2) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(f) If you own or operate an affected thermal spraying operation that applies one or more of the plating and polishing metal HAP, you must meet the applicable requirements specified in paragraphs (f)(1) through (3) of this section, and the applicable management practices in paragraph (g) of this section.

(1) For existing permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a water curtain, fabric filter, cartridge, or HEPA filter, according to paragraphs (f)(1)(i) and (ii) of this section.

(2) For new permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a fabric, cartridge, or HEPA filter, according to paragraphs (f)(2)(i) and (ii) of this section.

(3) For temporary thermal spraying operations, as defined in § 63.11511 “What definitions apply to this subpart?”, you must meet the applicable requirements specified in paragraphs (f)(3)(i) and (ii) of this section.

(i) You must document the amount of time the thermal spraying occurs each day, and where it is conducted.

(ii) You must implement the applicable management practices specified in paragraph (g) of this section, as practicable.

(g) If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in paragraphs (g)(1) through (12) of this section, as practicable.
(1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.

(2) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.

(3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.

(4) Use tank covers, if already owned and available at the facility, whenever practicable.

(5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).

(6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.

(7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.

(8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.

(9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.

(10) Minimize spills and overflow of tanks, as practicable.

(11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.

(12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57920, Sept. 19, 2011]

§ 63.11508 What are my compliance requirements?

(a) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with § 63.11509(b) of “What are my notification, reporting, and recordkeeping requirements?”

(b) You must be in compliance with the applicable management practices and equipment standards in this subpart at all times.

(c) To demonstrate initial compliance, you must satisfy the requirements specified in paragraphs (c)(1) through (11) of this section.

(1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), “What are my standards and management practices?”, and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(1)(i) through (iv) of this section.

(i) You must add wetting agent/fume suppressant to the bath of each affected tank according to manufacturer's specifications and instructions.
(ii) You must state in your Notification of Compliance Status that you add wetting agent/fume suppressant to the bath according to manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(2) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you use a control system, as defined in § 63.11511, "What definitions apply to this subpart?", to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(2)(i) through (v) of this section.

(i) You must install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.

(ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(v) You must follow the manufacturer's specifications and operating instructions for the control systems at all times.

(3) If you own or operate an affected batch electrolytic process tank, as defined in § 63.11511, "What definitions apply to this subpart?" that contains one or more of the plating and polishing metal HAP and which is subject to the requirements in § 63.11507(a), "What are my standards and management practices?" and you use a tank cover, as defined in § 63.11511, to comply with § 11507(a), (b) or (c) of this subpart, you must demonstrate initial compliance according to paragraphs (c)(3)(i) through (iv) of this section.

(i) You must install a tank cover on the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

(iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.

(4) If you own or operate an affected continuous electrolytic process tank, as defined in § 63.11511, "What definitions apply to this subpart?" that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?" and you cover the tank surface to comply with § 11507(a), (b) or (c) of this subpart, you must demonstrate initial compliance according to paragraphs (c)(4)(i) through (iv) of this section.

(i) You must cover at least 75 percent of the surface area of the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the surface cover in place whenever the continuous electrolytic process is in operation.
(iii) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by limiting the plating time of the affected tank, you must demonstrate initial compliance according to paragraphs (c)(5)(i) through (iii) of this section.

(i) You must state in your Notification of Compliance Status that you limit short-term or flash electroplating to no more than 1 cumulative hour per day, or 3 cumulative minutes per hour of plating time.

(ii) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(6) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must demonstrate initial compliance according to paragraphs (c)(6)(i) through (iv) of this section.

(i) You must install a tank cover on the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the plating time.

(iii) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(7) If you own or operate an affected tank that contains one or more of the plating and polishing metal HAP, uses cyanide in the bath, and is subject to the management practices specified in § 63.11507(d), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(7)(i) through (iii) of this section.

(i) You must report in your Notification of Compliance Status the pH of the bath solution that was measured at startup, as defined in § 63.11511, according to the requirements of § 63.11507(d)(1).

(ii) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11490(g), “What are my standards and management practices?”, as practicable.

(8) If you own or operate an affected dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(e), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(8)(i) through (iii) of this section.

(i) You must install a control system that is designed to capture PM emissions from the polishing operation and exhaust them to a cartridge, fabric, or HEPA filter.
(ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(9) If you own or operate an existing affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(f)(1), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(9)(i) through (iii) of this section.

(i) You must install a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a water curtain, or a cartridge, fabric, or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed and are operating the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(10) If you own or operate a new affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(f)(2), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(10)(i) through (iii) of this section.

(i) You must install and operate a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a cartridge, fabric, or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed and operate the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(11) If you own or operate an affected temporary thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), “What are my standards and management practices?”, you must demonstrate initial compliance according to paragraphs (c)(11)(i) and (ii) of this section.

(i) You must implement the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(ii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), “What are my standards and management practices?”, as practicable.

(d) To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must satisfy the requirements specified in paragraphs (d)(1) through (8) of this section.

(1) You must always operate and maintain your affected source, including air pollution control equipment.

(2) You must prepare an annual compliance certification according to the requirements specified in § 63.11509(c), “Notification, Reporting, and Recordkeeping,” and keep it in a readily-accessible location for inspector review.

(3) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), “What are my standards
and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must
demonstrate continuous compliance according to paragraphs (d)(3)(i) through (iii) of this section.

(i) You must record that you have added the wetting agent/fume suppressant to the tank bath in the original make-up
of the tank.

(ii) For tanks where the wetting agent/fume suppressant is a separate ingredient from the other tank additives, you
must demonstrate continuous compliance according to paragraphs (d)(3)(ii) (A) and (B) this section.

(A) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are
added to replenish the tank bath, as in the original make-up of the tank; or in proportion such that the bath is brought
back to the original make-up of the tank.

(B) You must record each addition of wetting agent/fume suppressant to the tank bath.

(iii) You must state in your annual compliance certification that you have added wetting agent/fume suppressant to
the bath according to the manufacturer's specifications and instructions.

(4) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more
of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards
and management practices?", and you use a control system to comply with this subpart; an affected dry mechanical
polishing operation that is subject to § 63.11507(e); or an affected thermal spraying operation that is subject to
§ 63.11507(f)(1) or (2), you must demonstrate continuous compliance according to paragraphs (d)(4)(i) through (v) of
this section.

(i) You must operate and maintain the control system according to the manufacturer's specifications and instructions.

(ii) Following any malfunction or failure of the capture or control devices to operate properly, you must take immediate
corrective action to return the equipment to normal operation according to the manufacturer's specifications and
operating instructions.

(iii) You must state in your annual certification that you have operated and maintained the control system according to
the manufacturer's specifications and instructions.

(iv) You must record the results of all control system inspections, deviations from proper operation, and any corrective
action taken.

(v) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be
easily accessed by the operators.

(5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating
and polishing metal HAP and is subject to the requirements in § 63.11507(b), "What are my standards and
management practices?" and you comply with § 11507(a), (b) or (c) of this subpart by limiting the plating time for the
affected tank, you must demonstrate continuous compliance according to paragraphs (d)(5)(i) through (iii) of this
section.

(i) You must limit short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes
per hour of plating time.

(ii) You must record the times that the affected tank is operated each day.

(iii) You must state in your annual compliance certification that you have limited short-term or flash electroplating to
no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(6) If you own or operate an affected batch electrolytic process tank that contains one or more of the plating and
polishing metal HAP and is subject to the requirements of § 63.11507(a), "What are my standards and management
practices?” or a flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), and you comply with § 11507(a), (b) or (c) of this section by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(6)(i) through (iii) of this section.

(i) You must operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

(ii) You must record the times that the tank is operated and the times that the tank is covered on a daily basis.

(iii) You must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.

(7) If you own or operate an affected continuous electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(7)(i) and (ii) of this section.

(i) You must operate the tank with at least 75 percent of the surface covered during all periods of electrolytic process operation.

(ii) You must state in your annual certification that you have operated the tank with 75 percent of the surface covered during all periods of electrolytic process operation.

(8) If you own or operate an affected tank or other operation that is subject to the management practices specified in § 63.11507(g), “What are my standards and management practices?”, you must demonstrate continuous compliance according to paragraphs (d)(8)(i) and (ii) of this section.

(i) You must implement the applicable management practices during all times that the affected tank or process is in operation.

(ii) You must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57920, Sept. 19, 2011]

§ 63.11509 What are my notification, reporting, and recordkeeping requirements?

(a) If you own or operate an affected source, as defined in § 63.11505(a), “What parts of my plant does this subpart cover?”, you must submit an Initial Notification in accordance with paragraphs (a)(1) through (4) of this section by the dates specified.

(1) The Initial Notification must include the information specified in § 63.9(b)(2)(i) through (iv) of the General Provisions of this part.

(2) The Initial Notification must include a description of the compliance method (e.g., use of wetting agent/fume suppressant) for each affected source.

(3) If you start up your affected source on or before July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after July 1, 2008.

(4) If you startup your new affected source after July 1, 2008, you must submit an Initial Notification when you become subject to this subpart.

(b) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with paragraphs (b)(1) through (3) of this section.
(1) The Notification of Compliance Status must be submitted before the close of business on the compliance date specified in § 63.11506, “What are my compliance dates?”

(2) The Notification of Compliance Status must include the items specified in paragraphs (b)(2)(i) through (iv) of this section.

(i) List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources.

(ii) Methods used to comply with the applicable management practices and equipment standards.

(iii) Description of the capture and emission control systems used to comply with the applicable equipment standards.

(iv) Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements.

(3) If a facility makes a change to any items in (b)(2)(i), iii, and (iv) of this section that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change.

(c) If you own or operate an affected source, you must prepare an annual certification of compliance report according to paragraphs (c)(1) through (7) of this section. These reports do not need to be submitted unless a deviation from the requirements of this subpart has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report.

(1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that is subject to the requirements in § 63.11507(a)(1), “What are my standards and management practices?”, you must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer’s specifications and instructions.

(2) If you own or operate any one of the affected sources listed in paragraphs (c)(2)(i) through (iii) of this section, you must state in your annual certification that you have operated and maintained the control system according to the manufacturer’s specifications and instructions.

(i) Electroplating, electroforming, or electropolishing tank that is subject to the requirements in § 63.11507(a), “What are my standards and management practices?”, and you use a control system to comply with this subpart;

(ii) Dry mechanical polishing operation that is subject to § 63.11507(e); or

(iii) Permanent thermal spraying operation that is subject to § 63.11507(f)(1) or (2).

(3) If you own or operate an affected flash or short-term electroplating tank that is subject to the requirements in § 63.11507(b), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by limiting the plating time of the affected tank, you must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(4) If you own or operate an affected batch electrolytic process tank that is subject to the requirements of § 63.11507(a) or a flash or short-term electroplating tank that is subject to the requirements in § 63.11507(b), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.

(5) If you own or operate an affected continuous electrolytic process tank that is subject to the requirements of § 63.11507(a), “What are my standards and management practices?” and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must state in your annual certification that you have covered at least 75 percent of the surface area of the tank during all periods of electrolytic process operation.
(6) If you own or operate an affected tank or other affected plating and polishing operation that is subject to the management practices specified in § 63.11507(g), “What are my standards and management practices?” you must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

(7) Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period.

(d) If you own or operate an affected source, and any deviations from the compliance requirements specified in this subpart occurred during the year, you must report the deviations, along with the corrective action taken, and submit this report to the delegated authority.

(e) You must keep the records specified in paragraphs (e)(1) through (3) of this section.

1. A copy of any Initial Notification and Notification of Compliance Status that you submitted and all documentation supporting those notifications.

2. The records specified in § 63.10(b)(2)(ii) through (iii) and (xiv) of the General Provisions of this part.

3. The records required to show continuous compliance with each management practice and equipment standard that applies to you, as specified in § 63.11508(d), “What are my compliance requirements?”

(f) You must keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1) of the General Provisions to part 63. You may keep the records offsite for the remaining 3 years.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57920, Sept. 19, 2011]

Other Requirements and Information

§ 63.11510 What General Provisions apply to this subpart?

If you own or operate a new or existing affected source, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 1 of this subpart.

§ 63.11511 What definitions apply to this subpart?

Terms used in this subpart are defined in this section.

**Batch electrolytic process tank** means a tank used for an electrolytic process in which a part or group of parts, typically mounted on racks or placed in barrels, is placed in the tank and immersed in an electrolytic process solution as a single unit (i.e., as a batch) for a predetermined period of time, during which none of the parts are removed from the tank and no other parts are added to the tank, and after which the part or parts are removed from the tank as a unit.

**Bath** means the liquid contents of a tank, as defined in this section, which is used for electroplating, electroforming, electropolishing, or other metal coating processes at a plating and polishing facility.

**Bench-scale** means any operation that is small enough to be performed on a bench, table, or similar structure so that the equipment is not directly contacting the floor.

**Capture system** means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device, as part of a complete control system.
A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

Cartridge filter means a type of control device that uses perforated metal cartridges containing a pleated paper or non-woven fibrous filter media to remove PM from a gas stream by sieving and other mechanisms. Cartridge filters can be designed with single use cartridges, which are removed and disposed after reaching capacity, or continuous use cartridges, which typically are cleaned by means of a pulse-jet mechanism.

Composite mesh pad means a type of control device similar to a mesh pad mist eliminator except that the device is designed with multiple pads in series that are woven with layers of material with varying fiber diameters, which produce a coalescing effect on the droplets or PM that impinge upon the pads.

Continuous electrolytic process tank means a tank that uses an electrolytic process and in which a continuous metal strip or other type of continuous substrate is fed into and removed from the tank continuously. This process is also called reel-to-reel electrolytic plating.

Control device means equipment that is part of a control system that collects and/or reduces the quantity of a pollutant that is emitted to the air. The control device receives emissions that are transported from the process by the capture system.

Control system means the combination of a capture system and a control device. The capture system is designed to collect and transport air emissions from the affected source to the control device. The overall control efficiency of any control system is a combination of the ability of the system to capture the air emissions (i.e., the capture efficiency) and the control device efficiency. Consequently, it is important to achieve good capture to ensure good overall control efficiency. Capture devices that are known to provide high capture efficiencies include hoods, enclosures, or any other duct intake devices with ductwork, dampers, manifolds, plenums, or fans.

Conversion coatings are coatings that form a hard metal finish on an object when the object is submerged in a tank bath or solution that contains the conversion coatings. Conversion coatings for the purposes of this rule include coatings composed of chromium, as well as the other plating and polishing metal HAP, where no electrical current is used.

Cyanide plating means plating processes performed in tanks that use cyanide as a major bath ingredient and that operate at pH of 12 or more, and use or emit any of the plating and polishing metal HAP, as defined in this section. Electroplating and electroforming are performed with or without cyanide. The cyanide in the bath works to dissolve the HAP metal added as a cyanide compound (e.g., cadmium cyanide) and creates free cyanide in solution, which helps to corrode the anode. These tanks are self-regulating to a pH of 12 due to the caustic nature of the cyanide bath chemistry. The cyanide in the bath is a major bath constituent and not an additive; however, the self-regulating chemistry of the bath causes the bath to act as if wetting agents/fume suppressants are being used and to ensure an optimum plating process. All cyanide plating baths at pH greater than or equal to 12 have cyanide-metal complexes in solution. The metal HAP to be plated is not emitted because it is either bound in the metal-cyanide complex or reduced at the cathode to elemental metal, and plated onto the immersed parts. Cyanide baths are not intentionally operated at pH less 12 since unfavorable plating conditions would occur in the tank, among other negative effects.

Deviation means any instance in which an affected source or an owner or operator of such an affected source:

(1) Fails to meet any requirement or obligation established by this rule including, but not limited to, any equipment standard (including emissions and operating limits), management practice, or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this rule and that is included in the operating permit for any affected facility required to obtain such a permit; or

(3) Fails to meet any equipment standard (including emission and operating limits), management standard, or operation and maintenance requirement in this rule during startup, shutdown, or malfunction.

Dry mechanical polishing means a process used for removing defects from and smoothing the surface of finished metals and formed products after plating or thermal spraying with any of the plating and polishing metal HAP, as
defined in this section, using automatic or manually-operated machines that have hard-faced abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles. The affected process does not include polishing with use of pastes, liquids, lubricants, or any other added materials.

**Electroforming** means an electrolytic process using or emitting any of the plating and polishing metal HAP, as defined in this section, that is used for fabricating metal parts. This process is essentially the same as electroplating except that the plated substrate (mandrel) is removed, leaving only the metal plate. In electroforming, the metal plate is self-supporting and generally thicker than in electroplating.

**Electroless plating** means a non-electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Electroless plating is also called non-electrolytic plating. Examples include, but are not limited to, chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

**Electroplating processes** means electroplating and electroforming that use or emit any of the plating and polishing metal HAP, as defined in this section, where metallic ions in a plating bath or solution are reduced to form a metal coating on the surface of parts and products using electrical energy.

**Electroplating** means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metal ions in solution are reduced onto the surface of the work piece (the cathode) via an electrical current. The metal ions in the solution are usually replenished by the dissolution of metal from solid metal anodes fabricated of the same metal being plated, or by direct replenishment of the solution with metal salts or oxides; electroplating is also called electrolytic plating.

**Electropolishing** means an electrolytic process performed in a tank after plating that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a work piece is attached to an anode immersed in a bath, and the metal substrate is dissolved electrolytically, thereby removing the surface contaminant; electropolishing is also called electrolytic polishing. For the purposes of this subpart, electropolishing does not include bench-scale operations.

**Fabric filter** means a type of control device used for collecting PM by filtering a process exhaust stream through a filter or filter media. A fabric filter is also known as a baghouse.

**Filters**, for the purposes of this part, include cartridge, fabric, or HEPA filters, as defined in this section.

**Flash electroplating** means an electrolytic process performed in a tank that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or no more than 1 cumulative hour per day.

**General Provisions of this part (40 CFR part 63, subpart A)** means the section of the Code of Federal Regulations (CFR) that addresses air pollution rules that apply to all HAP sources addressed in part 63, which includes the National Emission Standards for Hazardous Air Pollutants (NESHAP).

**HAP** means hazardous air pollutant as defined from the list of 188 chemicals and compounds specified in the CAA Amendments of 1990; HAP are also called “air toxics.” The five plating and polishing metal HAP, as defined in this section, are on this list of 188 chemicals.

**High efficiency particulate air (HEPA) filter** means a type of control device that uses a filter composed of a mat of randomly arranged fibers and is designed to remove at least 99.97 percent of airborne particles that are 0.3 micrometers or larger in diameter.

**Maintenance** is any process at a plating and polishing facility that is performed to keep the process equipment or the facility operating properly and is not performed on items to be sold as products.

**Major facility for HAP** is any facility that emits greater than 10 tpy of any HAP, or that emits a combined total of all HAP of over 25 tpy, where the HAP used to determine the total facility emissions are not restricted to only plating and polishing metal HAP or from only plating and polishing operations.
Mesh pad mist eliminator means a type of control device, consisting of layers of interlocked filaments densely packed between two supporting grids that remove liquid droplets and PM from the gas stream through inertial impaction and direct interception.

Metal coating operation means any process performed either in a tank that contains liquids or as part of a thermal spraying operation, that applies one or more plating and polishing metal HAP, as defined in this section, to the surface of parts and products used in manufacturing. These processes include but are not limited to: non-chromium electroplating; electroforming; electropolishing; non-electrolytic metal coating processes, such as chromate conversion coating, electroless nickel plating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal or flame spraying.

Metal HAP content of material used in plating and polishing is the HAP content as determined from an analysis or engineering estimate of the HAP contents of the tank bath or solution, in the case of plating, metal coating, or electropolishing; or the HAP content of the metal coating being applied in the case of thermal spraying. Safety data sheet (SDS) information may be used in lieu of testing or engineering estimates but is not required to be used.

New source means any affected source for which you commenced construction or reconstruction after March 14, 2008.

Non-cyanide electrolytic plating and electropolishing processes means electroplating, electroforming, and electropolishing that uses or emits any of the plating and polishing metal HAP, as defined in this section, performed without cyanide in the tank. These processes do not use cyanide in the tank and operate at pH values less than 12. These processes use electricity and add or remove metals such as metal HAP from parts and products used in manufacturing. Both electroplating and electroforming can be performed with cyanide as well.

Non-electrolytic plating means a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Non-electrolytic plating is also called electroless plating. Examples include chromate conversion coating, nickel acetate sealing, electroless nickel plating, sodium dichromate sealing, and manganese phosphate coating.

Packed-bed scrubber means a type of control device that includes a single or double packed bed that contains packing media on which PM and droplets impinge and are removed from the gas stream. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

Plating and polishing facility means a facility engaged in one or more of the following processes that uses or emits any of the plating and polishing metal HAP, as defined in this section: electroplating processes other than chromium electroplating (i.e., non-chromium electroplating); electroless plating; other non-electrolytic metal coating processes performed in a tank, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; thermal spraying; and the dry mechanical polishing of finished metals and formed products after plating or thermal spraying. Plating is performed in a tank or thermally sprayed so that a metal coating is irreversibly applied to an object. Plating and polishing does not include any bench-scale processes.

Plating and polishing metal HAP means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form, with the exception of lead. Any material that does not contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), and does not contain manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as reported on the Material Safety Data Sheet for the material, is not considered to be a plating and polishing metal HAP.

Plating and polishing process tanks means any tank in which a process is performed at an affected plating and polishing facility that uses or has the potential to emit any of the plating and polishing metal HAP, as defined in this section. The processes performed in plating and polishing tanks include the following: electroplating processes other than chromium electroplating (i.e., non-chromium electroplating) performed in a tank; electroless plating; and non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and electropolishing. This term does not include tanks containing solutions that are used to clean, rinse or wash parts prior to placing the parts in a plating and polishing process tank, or subsequent to removing the parts from a plating and polishing process tank. This term also does not include any bench-scale operations.
PM means solid or particulate matter that is emitted into the air.

Repair means any process used to return a finished object or tool back to its original function or shape.

Research and development process unit means any process unit that is used for conducting research and development for new processes and products and is not used to manufacture products for commercial sale, except in a de minimis manner.

Short-term plating means an electroplating process that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or 1 hour cumulative per day.

Startup of the tank bath is when the components or relative proportions of the various components in the bath have been altered from the most recent operating period. Startup of the bath does not include events where only the tank’s heating or agitation and other mechanical operations are turned back on after being turned off for a period of time.

Tank cover for batch process units means a solid structure made of an impervious material that is designed to cover the entire open surface of a tank or process unit that is used for plating or other metal coating processes.

Tank cover for continuous process units, means a solid structure or combination of structures, made of an impervious material that is designed to cover at least 75 percent of the open surface of the tank or process unit that is used for continuous plating or other continuous metal coating processes.

Temporary thermal spraying means a thermal spraying operation that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that lasts no more than 1 hour in duration during any one day and is conducted in situ. Thermal spraying that is conducted in a dedicated thermal spray booth or structure is not considered to be temporary thermal spraying.

Thermal spraying (also referred to as metal spraying or flame spraying) is a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a metallic coating is applied by projecting heated, molten, or semi-molten metal particles onto a substrate. Commonly-used thermal spraying methods include high velocity oxy-fuel (HVOF) spraying, flame spraying, electric arc spraying, plasma arc spraying, and detonation gun spraying. This operation does not include spray painting at ambient temperatures.

Water curtain means a type of control device that draws the exhaust stream through a continuous curtain of moving water to scrub out suspended PM.

Wetting agent/fume suppressant means any chemical agent that reduces or suppresses fumes or mists from a plating and polishing tank by reducing the surface tension of the tank bath.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57921, Sept. 19, 2011]

§ 63.11512 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.
(1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g), of the General Provisions of this part.

(2) Approval of an alternative opacity emissions standard under § 63.6(h)(9), of the General Provisions of this part.

(3) Approval of a major change to test methods under § 63.7(e)(2)(ii) and (f), of the General Provisions of this part. A "major change to test method" is defined in § 63.90.

(4) Approval of a major change to monitoring under § 63.8(f), of the General Provisions of this part. A "major change to monitoring" is defined in § 63.90.

(5) Approval of a major change to recordkeeping and reporting under § 63.10(f), of the General Provisions of this part. A "major change to recordkeeping/reporting" is defined in § 63.90.

§ 63.11513  [Reserved]

Table 1 to Subpart WWWWWW of Part 63—Applicability of General Provisions to Plating and Polishing Area Sources

As required in § 63.11510, “What General Provisions apply to this subpart?”, you must meet each requirement in the following table that applies to you.

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>63.1¹</td>
<td>Applicability.</td>
</tr>
<tr>
<td>63.2</td>
<td>Definitions.</td>
</tr>
<tr>
<td>63.3</td>
<td>Units and abbreviations.</td>
</tr>
<tr>
<td>63.4</td>
<td>Prohibited activities.</td>
</tr>
<tr>
<td>63.6(a), (b)(1)-(b)(5), (c)(1), (c)(2), (c)(5), and (j)</td>
<td>Compliance with standards and maintenance requirements.</td>
</tr>
<tr>
<td>63.10(a), (b)(1), (b)(2)(i)-(iii), (xiv), (b)(3), (d)(1), (f)</td>
<td>Recordkeeping and reporting.</td>
</tr>
<tr>
<td>63.12</td>
<td>State authority and delegations.</td>
</tr>
<tr>
<td>63.13</td>
<td>Addresses of State air pollution control agencies and EPA regional offices.</td>
</tr>
<tr>
<td>63.14</td>
<td>Incorporation by reference.</td>
</tr>
<tr>
<td>63.15</td>
<td>Availability of information and confidentiality.</td>
</tr>
</tbody>
</table>

¹ Section 63.11505(e), “What parts of my plant does this subpart cover?”, exempts affected sources from the obligation to obtain title V operating permits.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57922, Sept. 19, 2011]
Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Minor Source Operating Permit (MSOP)

Source Description and Location

<table>
<thead>
<tr>
<th>Source Name:</th>
<th>NTK Precision Axle Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Location:</td>
<td>7635 South Layton Rd., Anderson, IN 46011</td>
</tr>
<tr>
<td>County:</td>
<td>Madison</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>3714 (Motor Vehicle Parts and Accessories)</td>
</tr>
<tr>
<td>Operation Permit No.:</td>
<td>M 095-38642-00147</td>
</tr>
<tr>
<td>Operation Permit Issuance Date:</td>
<td>September 20, 2017</td>
</tr>
<tr>
<td>Significant Permit Revision No.:</td>
<td>095-41521-00147</td>
</tr>
<tr>
<td>Permit Reviewer:</td>
<td>Luda Lang</td>
</tr>
</tbody>
</table>

Existing Approvals

The source was issued MSOP No. 095-38642-00147 on September 20, 2017. There have been no subsequent approvals issued.

County Attainment Status

The source is located in Madison County.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>Better than national standards.</td>
</tr>
<tr>
<td>CO</td>
<td>Unclassifiable or attainment effective November 15, 1990.</td>
</tr>
<tr>
<td>O₃</td>
<td>Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.¹</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>Unclassifiable or attainment effective April 15, 2015, for the 2012 annual PM₂.₅ standard.</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>Unclassifiable effective November 15, 1990.</td>
</tr>
<tr>
<td>NO₂</td>
<td>Unclassifiable or attainment effective January 29, 2012, for the 2010 NO₂ standard.</td>
</tr>
<tr>
<td>Pb</td>
<td>Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard.</td>
</tr>
</tbody>
</table>

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard, which was revoked effective June 15, 2005.

(a) Ozone Standards
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. Madison 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) PM₂.₅
Madison County has been classified as attainment for PM₂.₅. Therefore, direct PM₂.₅, SO₂, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
(c) Other Criteria Pollutants

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

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**Fugitive Emissions**

Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit (326 IAC 2-7) and MSOP (326 IAC 2-6.1) applicability and source status under Section 112 of the Clean Air Act (CAA).

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**Greenhouse Gas (GHG) Emissions**

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at [http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf](http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

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**Source Status - Existing Source**

This table reflects the unrestricted potential emissions of the source prior to the proposed revision. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Source-Wide Emissions Prior to Revision (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM¹</td>
</tr>
<tr>
<td>0.11</td>
</tr>
</tbody>
</table>

---

*Total PTE of Entire Source Excluding Fugitives*
### Source-Wide Emissions Prior to Revision (tons/year)

<table>
<thead>
<tr>
<th></th>
<th>PM¹</th>
<th>PM₁₀¹</th>
<th>PM₂.₅¹ ²</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title V Major Source Thresholds</td>
<td>-</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>25</td>
</tr>
<tr>
<td>Total PTE of Entire Source Including Source-Wide Fugitives*</td>
<td>3.23</td>
<td>1.06</td>
<td>0.59</td>
<td>0.03</td>
<td>5.77</td>
<td>35.60</td>
<td>4.84</td>
<td>0.11</td>
</tr>
<tr>
<td>MSOP Thresholds</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>&lt;100</td>
<td>&lt;25</td>
</tr>
</tbody>
</table>

¹Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM₂.₅, not particulate matter (PM), are each considered as a "regulated air pollutant."

²PM₂.₅ listed is direct PM₂.₅.

*Fugitive HAP emissions are always included in the source-wide emissions.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is not a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.

(c) These emissions are based on the TSD of MSOP No. 095-38642-00147, issued on September 20, 2017.

---

### Emission Units and Pollution Control Equipment

**Constructed Under the Provisions of 326 IAC 2-1.1-3 (Exemptions)**

As part of this permitting action, the source requested to add the following existing emission unit(s) constructed under the provisions of 326 IAC 2-1.1-3 (Exemptions):

(a) One (1) parts washer, using a maximum of 1.0 gallon per day of solvents containing VOCs.

(b) One (1) maintenance shot blaster, with a maximum capacity of 0.9 pounds of abrasive per hour.

The total potential to emit of these units is less than levels specified at 326 IAC 2-1.1-3(e)(1)(A) through (G) and the addition of the emission units did not require the source to transition to a higher operation permit level. Therefore, pursuant to 326 IAC 2-1.1-3(e), the permit revision requirements under 326 IAC 2-6.1-6, including the requirement to submit an application, do not apply to these emission units. See Appendix A of this Technical Support Document for detailed emission calculations.

---

### Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by NTK Precision Axle Corporation on June 3, 2019, relating to adding new emission units and existing unpermitted emission units to their current Minor Source Operating Permit (MSOP).

The following is a list of the new emission units:

(a) Three (3) zinc phosphate non-electrolytic plating booths, constructed in 2019, each with a maximum capacity of 171 parts per hour, using dip coating for application of coatings, and exhausting indoors.

The booths are new affected sources under the provisions of 40 CFR 63, Subpart WWWWWW.
(b) Two (2) paint lines, constructed in 2019, each with a maximum capacity of 137 parts per hour, using roll coating and electrodeposition for application of a powdered slurry coating, and exhausting to three stacks per line (CS6a, CS6b, CS6c, CS7a, CS7b, and CS7c).

(c) Seven (7) heat treat lines, constructed in 2019, each with a maximum capacity of 103 parts per hour, using dip coating for application of coatings, and exhausting indoors.

(d) Two (2) wet turning machines, constructed in 2019, each with a maximum capacity of 47.2 parts per hour and a maximum usage rate 0.05 gallons per hour of machining oil, and exhausting indoors.

(e) One (1) hollow shaft turning machine, constructed in 2019, identified as T-101, with a maximum capacity of 70 parts per hour.

(f) One (1) hollow shaft heat treat line, constructed in 2019, identified as H-101, with a maximum capacity of 130 parts per hour.

(g) Seven (7) shot blasters, each with a maximum capacity of 0.9 pounds of abrasive per hour.

[Note: The units included above are exempt units under 326 IAC 2-1.1-3]

The following emission units were constructed and/or operated without a permit:

(h) Two (2) sealed air packaging machines, identified as U-101, constructed in 2019, each with a maximum capacity of 55 units per hour, using no control, and exhausting indoors.

As part of this permitting action, the following emission unit is being removed from the permit:

(i) One (1) parts washer from EU-6, using a maximum of 0.30 gallons per hour of solvents.

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**Enforcement Issues**

IDEM is aware that equipment (two (2) sealed air packaging machines) has been constructed prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

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**Emission Calculations**

See Appendix A of this Technical Support Document for detailed emission calculations.

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**Permit Level Determination – MSOP Significant Permit Revision**

Pursuant to 326 IAC 2-1.1-1(12), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”
The following table is used to determine the appropriate permit level under 326 IAC 2-6.1-6. This table reflects the PTE before controls of the proposed revision. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM\textsubscript{10}</th>
<th>PM\textsubscript{2.5}</th>
<th>SO\textsubscript{2}</th>
<th>NO\textsubscript{X}</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hollow Shaft Heat Treat Line (H-101)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.07</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hollow Shaft Turning Machine (T-101)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.10</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Abrasive Blasting</td>
<td>0.32</td>
<td>0.22</td>
<td>0.22</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sealed Air Packaging Machines (U-101)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>25.86</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Parts Washer (EU-6)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.11</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Three (3) Zinc Phosphate Coating Booths (in EU-2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.09</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Two (2) Paint Lines (in EU-3)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.40</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Seven (7) Heat Treat Lines (in EU-04)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.31</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Two (2) Wet Turning Machine (in EU-5a)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.91</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total PTE Before Controls of the New Emission Units:</strong></td>
<td>0.32</td>
<td>0.22</td>
<td>0.22</td>
<td>-</td>
<td>-</td>
<td>33.85</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

\textsuperscript{1}PM\textsubscript{2.5} listed is direct PM\textsubscript{2.5}.

Appendix A of this TSD reflects the detailed potential emissions of the proposed revision.

Pursuant to 326 IAC 2-6.1-6(i)(1)(E), this MSOP is revised through a Significant Permit Revision because the proposed revision is not an Administrative Amendment or Minor Permit Revision and the proposed revision involves the construction of new emission units with a potential to emit greater than or equal to twenty-five (25) tons per year of the following pollutants: VOC.

**PTE of the Entire Source After Issuance of the MSOP Revision**

The table below summarizes the uncontrolled/unlimited potential to emit of the entire source. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.
Source-Wide Emissions after Issuance (ton/year) (Uncontrolled/Unlimited)

<table>
<thead>
<tr>
<th>Source Description</th>
<th>PM¹</th>
<th>PM₁₀</th>
<th>PM₂.₅</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire Source Excluding Fugitive Emissions*</td>
<td>0.42</td>
<td>0.66</td>
<td>0.66</td>
<td>0.03</td>
<td>5.77</td>
<td>69.73</td>
<td>4.84</td>
<td>0.11</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
<td>-</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>25</td>
</tr>
<tr>
<td>Total PTE of Entire Source Including Source-Wide Fugitives*</td>
<td>3.54</td>
<td>1.28</td>
<td>0.81</td>
<td>0.03</td>
<td>5.77</td>
<td>69.01</td>
<td>4.84</td>
<td>0.11</td>
</tr>
<tr>
<td>MSOP Thresholds</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>&lt; 100</td>
<td>&lt; 25</td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>--</td>
</tr>
</tbody>
</table>

*Fugitive HAP emissions are always included in the source-wide emissions.

Appendix A of this TSD reflects the detailed unlimited/uncontrolled emissions of the source.

(a) This existing Title V minor stationary source will continue to be minor under 326 IAC 2-7 because the uncontrolled/unlimited potential to emit criteria pollutants and HAPs from the entire source will continue to be less than the Title V major source threshold levels. Therefore, the source is subject to the provisions of 326 IAC 2-6.1 (MSOP) and is an area source under Section 112 of the Clean Air Act (CAA).

(b) This existing minor PSD stationary source will continue to be minor under 326 IAC 2-2 because the potential to emit of all PSD regulated pollutants from the entire source will continue to be less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

Due to the proposed revision, federal rule applicability has been reviewed as follows:

New Source Performance Standards (NSPS):

(a) The requirements of the New Source Performance Standard for Automobile and Light Duty Truck Surface Coating Operations, 40 CFR 60, Subpart MM and 326 IAC 12, are not included in the permit for this source, because this source does not contain any surface coating of automobiles or light duty trucks operations. This source applies surface coatings to automobile parts.

(b) There are no other New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Automobiles and Light-Duty Trucks, 40 CFR 63, Subpart III and 326 IAC 20-85 are not included in the permit for this source, since this source does not contain any
surface coating of automobiles or light duty trucks operations. This source applies surface coatings to automobile parts.

(b) 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, Subpart HHHHHH are not included in the permit for this source, since this source does not use solvents containing methylene chloride, does not perform automobile refinishing operations, and does not use spray application of coatings containing target HAPs. Coatings that containing manganese are applied using dip coating.

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63, Subpart MMMM and 326 IAC 20-80 are not included in the permit for this source, since this source is not a major source of HAPs.

(d) Three (3) new zinc phosphate coating booths (in EU-2) are subject to the National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, 40 CFR 63, Subpart WWWWWW, because these units apply a manganese phosphate coating, the coating booths use non-electrolytic plating, and they are located at an area source of HAPs.

Applicable portions of the NESHAP are the following:

1. 40 CFR 63.11504(a)
2. 40 CFR 63.11505(a), (c), and (d)
3. 40 CFR 63.11506(c)
4. 40 CFR 63.11507(g)
5. 40 CFR 63.11508(a), (b), (c)(7), and (d)(1,2, and 6)
6. 40 CFR 63.11509(a), (b), (c)(6 and 7), (d), (e), and (f)
7. 40 CFR 63.11510
8. 40 CFR 63.11511
9. 40 CFR 63.11512
10. Table 1

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the zinc phosphate coating booths (in EU-2) except as otherwise specified in 40 CFR 63, Subpart WWWWWW.

(e) There are no other National Emission Standards for Hazardous Air Pollutants under 40 CFR 63, 326 IAC 14 and 326 IAC 20 included for this proposed revision.

Compliance Assurance Monitoring (CAM):

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

Due to this revision, state rule applicability has been reviewed as follows:

326 IAC 2-6.1 (MSOP)
MSOP applicability is discussed under the PTE of the Entire Source After Issuance of the MSOP Revision section of this document.
326 IAC 2-2 (PSD)
PSD and Emission Offset applicability is discussed under the PTE of the Entire Source After Issuance of the MSOP Revision section of this document.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The new emission unit(s) will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

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

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

1. 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.

2. Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is not subject to the requirements of 326 IAC 6-5, because the source has potential fugitive particulate emissions of less than twenty-five (25) tons per year.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-1(a), this source (located in Madison County) is not subject to the requirements of 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Madison County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

<table>
<thead>
<tr>
<th>State Rule Applicability – Individual Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due to the proposed revision, state rule applicability has been reviewed as follows:</td>
</tr>
<tr>
<td>Production Lines, Machining Operations (U-101, EU-2, EU-3, EU-4, EU-5a)</td>
</tr>
</tbody>
</table>

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(5) and (6) the new zinc phosphate coating booths (in EU-2), paint lines (in Uu-3), and heat treat lines (in EU-04) are not subject to the requirements of 326 IAC 6-3, since these units utilize dip coating or roll coating.
326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though, the new zinc phosphate coating booths (in EU-2), paint lines (in EU-3), and heat treat lines (in EU-04) was constructed after January 1, 1980, it is not subject to the requirements of 326 IAC 8-1-6 because its unlimited VOC potential emissions are less than twenty-five (25) tons per year.

326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operations)
The new zinc phosphate coating booths (in EU-2), paint lines (in EU-3), and heat treat lines (in EU-04) are not subject to the requirements of 326 IAC 8-2-2, since the source is not an automotive or light duty truck assembly plant. The source only coats driveshafts.

326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations)
Pursuant to 326 IAC 8-2-1(b), the new zinc phosphate coating booths (in EU-2), paint lines (in EU-3), and heat treat lines (in EU-04) are not subject to the requirements of 326 IAC 8-2-9, since they each have potential VOC emissions of less than fifteen (15) pounds per day.

Sealed Packaging Machines (U-101)

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though, the new sealed air packaging machines was constructed after January 1, 1980, they are not subject to the requirements of 326 IAC 8-1-6 because its unlimited VOC potential emissions are each less than twenty-five (25) tons per year.

Parts Washers (EU-6)

326 IAC 8-3-2 (Cold cleaner degreaser control equipment and operating requirements)
Pursuant to 326 IAC 8-3-1(c), the parts washer (EU-6) using VOC containing solvents is subject to 326 IAC 8-3-2, since it is a cold cleaner degreaser installed after 1980 located in Madison County without remote solvent reservoirs. For the parts washer, the Permittee shall:

1. Operators of cold cleaner degreasers shall ensure the following control equipment and operating requirements are met:

   A. Equip the degreaser with a cover.
   B. Equip the degreaser with a device for draining cleaned parts.
   C. Close the degreaser cover whenever parts are not being handled in the degreaser.
   D. Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
   E. Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).
   F. Store waste solvent only in closed containers.
   G. Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

2. The Permittee shall ensure the following additional control equipment and operating requirements are met:

   A. Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
(i) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(ii) A water cover when solvent used is insoluble in, and heavier than, water.

(iii) A refrigerated chiller.

(iv) Carbon adsorption.

(v) An alternative system of demonstrated equivalent or better control as those outlined in (b)(1)(A) through (D) of this condition that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

(B) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.

(C) If used, solvent spray:

(i) must be a solid, fluid stream; and

(ii) shall be applied at a pressure that does not cause excessive splashing.

326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers)
Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), on and after January 1, 2015, the Permittee shall not operate a cold cleaning degreaser with a solvent that has a VOC composite partial vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

Abrasive blasting

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the abrasive blasting operation is not subject to the requirements of 326 IAC 6-3, since it is a manufacturing process with potential emissions less than 0.551 pounds per hour, and therefore exempt from the rule.

Compliance Determination and Monitoring Requirements

There are no new or modified compliance requirements included with this revision.

Proposed Changes

The following changes listed below are due to the proposed revision. Deleted language appears as strikethrough text and new language appears as bold text:

(1) For this MSOP revision, IDEM OAQ has included IDEM's Master Agency ID number in the permit cover page signature box; and

(2) Sections A.2, D.1 and E.1 have been updated to include the new emission units.
...  

A.2  Emission Units and Pollution Control Equipment Summary  

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

(a) One (1) parkerizing and rust proofing operation, identified as EU-1, approved in 2017 for construction constructed in 2017, with a maximum capacity of 342 parts per hour, using dip coating for application of coatings, and exhausting to stacks PSa and PSb.

The operation is a new affected source under the provisions of 40 CFR 63, Subpart WWWW.

(b) Four (4) Seven (7) zinc phosphate non-electrolytic plating booths, identified as EU-2, approved in 2017 for construction constructed in 2017 and 2019, each with a maximum capacity of 171 parts per hour, using dip coating for application of coatings, and exhausting indoors.

The booths are new affected sources under the provisions of 40 CFR 63, Subpart WWWW.

(c) Five (5) Seven (7) paint lines, identified as EU-3, approved in 2017 for construction constructed in 2017 and 2019, each with a maximum capacity of 137 parts per hour, using roll coating and electrodeposition for application of a powdered slurry coating, and exhausting to three stacks per line (CS1a, CS1b, CS1c, CS2a, CS2b, CS2c, CS3a, CS3b, CS3c, CS4a, CS4b, CS4c, CS5a, CS5b, and CS5c, CS6a, CS6b, CS6c, CS7a, CS7b, and CS7c).

(d) Ten (10) Seventeen (17) heat treat lines, identified as EU-4, approved in 2017 for construction constructed in 2017 and 2019, each with a maximum capacity of 103 parts per hour, using dip coating for application of coatings, and exhausting indoors.

(e) Machining operations, approved in 2017 for construction constructed in 2017 and 2019, consisting of the following:

(1) Twenty-nine (29) Thirty-one (31) wet turning machines, identified as EU-5a, each with a maximum capacity of 47.2 parts per hour and a maximum usage rate 0.05 gallons per hour of machining oil, and exhausting indoors.

(2) Five (5) wet swaging machines, identified as EU-5b, with a total maximum capacity of 137 parts per hour and a maximum usage rate 0.0057 gallons of machining oil per hour, and exhausting indoors.

(3) Six (6) wet saws, identified as EU-5c, with a total maximum capacity of 1368 parts per hour and a maximum usage rate of 1.19 gallons of machining oil per hour, and exhausting indoors.

(f) Parts washers, identified as EU-6, consisting of:

(1) Four (4) parts washers, each using a maximum of 1.36 gallons per hour day of solvents that contain no VOCs or HAPs.

(2) One (1) parts washer, using a maximum of 0.30 gallons per hour day of solvents that contain no VOCs or HAPs.

(3) One (1) parts washer, using a maximum of 0.30 gallons per hour of solvents.
(3) **One (1) parts washer, using a maximum of 1.0 gallon per day of solvents containing VOCs.**

(g) Natural gas-fired space heaters, approved in 2017 for construction constructed in 2017, consisting of the following:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Number</th>
<th>Capacity per Unit (MMBtu/hr)</th>
<th>Total Capacity (MMBtu/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hanging Shop Heaters</td>
<td>5</td>
<td>0.25</td>
<td>1.25</td>
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<tr>
<td>Hanging Shop Heaters</td>
<td>2</td>
<td>0.20</td>
<td>0.40</td>
</tr>
<tr>
<td>Hanging Shop Heaters</td>
<td>3</td>
<td>0.15</td>
<td>0.45</td>
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<tr>
<td>RTU1</td>
<td>1</td>
<td>0.25</td>
<td>0.25</td>
</tr>
<tr>
<td>RTU2</td>
<td>1</td>
<td>0.60</td>
<td>0.60</td>
</tr>
<tr>
<td>RTU3 to RTU20</td>
<td>18</td>
<td>0.40</td>
<td>7.20</td>
</tr>
<tr>
<td>RTU21</td>
<td>1</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>RTU22</td>
<td>1</td>
<td>0.28</td>
<td>0.28</td>
</tr>
<tr>
<td>RTU23</td>
<td>1</td>
<td>0.60</td>
<td>0.60</td>
</tr>
<tr>
<td>RTU24</td>
<td>1</td>
<td>0.40</td>
<td>0.40</td>
</tr>
<tr>
<td>RTU25 and RTU26</td>
<td>2</td>
<td>0.20</td>
<td>0.40</td>
</tr>
<tr>
<td>RTU27 and RTU28</td>
<td>2</td>
<td>0.20</td>
<td>0.40</td>
</tr>
<tr>
<td>RTU29 and RTU30</td>
<td>2</td>
<td>0.20</td>
<td>0.40</td>
</tr>
<tr>
<td>RTU31</td>
<td>1</td>
<td>0.28</td>
<td>0.28</td>
</tr>
<tr>
<td>RTU32</td>
<td>1</td>
<td>0.40</td>
<td>0.40</td>
</tr>
</tbody>
</table>

(h) Two (2) sealed air packaging machines, identified as U-101, constructed in 2019, each with a maximum capacity of 55 units per hour, using no control, and exhausting indoors.

(i) **One (1) hollow shaft turning machine, identified as T-101, with a maximum capacity of 70 parts per hour.**

(j) **One (1) hollow shaft heat treat line, identified as H-101, with a maximum capacity of 130 parts per hour.**

(k) **Seven (7) shot blasters, each with a maximum capacity of 0.9 pounds of abrasive per hour.**

(l) **One (1) maintenance shot blaster, with a maximum capacity of 0.9 pounds of abrasive per hour.**

(ʌm) Paved roads.

...
SECTION E.1 NESHAP

Emissions Unit Description:

(a) One (1) parkerizing and rust proofing operation, identified as EU-1, approved in 2017 for construction in 2017, with a maximum capacity of 342 parts per hour, using dip coating for application of coatings, and exhausting to stacks PSa and PSb.  
The operation is a new affected source under the provisions of 40 CFR 63, Subpart WWWW.

(b) Four (4) Seven (7) zinc phosphate non-electrolytic plating booths, identified as EU-2, approved in 2017 for construction in 2017 and 2019, each with a maximum capacity of 171 parts per hour, using dip coating for application of coatings, and exhausting indoors.  
The booths are new affected sources under the provisions of 40 CFR 63, Subpart WWWW.

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

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 June 3, 2019.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed MSOP Significant Permit Revision No. 095-41521-00147. The staff recommends to the Commissioner that the MSOP Significant Permit Revision be approved.

IDEM Contact

(a) If you have any questions regarding this permit, please contact Luda Lang, 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) 233-0863 or (800) 451-6027, and ask for Luda Lang or (317) 233-0863.

(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 Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens’ Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.
### Company Name: NTK Precision Axle Corporation  
### Source Address: 7635 South Layton Rd., Anderson, IN 46011  
### MSOP No.: M095-38642-00147  
### SPR No.: 095-41521-00147  
### Reviewer: Luda Lang  

#### Emission Units

<table>
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<th>Emission Units</th>
<th>PM</th>
<th>PM$_{2.5}$</th>
<th>PM$_{10}$</th>
<th>SO$_2$</th>
<th>NO$_x$</th>
<th>VOC</th>
<th>CO</th>
<th>Combined HAPs</th>
<th>Highest Single HAP</th>
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<td>4.84</td>
<td>0.11</td>
<td>0.10</td>
<td>Hexane</td>
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<td><strong>TOTAL</strong></td>
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<td>1.28</td>
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<td>5.77</td>
<td>69.01</td>
<td>4.84</td>
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### Uncontrolled/Unlimited Potential to Emit (tons/year)

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<th>PM$_{2.5}$</th>
<th>SO$_2$</th>
<th>NO$_x$</th>
<th>VOC</th>
<th>CO</th>
<th>Combined HAPs</th>
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<tr>
<td>Hollow Shaft Heat Treat Line (H-101)</td>
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<td>Hollow Shaft Turning Machine (T-101)</td>
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<td>Abrasive Blasting</td>
<td>0.32</td>
<td>0.22</td>
<td>0.22</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>25.86</td>
<td>-</td>
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<td>Parts Washers (EU-6)</td>
<td>-</td>
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<td>-</td>
<td>0.11</td>
<td>-</td>
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<td>Three (3) Zinc Phosphate Coating Booths (in EU-2)</td>
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<td>Two (2) Paint Lines (in EU-3)</td>
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<td>Seven (7) Heat Treat Lines (in EU-04)</td>
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<td>Two (2) Wet Turning Machine (in EU-5a)</td>
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<td>1.91</td>
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<tr>
<td><strong>Total</strong></td>
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<td>≥25</td>
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<td>≥25</td>
<td>≥25</td>
<td>≥100</td>
<td>≥25 of any combination of HAP</td>
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</table>
### Appendix A: Emissions Calculations
#### VOC and Particulate
From Surface Coating Operations

**Company Name:** NTK Precision Axle Corporation  
**Source Address:** 7635 South Layton Rd., Anderson, IN 46011  
**MSOP No.:** M095-38542-00147  
**SPR No.:** 095-41521-00147  
**Reviewer:** Luda Lang

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (Lb/Gal)</th>
<th>Weight % Volatile (H2O &amp; Organics)</th>
<th>Weight % Water</th>
<th>Weight % Organics</th>
<th>Volume % Water</th>
<th>Volume % Non-Volatiles (solids)</th>
<th>Gal of Mat. (gal/unit)</th>
<th>Maximum (unit/hour)</th>
<th>Pounds VOC per gallon of coating</th>
<th>Potential VOC pounds per hour</th>
<th>Potential VOC pounds per day</th>
<th>Potential VOC tons per year</th>
<th>Particulate Potential (ton/yr)</th>
<th>lb VOC/gal solids</th>
<th>Transfer Efficiency*</th>
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<tr>
<td>Parkerizing and Rust Proofing EU-1</td>
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<tr>
<td>Parco Cleaner ZX-3</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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</tr>
<tr>
<td>Parco Lubrite Z</td>
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</tr>
<tr>
<td>Rust Preventative</td>
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<td>97.50%</td>
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<td>2.50%</td>
<td>97.50%</td>
<td>2.6BE-03</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
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<td>0.00%</td>
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<td>0.00%</td>
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<tr>
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<tr>
<td>Chemfil Buffer</td>
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<td>0.00E+00</td>
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<td>100%</td>
</tr>
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<td><strong>Total</strong></td>
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</tr>
<tr>
<td>Powercron Black Feed</td>
<td>8.53</td>
<td>59.49%</td>
<td>44.49%</td>
<td>15.00%</td>
<td>45.00%</td>
<td>36.00%</td>
<td>8.7BE-04</td>
<td>959.0</td>
<td>2.44</td>
<td>1.34</td>
<td>1.12</td>
<td>26.85</td>
<td>4.90</td>
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<td>3.72</td>
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<td><strong>Each Booth</strong></td>
<td>0.16</td>
<td>3.81%</td>
<td>0.70%</td>
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</tr>
<tr>
<td>Geo-Guard 4008</td>
<td>9.00</td>
<td>95.00%</td>
<td>90.00%</td>
<td>5.00%</td>
<td>90.00%</td>
<td>5.00%</td>
<td>2.1BE-04</td>
<td>1751.0</td>
<td>4.50</td>
<td>0.45</td>
<td>0.17</td>
<td>4.12</td>
<td>1.75</td>
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<tr>
<td><strong>Each Line</strong></td>
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<td>0.24%</td>
<td>0.04%</td>
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<td>Hollow Shaft Heat Treat Line H-101</td>
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<tr>
<td>Geo-Guard 4008</td>
<td>9.00</td>
<td>95.00%</td>
<td>90.00%</td>
<td>5.00%</td>
<td>90.00%</td>
<td>5.00%</td>
<td>2.75E-04</td>
<td>130.0</td>
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<td>0.45</td>
<td>0.02</td>
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<td><strong>Total</strong></td>
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<td>4.50%</td>
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<td><strong>Totals</strong></td>
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<td>10.59%</td>
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</table>

*Transfer efficiencies are as follows:
The Parkerizing and Rust Proofing EU-1 uses dip coating with 100% transfer efficiency.
The seven (7) Zinc Phosphate Coating Booths EU-2 use dip coating with 100% transfer efficiency.
The seven (7) Paint Lines EU-3 use roll coating and electrodeposition for application with 100% transfer efficiency.
The seventeen (17) Heat Treat Lines EU-4 use dip coating for application of coatings with 100% transfer efficiency.
The Hollow Shaft Heat Treat Line H-101 uses dip coating for application of coatings with 100% transfer efficiency.

**METHODOLOGY**
Coatings contain no HAPs

- Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1 - Volume % water)
- Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
- Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
- Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
- Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs)
- Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1 - Weight % Volatiles) * (1 - Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
- Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % Organics) / (Volume % solids)
Appendix A: Emissions Calculations
Sealed Air Packaging Machines

Company Name: NTK Precision Axle Corporation
Source Address: 7635 South Layton Rd., Anderson, IN 46011
MSOP No.: M095-38642-00147
SPR No.: 095-41521-00147
Reviewer: Luda Lang

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (lb/gal)</th>
<th>Weight % VOC</th>
<th>Material Usage (lb/unit)</th>
<th>Maximum Throughput (unit/hour)</th>
<th>Potential VOC (lb/hr)</th>
<th>Potential VOC (lb/day)</th>
<th>Potential VOC (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two (2) Sealed Air Packaging Machines U-101</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Instapak Dispenser Solution M-58</td>
<td>8.05</td>
<td>96.36%</td>
<td>9.12E-02</td>
<td>55.00</td>
<td>4.83</td>
<td>116.00</td>
<td>21.17</td>
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<tr>
<td>Instapak Port Cleaner M-57</td>
<td>8.05</td>
<td>0.00%</td>
<td>1.76E-02</td>
<td>55.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Gflex Component &quot;A&quot; M-51</td>
<td>10.35</td>
<td>0.07%</td>
<td>1.76E-02</td>
<td>55.00</td>
<td>0.00</td>
<td>0.02</td>
<td>0.00</td>
</tr>
<tr>
<td>Gflex Component &quot;B&quot; M-52</td>
<td>8.8</td>
<td>10.45%</td>
<td>1.76E-02</td>
<td>55.00</td>
<td>0.10</td>
<td>2.43</td>
<td>0.44</td>
</tr>
<tr>
<td>Multemp TAS No. 2</td>
<td>7.59</td>
<td>100.00%</td>
<td>1.76E-02</td>
<td>55.00</td>
<td>0.97</td>
<td>23.23</td>
<td>4.24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5.90</strong></td>
<td><strong>141.68</strong></td>
<td></td>
<td></td>
<td><strong>25.86</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**METHODOLOGY**
Potential VOC (lb/hr) = Maximum Throughput (unit/hr) x Material Usage (lb/unit) x Weight % VOC
Potential VOC (lb/day) = Potential VOC (lb/hr) x 24 (hr/day)
Potential VOC (tpy) = Potential VOC (lb/hr) x 8,760 (hr/yr) / 2,000 (lb/ton)
The VOC content of Multemp TAS No. 2 is not available - 100% VOC content is conservatively being used for calculations
According to the 2005 AESF training manual, Electroplating & Surface Finishing, the zinc phosphate coating weight range for drawing is 300-2500 mg/m². Since the SDS provided indicates that the product, Bonderite M-MN Lubrite 2, is a heavy zinc phosphate, emissions are based on the high end of the range.

According to the online article "Phosphate Conversion Coatings", http://www.pfonline.com/articles/phosphate-conversion-coatings, accessed 8/11/16, cold forming zinc phosphates are operated iron-free to extend die life. Thus the general phosphating reaction is:

\[
\text{Fe} + 3 \text{Zn(H}_2\text{PO}_4\text{)}_2 + 2 \text{H}_2\text{O} \rightarrow \text{Zn}_3(\text{PO}_4)_2 \cdot 4 \text{H}_2\text{O} \downarrow + \text{FeHPO}_4 + 3 \text{H}_3\text{PO}_4 + \text{H}_2
\]

and the formula weight of the hydrated phosphate complex is:

\[
457 \text{ (g/g-mole)}
\]

At the target coating weight the molar deposition is:

\[
\frac{2500 \text{ (mg/m²)}}{1000 \text{ (mg/g)}} / 457 \text{ (g/g-mole)} = 5.47E-03 \text{ (g-mole/m²)}
\]

and the molar gas generation from the reaction above is:

\[
5.47E-03 \text{ (g-mole phosphate/m²)} \times 1 \text{ (g-mole H}_2\text{/g-mole phosphate)} = 5.47E-03 \text{ (g-mole H}_2\text{/m²)}
\]

According to "Phosphate Conversion Coatings", the highest typical operating temperature for heavy zinc phosphate is 185 (ºF) = 358 (K).

So the actual volume can be found from the ideal gas law, \( P \frac{V}{T} = RT \), where \( R = 0.08205 \text{ (l atm/g mole K)} \) (Table 1-9, Perry's Chemical Engineers' Handbook, 6th ed.).

and for \( P = 1 \text{ atm} \),

\[
\frac{V}{T} = 29.40 \text{ (l/g mole)} \text{ at the operating temperature, following the convention of representing molar volume (l/g mole) as } V\text{.}
\]

and the actual volume of gas generated is, \( V = 5.47E-03 \text{ (g-mole H}_2\text{/m²)} \times 29.40 \text{ (l/g mole)} = 0.16 \text{ (l/m²)}
\]

Calculation of average surface area of phosphate coated products:

| Density of steel, \( \rho \) | 8000 \text{ (kg/m³)} |
| Wire diameter, \( d \) | 50 \text{ (mm)} |
| Wire radius, \( r \) | 0.025 \text{ (m)} |
| Cross sectional area of wire, \( a \) | 0.0019635 \text{ (m²)} |
| Production mass rate, \( m \) | 1,632,653 \text{ (kg/yr)} |
| Production volume rate, \( q \) | 204.081625 \text{ (m³/yr)} |
| Annual length, \( l \) | 1.04E+05 \text{ (m/yr)} |

Then the gas volume generation rate, \( V_{\text{total}} \), is \( A \times V = 16,327 \text{ (m²/yr)} \times 0.16 \text{ (l/m²)} = 2,626 \text{ (l/yr)} = 93 \text{ (ft}^3\text{/yr)} = 0.01 \text{ acfh} \)

According to Chapter 12.20, AP-42, the following equation may be used to estimate emissions from electroless plating operations, and by extension processes such as conventional coating that generate gas without an applied current:

\[
E_1 = 100 k_1 R_b \left\{\frac{(1-2a+9a^2)^{0.5} + (a-1)}{(1+3a) - (1-2a+9a^2)^{0.5}}\right\}^{0.5}
\]

where

\[
a = 6.45 \frac{R_b}{\sqrt{k_2}}
\]

\[
k_1 = 56.7 \frac{\sigma}{c s^2}
\]

\[
k_2 = 1.79 \times 10^5 \frac{\sigma}{(\rho_l - \rho_g)g}
\]

and

\[
E_1 = \text{emission factor, grain/bubble}
\]

\[
R_b = \text{average bubble radius, in.} = 0.002 \text{ (assumed diameter 100 } \mu\text{m} = 0.1 \text{ mm)}
\]

\[
\sigma = \text{surface tension of bath, lbf/ft} = 5.21E-03 = 76 \text{ dynes/cm (phosphoric acid solution, x=0.1, Fig 6, Wang, et al., “Modeling Surface Tension of Concentrated and Mixed-Solvent Electrolyte Solutions” Ind Eng Chem Res, 50, 4086-4098, 2011)}
\]

\[
c_s = \text{speed of sound, ft/sec} = 1140 \text{ AP-42, Chap 12.20}
\]

\[
\rho_l = \text{density of liquid, lb/ft}^3 = 67.70 \text{ (8% by vol M-ZN 1048 R4, 8% M-AD 319)}
\]

\[
\rho_g = \text{density of gas, lb/ft}^3 = 0.0043 \text{ (hydrogen at 0ºC, 1 atm, Tbl 3-30, Perry's, corrected to operating temperature by Charles' Law)}
\]

\[
g = \text{acceleration due to gravity, ft/sec}^2 = 32.2 \text{ AP-42, Chap 12.20}
\]

Then

\[
a = 5.85E-05
\]

\[
k_1 = 2.27E-07
\]

\[
k_2 = 4.28E-01
\]

and

\[
E_1 = 6.73E-13 \text{ gr/bubble} = 3.64E-02 \text{ gr/ft}^3 \text{ of gas generated, } E_1 \text{ (gr/bubble)} / \left[4/3 \pi \left(\frac{R_b}{12}\right)^3\right]
\]

and actual emissions are:

| Nickel content (M-ZN 1048 R4 1%, and M-AD 319 10% Ni(NO₃)₂), \([\text{Ni}]\) | 0.3% |
| Phosphorus content (M-ZN 1048 R4 30% Zn(H₂PO₄)₂ and 10% H₃PO₄), \([\text{P}]\) | 0.8% |

Phosphate tanks do not use air agitation (sparging).

**Potential to Emit**

| C | \(4.45E-08\) | \(6.65E-09\) | \(2.91E-08\) |
| Total HAPs | \(2.68E-09\) |

**Methodology**

PTE as solution (gr/hr) = \(E_1 \times V_{\text{total}}\) (ft³/hr)

PTE solids (gr/hr) = \(C \times E_1 \times V_{\text{total}}\)

PTE nickel (gr/hr) = \(\times [\text{Ni}] \times E_1 \times V_{\text{total}}\)

PTE phosphorus (gr/hr) = \(\times [\text{P}] \times E_1 \times V_{\text{total}}\)

Total HAP PTE = PTE nickel + PTE phosphorus
## Appendix A: Emissions Calculations

**VOC and Particulate**

From Machining Operations

### Company Name:
NTK Precision Axle Corporation

### Source Address:
7635 South Layton Rd., Anderson, IN 46011

### MSOP No.:
M095-38642-00147

### SPR No.:
095-41521-00147

### Reviewer:
Luda Lang

### Material Density

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (Lb/Gal)</th>
<th>Weight % Volatile (H2O &amp; Organics)</th>
<th>Weight % Organics</th>
<th>Volume % Water</th>
<th>Volume % Non-Volatiles (solids)</th>
<th>Gal of Mat. (gal/unit)</th>
<th>Maximum (unit/hour)</th>
<th>Maximum (gal/hour)</th>
<th>Pounds VOC per gallon of coating less water</th>
<th>Pounds VOC per gallon of coating</th>
<th>Potential VOC pounds per hour</th>
<th>Potential VOC pounds per day</th>
<th>Potential VOC tons per year</th>
<th>Particulate Potential (ton/yr)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thirty-One (31) Wet Turning Machines EU-5a</td>
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<td></td>
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</tr>
<tr>
<td>Tech Cool 35628</td>
<td>8.70</td>
<td>100.00%</td>
<td>85.00%</td>
<td>15.00%</td>
<td>85.00%</td>
<td>6.60E-04</td>
<td>1463.2</td>
<td>0.97</td>
<td>8.70</td>
<td>1.31</td>
<td>1.26</td>
<td>30.27</td>
<td>5.52</td>
<td>0.00</td>
</tr>
<tr>
<td>SBL Oil</td>
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<td>100.00%</td>
<td>0.00%</td>
<td>100.00%</td>
<td>0.00%</td>
<td>5.00E-04</td>
<td>1463.2</td>
<td>0.73</td>
<td>7.51</td>
<td>5.50</td>
<td>51.97</td>
<td>24.09</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
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<td></td>
<td></td>
<td>1.70</td>
<td>8.82</td>
<td>6.76</td>
<td>162.24</td>
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<td></td>
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<td>0.00</td>
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<tr>
<td>Each Machine</td>
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<td></td>
<td></td>
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<td>0.05</td>
<td>0.22</td>
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<td>Hollow Shaft Wet Turning Machine T-101</td>
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</tr>
<tr>
<td>Tech Cool 35628</td>
<td>8.70</td>
<td>100.00%</td>
<td>85.00%</td>
<td>15.00%</td>
<td>85.00%</td>
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<td>1.31</td>
<td>0.09</td>
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<tr>
<td>SBL Oil</td>
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<td>0.00%</td>
<td>100.00%</td>
<td>0.00%</td>
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<td>7.51</td>
<td>7.51</td>
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<td>16.21</td>
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<td>11.51</td>
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<tr>
<td>Six (6) Wet Saws EU-5c</td>
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<tr>
<td>Yumate CM20</td>
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<td>60.00%</td>
<td>54.30%</td>
<td>5.70%</td>
<td>60.00%</td>
<td>9.167E-05</td>
<td>1368.8</td>
<td>0.13</td>
<td>1.04</td>
<td>0.43</td>
<td>0.05</td>
<td>1.30</td>
<td>0.24</td>
<td>0.00</td>
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<tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>0.12</td>
<td>16.21</td>
<td>8.82</td>
<td>11.51</td>
<td>2.10</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
</tbody>
</table>

*Machines are continuously flooded with oil based machining fluid so particulate emissions are negligible.

### METHODOLOGY

Machining oils contain no HAPs

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Table 1 - Emission Factors for Abrasives

<table>
<thead>
<tr>
<th>Abrasive</th>
<th>lb PM/lb Abrasive</th>
<th>lb PM10/lb PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>sand</td>
<td>0.041</td>
<td>0.7</td>
</tr>
<tr>
<td>grit</td>
<td>0.01</td>
<td>0.7</td>
</tr>
<tr>
<td>steel shot</td>
<td>0.004</td>
<td>0.86</td>
</tr>
<tr>
<td>other</td>
<td>0.01</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Uncontrolled PTE

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Abrasive Type</th>
<th>Abrasive Usage Rate (lb/hr)</th>
<th>PM (lb/lb abrasive)</th>
<th>PM10 (lb/lb PM)</th>
<th>lb/hr</th>
<th>ton/yr</th>
<th>lb/hr</th>
<th>ton/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shot Blast 1</td>
<td>Grit</td>
<td>0.9</td>
<td>0.01</td>
<td>0.7</td>
<td>0.009</td>
<td>0.04</td>
<td>0.0063</td>
<td>2.76E-02</td>
</tr>
<tr>
<td>Shot Blast 2</td>
<td>Grit</td>
<td>0.9</td>
<td>0.01</td>
<td>0.7</td>
<td>0.009</td>
<td>0.04</td>
<td>0.0063</td>
<td>2.76E-02</td>
</tr>
<tr>
<td>Shot Blast 3</td>
<td>Grit</td>
<td>0.9</td>
<td>0.01</td>
<td>0.7</td>
<td>0.009</td>
<td>0.04</td>
<td>0.0063</td>
<td>2.76E-02</td>
</tr>
<tr>
<td>Shot Blast 4</td>
<td>Grit</td>
<td>0.9</td>
<td>0.01</td>
<td>0.7</td>
<td>0.009</td>
<td>0.04</td>
<td>0.0063</td>
<td>2.76E-02</td>
</tr>
<tr>
<td>Shot Blast 5</td>
<td>Grit</td>
<td>0.9</td>
<td>0.01</td>
<td>0.7</td>
<td>0.009</td>
<td>0.04</td>
<td>0.0063</td>
<td>2.76E-02</td>
</tr>
<tr>
<td>Shot Blast 6</td>
<td>Grit</td>
<td>0.9</td>
<td>0.01</td>
<td>0.7</td>
<td>0.009</td>
<td>0.04</td>
<td>0.0063</td>
<td>2.76E-02</td>
</tr>
<tr>
<td>Shot Blast 7</td>
<td>Grit</td>
<td>0.9</td>
<td>0.01</td>
<td>0.7</td>
<td>0.009</td>
<td>0.04</td>
<td>0.0063</td>
<td>2.76E-02</td>
</tr>
<tr>
<td>Maintenance Shot Blast</td>
<td>Grit</td>
<td>0.9</td>
<td>0.01</td>
<td>0.7</td>
<td>0.009</td>
<td>0.04</td>
<td>0.0063</td>
<td>2.76E-02</td>
</tr>
</tbody>
</table>

Total | 0.07 | 0.32 | 0.050 | 0.22 |

Notes:

Methodology:
Uncontrolled PTE of PM (lb/hr)= Flow rate (lb/hr) * PM emission factor (lb/lb PM) Uncontrolled PTE of PM10 (lb/hr)= Uncontrolled PTE of PM (lb/hr) * PM10 emission factor (lb/lb PM) Uncontrolled PTE (ton/yr)= Uncontrolled PTE (lb/hr) * 8760 hrs/yr * 1 ton/2000 lbs
## TSD Appendix A: Emissions Calculations
### Cold Cleaners

**Company Name:** NTK Precision Axle Corporation  
**Source Address:** 7635 South Layton Rd., Anderson, IN 46011  
**MSOP No.:** M095-38642-00147  
**SPR No.:** 095-41521-00147  
**Reviewer:** Luda Lang

<table>
<thead>
<tr>
<th>Emission Unit ID</th>
<th>Material</th>
<th>Density (lb/gal)</th>
<th>VOC Content (%)</th>
<th>Solvent Consumption (gal/day)</th>
<th>PTE of VOC (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4 Units total) EU-6</td>
<td>Rinse Conditioner GL</td>
<td>8.35</td>
<td>0%</td>
<td>5.42</td>
<td>0.00</td>
</tr>
<tr>
<td>(1 Unit total) EU-6</td>
<td>Parco Cleaner ZX-3</td>
<td>10.93</td>
<td>0%</td>
<td>0.30</td>
<td>0.00</td>
</tr>
<tr>
<td>(1 Unit total) EU-6</td>
<td>Turbo Biotene 880</td>
<td>8.33</td>
<td>8%</td>
<td>0.99</td>
<td>0.11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>6.71</strong></td>
<td><strong>0.11</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### METHODOLOGY

PTE of VOC (tons/year) = Density (lb/gal) * Solvent Consumption (gal/day) * 1 day/24 hours * 8760 hours/year * 1 ton/2000 lbs
TSD Appendix A: Emission Calculations
Natural Gas Combustion Only
Space Heaters

Company Name: NTK Precision Axle Corporation
Source Address: 7635 South Layton Rd., Anderson, IN 46011
MSOP No.: M095-38642-00147
SPR No.: 095-41521-00147
Reviewer: Luda Lang

Heat Input Capacity | Potential Throughput
-------------------|---------------------
**13.43** MMBtu/hr | **115** MMCF/yr

### Potential to Emit

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>PM*</th>
<th>PM10*</th>
<th>PM2.5*</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.9</td>
<td>7.6</td>
<td>7.6</td>
<td>0.6</td>
<td>100.0</td>
<td>5.5</td>
<td>84.0</td>
</tr>
</tbody>
</table>

**Potential Emission in tons/yr**

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>PM*</th>
<th>PM10*</th>
<th>PM2.5*</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>0.11</strong></td>
<td>0.44</td>
<td>0.44</td>
<td>0.03</td>
<td><strong>5.77</strong></td>
<td><strong>0.32</strong></td>
<td><strong>4.84</strong></td>
</tr>
</tbody>
</table>

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

**Emission Factors for NOx:** Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

### Hazardous Air Pollutants (HAPs)

#### HAPs - Organics

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>Benzene</th>
<th>Dichlorobenzene</th>
<th>Formaldehyde</th>
<th>Hexane</th>
<th>Toluene</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.1E-03</td>
<td>1.2E-03</td>
<td>7.5E-02</td>
<td>1.8E+00</td>
<td>3.4E-03</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential Emission in tons/yr</th>
<th>Benzene</th>
<th>Dichlorobenzene</th>
<th>Formaldehyde</th>
<th>Hexane</th>
<th>Toluene</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.2E-04</td>
<td>6.9E-05</td>
<td>4.3E-03</td>
<td>1.0E-01</td>
<td>2.0E-04</td>
</tr>
</tbody>
</table>

#### HAPs - Metals

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>Lead</th>
<th>Cadmium</th>
<th>Chromium</th>
<th>Manganese</th>
<th>Nickel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.0E-04</td>
<td>1.1E-03</td>
<td>1.4E-03</td>
<td>3.8E-04</td>
<td>2.1E-03</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential Emission in tons/yr</th>
<th>Lead</th>
<th>Cadmium</th>
<th>Chromium</th>
<th>Manganese</th>
<th>Nickel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.9E-05</td>
<td>6.3E-05</td>
<td>8.1E-05</td>
<td>2.2E-05</td>
<td>1.2E-04</td>
</tr>
</tbody>
</table>

### Methodology

All Emission factors are based on normal firing.

**MMBtu = 1,000,000 Btu**

**MMCF - 1,000,000 Cubic Feet of Gas**

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

Emission Factors from AP-42, Chapter 1.4, Natural Gas Combustion, 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

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

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

Additional HAPs emission factors are available in AP-42, Chapter 1.4.
# TSD Appendix A: Emission Calculations
## Space Heaters Summary

**Company Name:** NTK Precision Axle Corporation  
**Source Address:** 7635 South Layton Rd., Anderson, IN 46011  
**MSOP No.:** M095-38642-00147  
**SPR No.:** 095-41521-00147  
**Reviewer:** Luda Lang

<table>
<thead>
<tr>
<th>Unit</th>
<th>Number</th>
<th>Capacity per Unit (MMBtu/hr)</th>
<th>Total Capacity (MMBtu/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hanging Shop Heaters</td>
<td>5</td>
<td>0.25</td>
<td>1.25</td>
</tr>
<tr>
<td>Hanging Shop Heaters</td>
<td>2</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Hanging Shop Heaters</td>
<td>3</td>
<td>0.15</td>
<td>0.45</td>
</tr>
<tr>
<td>RTU1</td>
<td>1</td>
<td>0.25</td>
<td>0.25</td>
</tr>
<tr>
<td>RTU2</td>
<td>1</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>RTU3 to RTU20</td>
<td>18</td>
<td>0.4</td>
<td>7.2</td>
</tr>
<tr>
<td>RTU21</td>
<td>1</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>RTU22</td>
<td>1</td>
<td>0.28</td>
<td>0.28</td>
</tr>
<tr>
<td>RTU23</td>
<td>1</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>RTU24</td>
<td>1</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>RTU25 and RTU26</td>
<td>2</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>RTU27 and RTU28</td>
<td>2</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>RTU29 and RTU30</td>
<td>2</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>RTU31</td>
<td>1</td>
<td>0.28</td>
<td>0.28</td>
</tr>
<tr>
<td>RTU32</td>
<td>1</td>
<td>0.4</td>
<td>0.4</td>
</tr>
</tbody>
</table>

**Total** 13.43
Appendix A: Emission Calculations

Fugitive Dust Emissions - Paved Roads

Company Name: NTK Precision Axle Corporation
Source Address: 7635 South Layton Rd., Anderson, IN 46011
MSOP No.: M095-38642-00147
SPR No.: 095-41521-00147
Reviewer: Luda Lang

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles per day</th>
<th>Number of one-way trips per day per vehicle</th>
<th>Maximum trips per day (trip/day)</th>
<th>Maximum Weight Loaded (tons/trip)</th>
<th>Total Weight driven per day (ton/day)</th>
<th>Maximum one-way distance (feet/trip)</th>
<th>Maximum one-way distance (mi/trip)</th>
<th>Maximum one-way miles (miles/day)</th>
<th>Maximum one-way miles (miles/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant) (one-way trip)</td>
<td>165.0</td>
<td>1.0</td>
<td>165.0</td>
<td>2.5</td>
<td>412.5</td>
<td>1350</td>
<td>0.256</td>
<td>42.2</td>
<td>15398.4</td>
</tr>
<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>165.0</td>
<td>1.0</td>
<td>165.0</td>
<td>2.5</td>
<td>412.5</td>
<td>1350</td>
<td>0.256</td>
<td>42.2</td>
<td>15398.4</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>330.0</strong></td>
<td><strong>825.0</strong></td>
<td><strong>84.4</strong></td>
<td><strong>30796.9</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average Vehicle Weight Per Trip = 2.5 tons/trip
Average Miles Per Trip = 0.26 miles/trip

Unmitigated Emission Factor, $EF = [k \times (sL)^{0.91} \times (W)^{1.02}]$ (Equation 1 from AP-42 13.2.1)

where 
- $k = \begin{cases} 0.011 & \text{PM} \\ 0.0022 & \text{PM10} \\ 0.00054 & \text{PM2.5} \end{cases}$ lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
- $W = 2.5, 2.5, 2.5$ tons = average vehicle weight (provided by source)
- $sL = 9.7, 9.7, 9.7$ g/m² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E \times \left[1 - \frac{p}{4N}\right]$ (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, $E_{ext} = EF \times \left[1 - \frac{p}{4N}\right]$

where 
- $p = 125$ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
- $N = 365$ days per year

Unmitigated Emission Factor, $EF = \begin{cases} 0.221 & \text{PM} \\ 0.044 & \text{PM10} \\ 0.0109 & \text{PM2.5} \end{cases}$ lb/mile

Mitigated Emission Factor, $E_{ext} = \begin{cases} 0.202 & \text{PM} \\ 0.040 & \text{PM10} \\ 0.0099 & \text{PM2.5} \end{cases}$ lb/mile

<table>
<thead>
<tr>
<th>Process</th>
<th>Unmitigated PTE of PM (tons/yr)</th>
<th>Unmitigated PTE of PM10 (tons/yr)</th>
<th>Unmitigated PTE of PM2.5 (tons/yr)</th>
<th>Mitigated PTE of PM (tons/yr)</th>
<th>Mitigated PTE of PM10 (tons/yr)</th>
<th>Mitigated PTE of PM2.5 (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant) (one-way trip)</td>
<td>1.70</td>
<td>0.34</td>
<td>0.08</td>
<td>1.56</td>
<td>0.31</td>
<td>0.08</td>
</tr>
<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>1.70</td>
<td>0.34</td>
<td>0.08</td>
<td>1.56</td>
<td>0.31</td>
<td>0.08</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>3.41</strong></td>
<td><strong>0.68</strong></td>
<td><strong>0.17</strong></td>
<td><strong>3.12</strong></td>
<td><strong>0.62</strong></td>
<td><strong>0.08</strong></td>
</tr>
</tbody>
</table>

Methodology

<table>
<thead>
<tr>
<th>Equation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Weight driven per day (ton/day)</td>
<td>$= [\text{Maximum Weight Loaded (tons/trip)}] \times [\text{Maximum trips per day (trip/day)}]$</td>
</tr>
<tr>
<td>Maximum one-way distance (mi/trip)</td>
<td>$= [\text{Maximum one-way distance (feet/trip)}] / [5280 \text{ ft/mile}]$</td>
</tr>
<tr>
<td>Maximum one-way miles (miles/day)</td>
<td>$= [\text{Maximum trips per year (trip/day)}] \times [\text{Maximum one-way distance (mi/trip)}]$</td>
</tr>
<tr>
<td>Average Vehicle Weight Per Trip (ton/trip)</td>
<td>$= \text{SUM}(\text{Total Weight driven per day (ton/day)}) / \text{SUM}(\text{Maximum trips per day (trip/day)})$</td>
</tr>
<tr>
<td>Average Miles Per Trip (miles/trip)</td>
<td>$= \text{SUM}(\text{Maximum one-way miles (miles/day)}) / \text{SUM}(\text{Maximum trips per year (trip/day)})$</td>
</tr>
<tr>
<td>Unmitigated PTE (tons/yr)</td>
<td>$= [\text{Maximum one-way miles (miles/yr)}] \times [\text{Unmitigated Emission Factor (lb/mile)}] / [\text{ton2000 lbs}]$</td>
</tr>
<tr>
<td>Mitigated PTE (tons/yr)</td>
<td>$= [\text{Mitigated Emission Factor (lb/mile)}] \times [\text{Mitigated Emission Factor (lb/mile)}] / [\text{ton2000 lbs}]$</td>
</tr>
<tr>
<td>Controlled PTE (tons/yr)</td>
<td>$= [\text{Mitigated PTE (tons/yr)}] \times [1 - \text{Dust Control Efficiency}]$</td>
</tr>
</tbody>
</table>

**Abbreviations**

- PM = Particulate Matter
- PM10 = Particulate Matter (<10 um)
- PM2.5 = Particle Matter (<2.5 um)
- PTE = Potential to Emit

**Units**

- PM = Particulate Matter
- PM10 = Particulate Matter (<10 um)
- PM2.5 = Particle Matter (<2.5 um)
- PTE = Potential to Emit

**Conversion Factors**

- 1 ton/2000 lbs = 1 lb/mile
- 1 ft/mile = 0.000189394 miles
- 1 ton = 2000 lbs
July 2, 2019

Morris Claypool
NTK Precision Axle Corporation
7635 S Layton Rd
Anderson, IN 46011

Re: Public Notice
NTK Precision Axle Corporation
Permit Level: MSOP Significant Permit Revision
Permit Number: 095-41521-00147

Dear Morris Claypool:

Enclosed is a copy of your draft MSOP Significant Permit Revision (Minor PSD/EO) (120), Technical Support Document, emission calculations, and the Public Notice.

The Public Notice period will begin the date the Notice is published on the IDEM Official Public Notice website. Publication has been requested and is expected within 2-3 business days. You may check the exact Public Notice begins and ends date here: https://www.in.gov/idem/5474.htm

Please note that as of April 17, 2019, IDEM is no longer required to publish the notice in a newspaper.

OAQ has submitted the draft permit package to the Pendleton Community Public, 595 E Water St in Pendleton IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Luda Lang, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-0863 or dial (317) 233-0863.

Sincerely,

L. Pogost

L. Pogost
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 4/12/19
July 2, 2019

To: Pendleton Community Public 595 E Water St Pendleton IN 46064-1070 (Library)

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: Important Information to Display Regarding a Public Notice for an Air Permit

Applicant Name: NTK Precision Axle Corporation
Permit Number: 095-41521-00147

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. Please make this information readily available until you receive a copy of the final package.

If you have any questions concerning this public review process, please contact Joanne Smiddle-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.
Notice of Public Comment

July 2, 2019
NTK Precision Axle Corporation
095-41521-00147

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has posted on IDEM’s Public Notice website at https://www.in.gov/idem/5474.htm.

The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana’s Air Permitting Program.

Please Note: If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.

Enclosure
PN AAA Cover Letter 4/12/2019
<table>
<thead>
<tr>
<th>Line</th>
<th>Name, Address, Street and Post Office Address</th>
<th>Postage</th>
<th>Handling Charges</th>
<th>Act. Value (If Registered)</th>
<th>Insured Value</th>
<th>Due Send if COD</th>
<th>R.R. Fee</th>
<th>S.D. Fee</th>
<th>S.H. Fee</th>
<th>Rest. Del. Fee</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Morris Claypool, NTK Precision Axle Corporation 7635 S Layton Rd Anderson IN 46011 (Source CAATS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Madison County Commissioners 16 E. 9th Suite 104 Anderson IN 46016 (Local Official)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>3</td>
<td>Anderson Town Council &amp; Mayors Office P.O. Box 2100 Anderson IN 46018 (Local Official)</td>
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<td>Pendleton Community Public 595 E Water St Pendleton IN 46064-1070 (Library)</td>
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<td>Madison County Health Department 206 E 9th St Anderson IN 46016-1512 (Health Department)</td>
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<td>6</td>
<td>Jessica Howe, Cornerstone Environmental 880 Lennox Ct. Zionsville IN 46077 (Consultant)</td>
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<td>Scott Underwood, The Herald Bulletin 1133 Jackson St Anderson IN 46016 (Affected Party)</td>
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<td>Scott Slade, The Times-Post 104 W High St Pendleton IN 46064 (Affected Party)</td>
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**Total number of pieces Listed by Sender**: 9

**Total number of Pieces Received at Post Office**: 9

**Postmaster, Per (Name of Receiving employee)**: 

The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50,000 per occurrence. The maximum indemnity payable on Express mail merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See *Domestic Mail Manual* R900, S913, and S921 for limitations of coverage on insured and COD mail. See *International Mail Manual* for limitations of coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.