



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant
DATE: December 27, 2013
RE: Tsuda USA Corporation / 059-33231-00042
FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 6/13/13



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New Source Construction and Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

**Tsuda USA Corporation
2984 N Jannetides Blvd.
Greenfield, Indiana 46140**

(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.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-8-11.1, applicable to those conditions

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 FESOP under 326 IAC 2-8.

Operation Permit No.: F059-33231-00042	
Issued by:  Nathan C. Bell, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 27, 2013 Expiration Date: December 27, 2018

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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 through A.3 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 2-8-3(b)]

The Permittee owns and operates a stationary motor vehicle part manufacturing operation.

Source Address:	2984 N Jannetides Blvd., Greenfield, Indiana 46140
General Source Phone Number:	317-805-4743
SIC Code:	3714 (Motor Vehicle Parts and Accessories)
County Location:	Hancock
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

- (a) One (1) steel processing line, identified as Line 1, approved for construction in 2013, with a maximum capacity of 1,773 pounds of steel per hour. Line 1 consists of the following processes:
- (1) One (1) CNC cutting machine, identified as CNC-1, approved for construction in 2013, using a maximum of 83.31 gallons per year of aqueous cutting coolant, which continuously floods the machining interface, and vents indoors.
 - (2) One (1) electric annealing furnace, identified as FURN-1, approved for construction in 2013, with metal throughput of 1,773 pounds per hour, using nitrogen gas during the annealing process, and exhausting through stack S001.
 - (3) One (1) electric normalizing oven, identified as OVE-1, approved for construction in 2013, with a metal throughput of 1,773 pounds per hour, using nitrogen gas, and exhausting through stack S004.
 - (4) One (1) electric tempering operation, identified as TEMP-1, approved for construction in 2013, with a metal throughput of 1,773 pounds per hour, using nitrogen gas, and exhausting through stack S006.
 - (5) One (1) shotblaster, identified as SB-1, approved for construction in 2013, with a maximum usage rate of 31,800 pounds per hour of steel grit, using dust collector DC-1 and Hemipleat filter as control, and exhausting through stack S002.
 - (6) One (1) bonderizing line, identified as BOND-1, approved for construction in 2013, with a maximum throughput of 1,773 pounds per of steel per hour, and exhausting through stack S003. This line consists of the following tanks, in order of the process:

- (i) One (1) alkaline cleaner tank;
 - (ii) One (1) ambient temperature water rinse tank;
 - (iii) One (1) hot water rinse tank;
 - (iv) One (1) Bonderite tank;
 - (v) One (1) ambient temperature water rinse tank;
 - (vi) One (1) hot water rinse tank;
 - (vii) One (1) Bonderlube tank.
- (7) One (1) natural gas-fired steam boiler, approved for construction in 2013, with a maximum rated heat capacity of 1.7 MMBtu per hour, and exhausting through stack S007.
 - (8) One (1) cold former, identified as FORM-1, approved for construction in 2013, with a maximum usage rate of 1,902 gallons of forging oil and 634 gallons of rust inhibitor per year on the unit machinery not the product, and exhausting indoors.
 - (9) One (1) machining operation, identified as MACH-1, approved for construction in 2013, consisting of 100 CNC machines, using cutting fluids, lubricants, rust prevention oil and a cleaner on the unit machinery not the product, using a oil mist separator for VOC control, and exhausting indoors.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

- (a) One (1) welding operation, identified as WELD-1, approved for construction in 2013, and exhausting through stack S005. The operation consists of:
 - (1) One (1) arc welding station, approved for construction in 2013, with a maximum usage rate of 2.4 pounds of welding wire per hour.
 - (2) Three (3) projection welding stations, approved for construction in 2013, each with a maximum usage rate of 0.31 pounds of welding wire per hour.
- (b) One (1) natural gas-fired air make-up unit, approved for construction in 2013, with a maximum heat capacity of 0.432 MMBtu per hour.
- (c) One (1) cooling tower, approved for construction in 2013, with a maximum flow rate of 176 gallons per minute (gpm).
- (d) Two (2) hydraulic presses, approved for construction in 2013.
- (e) One (1) oil/water separator, approved for construction in 2013.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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 2-7) 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][326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 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 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, F059-33231-00042, 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 [326 IAC 2-8-6] [IC 13-17-12]

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 [326 IAC 2-8-4(4)]

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 [326 IAC 2-8-4(5)(D)]

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

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

- (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 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:
 - (1) it contains a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 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

- (b) The annual compliance certification report 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 annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

- (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 PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality,
Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile 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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F059-33231-00042 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.16 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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 nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.18 Permit Renewal [326 IAC 2-8-3(h)]

- (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 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a

certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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 nine (9) months 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 2-8 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 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.19 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

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

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

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.20 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (c) without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;

- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

- (4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(1) and (c).

- (b) Emission Trades [326 IAC 2-8-15(b)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(b).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.22 Inspection and Entry [326 IAC 2-8-5(a)(2)][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 FESOP 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.23 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 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

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.

- (c) 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.25 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [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 2-8-4(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 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM) and greenhouse gases (GHGs), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

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. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

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. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

- (a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.
- (b) For existing units:
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for 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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

- (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 [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.13 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

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.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (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.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (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. Support information includes the following, where applicable:
- (AA) All calibration and maintenance records.
 - (BB) All original strip chart recordings for continuous monitoring instrumentation.
 - (CC) Copies of all reports required by the FESOP.
- Records of required monitoring information include the following, where applicable:
- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
 - (BB) The dates analyses were performed.
 - (CC) The company or entity that performed the analyses.
 - (DD) The analytical techniques or methods used.
 - (EE) The results of such analyses.
 - (FF) The operating conditions as existing at the time of sampling or measurement.
- 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 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:
- 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) 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.

- (d) 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.

Stratospheric Ozone Protection

C.17 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) steel processing line, identified as Line 1, approved for construction in 2013, with a maximum capacity of 1,773 pounds of steel per hour. Line 1 consists of the following processes:
- (1) One (1) CNC cutting machine, identified as CNC-1, approved for construction in 2013, using a maximum of 83.31 gallons per year of aqueous cutting coolant, which continuously floods the machining interface, and vents indoors.
 - (2) One (1) electric annealing furnace, identified as FURN-1, approved for construction in 2013, with metal throughput of 1,773 pounds per hour, using nitrogen gas during the annealing process, and exhausting through stack S001.
 - (3) One (1) electric normalizing oven, identified as OVE-1, approved for construction in 2013, with a metal throughput of 1,773 pounds per hour, using nitrogen gas, and exhausting through stack S004.
 - (4) One (1) electric tempering operation, identified as TEMP-1, approved for construction in 2013, with a metal throughput of 1,773 pounds per hour, using nitrogen gas, and exhausting through stack S006.
 - (5) One (1) shotblaster, identified as SB-1, approved for construction in 2013, with a maximum usage rate of 31,800 pounds per hour of steel grit, using dust collector DC-1 and Hemipleat filter as control, and exhausting through stack S002.
 - (6) One (1) bonderizing line, identified as BOND-1, approved for construction in 2013, with a maximum throughput of 1,773 pounds per of steel per hour, and exhausting through stack S003. This line consists of the following tanks, in order of the process:
 - (i) One (1) alkaline cleaner tank;
 - (ii) One (1) ambient temperature water rinse tank;
 - (iii) One (1) hot water rinse tank;
 - (iv) One (1) Bonderite tank;
 - (v) One (1) ambient temperature water rinse tank;
 - (vi) One (1) hot water rinse tank;
 - (vii) One (1) Bonderlube tank.
 - (7) One (1) natural gas-fired steam boiler, approved for construction in 2013, with a maximum rated heat capacity of 1.7 MMBtu per hour, and exhausting through stack S007.
 - (8) One (1) cold former, identified as FORM-1, approved for construction in 2013, with a maximum usage rate of 1,902 gallons of forging oil and 634 gallons of rust inhibitor per year on the unit machinery not the product, and exhausting indoors.

(9) One (1) machining operation, identified as MACH-1, approved for construction in 2013, consisting of 100 CNC machines, using cutting fluids, lubricants, rust prevention oil and a cleaner on the unit machinery not the product, using a oil mist separator for VOC control, and exhausting indoors.

(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 2-8-4(1)]

D.1.1 FESOP and PSD Minor Limits [326 IAC 2-2] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, PM, PM₁₀, and PM_{2.5} emissions (after control) from the shotblaster (SB-1) shall be less than the following emission limitations:

Emission Unit Description	Control Device	PM Emission Limit (lbs/hour)	PM10 Emission Limit (lbs/hour)	PM2.5 Emission Limit (lbs/hour)
Shotblaster SB-1	Dust Collector (DC-1) with Hemipleat filter	26.16	19.50	19.50

Compliance with these limits, combined with the potential to emit PM, PM₁₀, and PM_{2.5} from other emission units at the source, shall limit the PM emissions from the entire source to less than two hundred fifty (250) tons per twelve (12) consecutive month period and shall limit the PM₁₀ and PM_{2.5} emissions from the entire source to less than one hundred (100) tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70 Program) not applicable.

D.1.2 Particulate Matter (PM) Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, particulate emissions from each of the following operations shall not exceed the pound per hour limits listed in the table below:

Unit ID	Unit Description	Max. Throughput Rate (tons/hr)	Particulate Emission Limit (lbs/hr)
SB-1	Shotblaster	19.50	26.16

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

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

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

D.1.3 VOC Limitations [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) not applicable, the total input of VOC to the machining operation (MACH-1), including lubricants, oils, and cutting fluids, shall be less than 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit shall limit the VOC input to the machining operation (MACH-1) to less than 25 tons per 12 consecutive month period, and shall render the requirements of 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

D.1.4 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, particulate emissions from the natural gas-fired steam boiler shall not exceed 0.6 pounds per million Btu (lb/MMBtu),

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for the shotblaster (SB-1), the machining operation (MACH-1), and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.6 Particulate Control

In order to comply with Conditions D.1.1 and D.1.2, the dust collector (DC-1) with Hemipleat filter shall be in operation and control emissions from the shotblaster (SB-1) at all times that the shotblaster (SB-1) is in operation.

D.1.7 Volatile Organic Compounds (VOC) [326 IAC 8-1-4][326 IAC 8-1-2(a)]

Compliance with the VOC input and content limitations contained in Condition D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.8 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM, PM₁₀, and PM_{2.5} testing for dust collector DC-1 with Hemipleat filter utilizing methods as approved by the Commissioner not later than one hundred and eighty (180) days after initial startup. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this section.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.1.9 Parametric Monitoring

The Permittee shall record the pressure drop across the dust collector DC-1 with Hemipleat filter, at least once per day when these units are in operation. When for any one reading, the pressure drop across the dust collector DC-1 with Hemipleat filter is outside the normal range, the Permittee shall take reasonable response. The normal range for this unit is a pressure drop between 3.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.9, the Permittee shall maintain daily records of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

- (b) To document compliance with Condition D.1.3, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC input and content limitations established in Condition D.1.3.
 - (1) The VOC content of each coating material and solvent used less water.
 - (2) The amount of coating material and solvent used on a monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (3) The monthly cleanup solvent usage;
 - (4) The total VOC input for each month and each compliance period.

- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.1.3 shall be submitted using the reporting form located at the end of this permit, or its equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, Indiana 46140
FESOP Permit No.: F059-33231-00042

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, Indiana 46140
FESOP Permit No.: F059-33231-00042

This form consists of 2 pages

Page 1 of 2

- | |
|--|
| <p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16 |
|--|

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

FESOP Quarterly Report

Source Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, Indiana 46140
FESOP Permit No.: F059-33231-00042
Facility: Machining Operation (MACH-1)
Parameter: VOC Input
Limit: The total input of VOC to the machining operation (MACH-1), including lubricants, oils, and cutting fluids, shall be less than 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH
 FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Tsuda USA Corporation
 Source Address: 2984 N Jannetides Blvd., Greenfield, Indiana 46140
 FESOP Permit No.: F059-33231-00042

Months: _____ **to** _____ **Year:** _____

<p>This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C- General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

Tsuda USA Corporation
2984 N Jannetides Blvd.
Greenfield, Indiana 46140

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

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 _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make
these representations on behalf of _____.
(Company Name)
4. I hereby certify that Tsuda USA Corporation 2984 N Jannetides Blvd., Greenfield, Indiana 46140, completed construction of the motor vehicle part manufacturing operation on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on May 20, 2013, and as permitted pursuant to New Source Construction Permit and Federally Enforceable State Operating Permit No. F059-33231-00042, Plant ID No. 059-00042 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)

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

Technical Support Document (TSD) for a New Source Construction and
Federally Enforceable State Operating Permit (FESOP)

Source Description and Location

Source Name: Tsuda USA Corporation
Source Location: 2984 N Jannetides Blvd., Greenfield, IN 46140
County: Hancock
SIC Code: 3714 (Motor Vehicle Parts and Accessories)
Operation Permit No.: F059-33231-00042
Permit Reviewer: Brian Wright

On May 20, 2013, the Office of Air Quality (OAQ) received an application from Tsuda USA Corporation related to the construction and operation of a new stationary motor vehicle part manufacturing operation.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Hancock County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective October 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard, which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

- (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. Hancock 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) **PM_{2.5}**
 Hancock County has been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

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

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard 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.

Background and Description of Permitted Emission Units

The Office of Air Quality (OAQ) has reviewed an application, submitted by Tsuda USA Corporation on May 20, 2013, relating to the construction and operation of a new stationary motor vehicle part manufacturing operation.

The following is a list of the new emission units and pollution control devices:

- (a) One (1) steel processing line, identified as Line 1, approved for construction in 2013, with a maximum capacity of 1,773 pounds of steel per hour. Line 1 consists of the following processes:
- (1) One (1) CNC cutting machine, identified as CNC-1, approved for construction in 2013, using a maximum of 83.31 gallons per year of aqueous cutting coolant, which continuously floods the machining interface, and vents indoors.
 - (2) One (1) electric annealing furnace, identified as FURN-1, approved for construction in 2013, with metal throughput of 1,773 pounds per hour, using nitrogen gas during the annealing process, and exhausting through stack S001.
 - (3) One (1) electric normalizing oven, identified as OVE-1, approved for construction in 2013, with a metal throughput of 1,773 pounds per hour, using nitrogen gas, and exhausting through stack S004.
 - (4) One (1) electric tempering operation, identified as TEMP-1, approved for construction in 2013, with a metal throughput of 1,773 pounds per hour, using nitrogen gas, and exhausting through stack S006.
 - (5) One (1) shotblaster, identified as SB-1, approved for construction in 2013, with a maximum usage rate of 31,800 pounds per hour of steel grit, using dust collector DC-1 and Hemipleat filter as control, and exhausting through stack S002.
 - (6) One (1) bonderizing line, identified as BOND-1, approved for construction in 2013, with a maximum throughput of 1,773 pounds per of steel per hour, and exhausting through stack S003. This line consists of the following tanks, in order of the process:
 - (i) One (1) alkaline cleaner tank;
 - (ii) One (1) ambient temperature water rinse tank;
 - (iii) One (1) hot water rinse tank;
 - (iv) One (1) Bonderite tank;

- (v) One (1) ambient temperature water rinse tank;
- (vi) One (1) hot water rinse tank;
- (vii) One (1) Bonderlube tank.
- (7) One (1) natural gas-fired steam boiler, approved for construction in 2013, with a maximum rated heat input capacity of 1.7 MMBtu per hour, and exhausting through stack S007.
- (8) One (1) cold former, identified as FORM-1, approved for construction in 2013, with a maximum usage rate of 1,902 gallons of forging oil and 634 gallons of rust inhibitor per year on the unit machinery not the product, and exhausting indoors.
- (9) One (1) machining operation, identified as MACH-1, approved for construction in 2013, consisting of 100 CNC machines, using cutting fluids, lubricants, rust prevention oil and a cleaner on the unit machinery not the product, using a oil mist separator for VOC control, and exhausting indoors.

Insignificant Activities

- (b) One (1) welding operation, identified as WELD-1, approved for construction in 2013, and exhausting through stack S005. The operation consists of:
 - (1) One (1) arc welding station, approved for construction in 2013, with a maximum usage rate of 2.4 pounds of welding wire per hour.
 - (2) Three (3) projection welding stations, approved for construction in 2013, each with a maximum usage rate of 0.31 pounds of welding wire per hour.
- (c) One (1) natural gas-fired air make-up unit, approved for construction in 2013, with a maximum heat input capacity of 0.432 MMBtu per hour.
- (d) One (1) cooling tower, approved for construction in 2013, with a maximum flow rate of 176 gallons per minute (gpm).
- (e) Two (2) hydraulic presses, approved for construction in 2013.
- (f) One (1) oil/water separator for the removal of oil from cleaning water prior to discharge to sewer, approved for construction in 2013.

“Integral Part of the Process” Determination

The applicant has submitted the following information to justify why the dust collector (DC-1) with Hemipleat filter should be considered an integral part of the shotblaster (SB-1):

- (a) The dust collector captures the steel grit used as the abrasive material for the shot blaster and the heat treat scales removed by the blaster. The abrasive and scales that are collected fall through drain holes in the rubber mill belt down to a screw conveyor which skews the mixture over to the boot of the elevator. The elevator transports the mixture up to the rotary scalping screen located above the machine. The large contaminants are skewed out the rotary screen and down a flexible tube to a refuse container at floor level. An interlock is installed between the dust collector and the shotblaster so that the unit cannot operate without the dust collector collecting the abrasive and scales.

The abrasive and scales fall through the rotary screen into the air-wash separator which separates the dust, scale, and broken down abrasive particles that are too small to be beneficial from the cleansed reusable abrasive. The scale and broken down abrasive particles fall into a 55-gallon steel drum. When the drum is full, the drum is replaced by a new drum. The full drum is then covered with a lid and secured by the lever lock. The full drum would then be disposed of in an appropriate manner.

The remaining dust that is separated from the scale and broken down abrasive particles in the air-wash separator is collected by a Hemipleat filter. The shotblaster can operate without the use of the Hemipleat filter, but the company intends to operate the dust collector with Hemipleat filter at all times the shotblaster is in operation due to the economic benefits of reusing the abrasive and worker safety requirements.

There is a monitoring system that measures the pressure drop across the collector cell plate for detecting failures in the system. If the dust is not removed from the system, it will settle on the parts being processed, and could potentially exit the machine into the work space around the machine. Additionally, without proper operation, the ability to recover the shots diminishes. The machine operator would be aware of the problem quickly and would take appropriate action to avoid unwanted dust in the work area, and to ensure that the shot is able to be reused.

The cleansed reusable abrasive falls into the abrasive storage hopper where it is then fed back into the blast wheel. Out of the total steel grit that is used in the shotblaster (a maximum of 31,800 lbs per hour of steel grit), a maximum of 7 pounds per hour of broken down abrasive particles will be collected in the drum for disposal.

- (b) The use of the shot blaster and reuse of the steel grit has a positive net economic benefit (see cost benefit analysis below).

Cost Item	Basis	Operating w/ Dust Collector	Operating w/o Dust Collector
<u>Equipment Cost</u>			
Control Device Cost (a)		\$ 26,560.00	
<u>Annual Operating Costs</u>			
Operating Labor	= (Hrs/shift) x (Shifts/day) x (Days/yr) x (\$/hr)	\$55,776.00	
Supervisory Labor	= Labor Cost x 15% of Time	\$8,366.40	
Maintenance Labor	= (Hrs/shift) x (Shifts/day) x (Days/yr) x (\$/hr)	\$55,776.00	
Replacement Material & Labor	= Maintenance Labor x 5%	\$2,788.80	
Maintenance Materials	= Maintenance Labor x 100%	\$55,776.00	
Electricity	= (3.2 kWh) x (\$0.09/kWh)	\$2,522.88	
Grit Cost	= (\$0.56/lb) x (Grit used/hr) x (hrs/shift) x (shifts/day) x (days/yr)	\$7,808.64	\$ 35,473,536.00
	Total Equipment Cost	\$ 26,560.00	
	Total Operating Cost Over 10 Years	\$ 1,888,147.20	\$ 354,735,360.00
	Total Cost Over 10 Years	\$ 1,914,707.20	\$ 354,735,360.00
	Total Profit over 10 Years	\$ 61,829,292.80	\$(292,906,067.20)

IDEM, OAQ has evaluated the information submitted and has determined that the Hemipleat filter associated with the dust collector (DC-1) is not considered an integral part of the shot blaster (SB-1). This determination is based on the fact that the system could be operated without the Hemipleat filter being in place or could continue to operate if the Hemipleat filter was not working properly. Therefore, the permitting level will be determined using the potential to emit before the dust collector.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	559.12
PM10 ⁽¹⁾	481.17
PM2.5 ⁽¹⁾	481.17
SO ₂	5.47
NO _x	2.99
VOC	42.94
CO	1.43
GHGs as CO ₂ e	1,105

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10) and particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM2.5), not particulate matter (PM), are each considered as a "regulated air pollutant".

HAPs	Potential To Emit (tons/year)
Diethanolamine	0.38
Manganese Compounds	4.02
Triethanolamine	0.17
Hexane	0.02
TOTAL HAPs	4.58

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of PM10 and PM2.5 are each greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are each less than one hundred (100) tons per year. The source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a New Source Construction Permit (326 IAC 2-5.1-3) and a Federally Enforceable State Operating Permit (FESOP) (326 IAC 2-8), because the source will limit emissions to less than the Title V major source threshold levels.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

- (c) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year.

PTE of the Entire Source After Issuance of the FESOP

The table below summarizes the potential to emit of the entire source after issuance of this FESOP, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of MSOP (tons/year)									
	PM	PM10*	PM2.5*	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
CNC Cutting Machine (CNC-1)	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.38	0.38 Diethanolamine
Heat Treatment	1.50	1.50	1.50	5.46	2.07	0.01	0.66	0.00	0.00	0.00
Shotblaster (SB-1)	92.68	85.41	85.41	0.00	0.00	0.00	0.00	0.00	3.90	3.90 Manganese Compounds
Bonderizer	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00
Natural Gas Fired Combustion	0.02	0.07	0.07	0.01	0.92	0.05	0.77	1,105	0.02	0.02 Hexane
Cold Former	0.00	0.00	0.00	0.00	0.00	10.52	0.00	0.00	0.00	0.00
Machining Operations	0.00	0.00	0.00	0.00	0.00	24.00	0.00	0.00	0.17	0.17 Triethanolamine
Welding Operation	0.46	0.46	0.46	0.00	0.00	0.00	0.00	0.00	0.12	0.12 Manganese Compounds
Cooling Tower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	94.67	87.45	87.45	5.47	2.99	35.23	1.43	1,105	4.58	4.02 Manganese Compounds
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	250	250	250	250	250	250	250	100,000	NA	NA

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

**The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

- (a) **FESOP and PSD Minor Status**
 This new source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels. In addition, this new source is not a major source of HAPs, as defined in 40 CFR 63.41, because the potential to emit HAPs is less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of total HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP) and render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, the PM, PM10, and PM2.5 emissions (after control) shall be less than the following emission limitations:

Emission Unit Description	Control Device	PM Emission Limit (lbs/hour)	PM10 Emission Limit (lbs/hour)	PM2.5 Emission Limit (lbs/hour)
Shotblaster SB-1	Dust Collector (DC-1) with Hemipleat filter	26.16	19.50	19.50

Compliance with these limits, combined with the potential to emit PM, PM₁₀, and PM_{2.5} from other emission units at the source, shall limit the PM emissions from the entire source to less than two hundred fifty (250) tons per twelve (12) consecutive month period and shall limit the PM₁₀ and PM_{2.5} emissions from the entire source to less than one hundred (100) tons per twelve (12) consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70 Program) not applicable.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc are not included in this permit, since the natural gas-fired boiler has a maximum heat input capacity of less than 10 MMBtu per hour.
- (b) The requirements of the New Source Performance Standard for Automobile and Light Duty Truck Surface Coating Operations, 40 CFR 60, Subpart MM (326 IAC 12), are not included in the permit, since this facility does not perform Automobile and Light Duty Truck surface coating.
- (c) The requirements of the New Source Performance Standard for Metal Coil Surface Coating, 40 CFR 60, Subpart TT (326 IAC 12), are not included in this permit, since this facility does not apply surface coating to metal coils.
- (d) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Oil-Water Separators and Organic-Water Separators, 40 CFR 63, Subpart VV (326 IAC 20-42), are not included in the permit, since this subpart only applies to facilities using oil water separators in order to comply with the requirements of another NSPS or NESHAP subpart.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Surface Coating of Automobiles and Light-Duty Trucks, 40 CFR 63, Subpart IIII (326 IAC 20-85), are not included in this permit, since this facility does not coat automobile or light duty truck body parts and is not a major source of HAPs.
- (g) 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 (326 IAC 20-80), are not included in this permit, since this source is not a major source of HAPs.
- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Plastic Parts and Products, Subpart PPPP (326 IAC 20-81), are not

included in this permit, since this facility does not perform surface coating of plastic parts and products and is not a major source of HAPs,

- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Metal Coil, Subpart SSSS (326 IAC 20-64), are not included in this permit, since this facility does not perform surface coating of metal coil and is not a major source of HAPs,
- (i) The requirements of the National Emission Standards for the Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD (326 IAC 20-95), are not included in the permit, since this source is not considered a major source of HAPs.
- (j) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations, 40 CFR 63, Subpart HHHHHH (63.11169 through 63.11180), are not included in the permit, since this source does not perform paint stripping using chemical strippers that contain methylene chloride in the removal of dried paint, does not perform spray application of coatings to motor vehicles or mobile equipment, and does not perform spray application of coating that contains chromium, lead, manganese, nickel, or cadmium to a plastic and/or metal substrates.
- (k) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boiler Area Sources, 40 CFR 63, Subpart JJJJJJ, are not included in this permit, since the natural gas-fired boiler is a gas-fired boiler as defined by 40 CFR 63.11237.
- (l) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (m) 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 Determination

The following state rules are applicable to the source:

- (a) 326 IAC 2-8-4 (FESOP)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated criteria pollutants are less than or limited to less than 250 tons per year, the potential to emit greenhouse gases (GHGs) is less than 100,000 tons of CO₂e per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.
- (c) 326 IAC 2-3 (Emission Offset)
Hancock County has been classified as attainment for all criteria pollutants. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

- (d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (e) 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, or LaPorte 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.
- (f) 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.
- (g) 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.
- (h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the paved roads potential fugitive particulate emissions less than 25 tons per year.
- (i) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.
- (j) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Cutting Machine

- (k) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The CNC cutting machine (CNC-1) is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from the cutting machine is less than twenty-five (25) tons per year.

Heat Treatment

- (l) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the annealing furnace (FURN-1), normalizing oven (OVE-1), and tempering operation (TEMP-1) are not subject to the requirements of 326 IAC 6-3, because the potential to emit particulate matter from each unit is less than five hundred fifty-one thousandths (0.551) pound per hour.

- (m) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
Pursuant to 326 IAC 7-1.1-1, the annealing furnace (FURN-1), normalizing oven (OVE-1), and tempering operation (TEMP-1) are not subject to the requirements of 326 IAC 7-1.1, since each unit has unlimited sulfur dioxide (SO₂) emissions less than twenty-five (25) tons per year and ten (10) pounds per hour, respectively.

Shotblaster

- (n) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the shotblaster (SB-1) is subject to 326 IAC 6-3-2(e), since the potential particulate matter emissions (before control) are greater than 0.551 pounds per hour. The allowable particulate emission rate from the shotblaster shall not exceed 26.16 pounds per hour when operating at a process weight rate of 31,800 pounds per hour.

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

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

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

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

In order to comply with this limit, the dust collector (DC-1) with Hemipleat filter must be in operation at all times while the shotblaster is in operation.

Bonderizing Line

- (o) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The bonderizing line (BOND-1) is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from the bonderizing line is less than twenty-five (25) tons per year.
- (p) 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations)
Pursuant to 326 IAC 8-2-1(a)(4), this rule applies to facilities located in any county, constructed after July 1, 1990, which have actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls, and that perform surface coating of metal and/or plastic parts as specified in 326 IAC 8-2-9(a) and (b). The bonderizing line (BOND-1) is not subject to the requirements of 326 IAC 8-2-9, since it has potential emissions of less than fifteen (15) pounds of VOC per day before add-on controls.

Natural Gas Combustion

- (q) 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-1(d), the natural gas-fired make up heater is not subject to the 326 IAC 6-2-4 since it is not a source of indirect heat.

Pursuant to 326 IAC 6-2-1(d), the natural gas-fired steam boiler is subject to 326 IAC 6-2-4 since it is a source of indirect heat constructed after September 21, 1983. Pursuant to 326 IAC 6-2-4, particulate emissions from the natural gas-fired steam boiler shall not exceed 0.6 pounds per million Btu (lb/MMBtu), the maximum emission rate under 326 IAC 6-2-4 for any units with a combined maximum heat input of less than 10 MMBtu/hr.

Based on the AP-42, Chapter 1.4, uncontrolled natural gas combustion particulate emission factor of 1.9 pounds per million cubic foot (MMCF) of natural gas, the natural gas-fired steam boiler has particulate emissions as follows:

$$(1.9 \text{ pound PM/MMCF}) * (\text{MMCF}/1020 \text{ MMBtu}) = 0.00186 \text{ pound PM per MMBtu}$$

Therefore, the natural gas-fired steam boiler is able to comply with the particulate emission limitation under 326 IAC 6-2-4 without the use of a control device.

Cold Former

- (r) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The cold former (FORM-1) is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from the cold former is less than twenty-five (25) tons per year.
- (s) 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coatings)
Pursuant to 326 IAC 8-2-9(a), the cold former (FORM-1) is not subject to the requirements of 326 IAC 8-2-9 since it does not apply coatings as defined by 326 IAC 8-1-0.5(b) and the Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings (see note 1 below). Pursuant to 326 IAC 8-1-0.5(b), "coating" means the application of protective, functional, or decorative films. The forging oil and rust inhibitor are used on the facility machinery instead of the produced product and can be considered protective oils that do not form a solid film. Additional information on the definition of coatings is provided below.

Note 1: As explained in Section IV, Subsection A, of the Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, EPA-453/R-08-003, U.S. Environmental Protection Agency, September 2008, miscellaneous metal product and plastic parts coatings include paints, sealants, caulks, inks, and maskants, but decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances are not considered miscellaneous metal or plastic part coatings. This Control Techniques Guidelines document can be found on internet at the following website:

http://www.epa.gov/airquality/ozonepollution/SIPToolkit/ctg_act/200809_voc_epa453_r-08-003_misc_metal_plasticparts_coating.pdf

Note 2: As explained in 40 CFR 63, Subpart Mmmm, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, under 40 CFR 63.3981 (Definitions), "protective oil" means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Machining Operations

- (t) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The unlimited VOC potential emissions from the machining operations (MACH-1) is greater than twenty-five (25) tons per year. However, the source shall limit the VOC potential emissions from the machining operations (MACH-1) to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

In order to render the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) not applicable, the total input of VOC to the machining operation (MACH-1), including lubricants, oils, and cutting fluids, shall be less than 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit shall limit the VOC input to the machining operation (MACH-1) to less than 25 tons per 12 consecutive month period, and shall render the requirements of 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

- (u) 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coatings)
Pursuant to 326 IAC 8-2-9(a), the machining operation is not subject to the requirements of 326 IAC 8-2-9 since it does not apply coatings as defined by 326 IAC 8-1-0.5(b) and the Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings (see note 1 below). Pursuant to 326 IAC 8-1-0.5(b), "coating" means the application of protective, functional, or decorative films. The cutting fluid, oils, and lubricant are used on the facility machinery instead of the produced product and can be considered protective oils that do not form a solid film. Additional information on the definition of coatings is provided below.

Note 1: As explained in Section IV, Subsection A, of the Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, EPA-453/R-08-003, U.S. Environmental Protection Agency, September 2008, miscellaneous metal product and plastic parts coatings include paints, sealants, caulks, inks, and maskants, but decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances are not considered miscellaneous metal or plastic part coatings. This Control Techniques Guidelines document can be found on internet at the following website:

http://www.epa.gov/airquality/ozonepollution/SIPToolkit/ctg_act/200809_voc_epa453_r-08-003_misc_metal_plasticparts_coating.pdf

Note 2: As explained in 40 CFR 63, Subpart Mmmm, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, under 40 CFR 63.3981 (Definitions), "protective oil" means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Welding Operation

- (v) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the welding operation (WELD-1) is not subject to the requirements of 326 IAC 6-3, because it uses less than six hundred twenty-five (625) pounds of welding wire per day.

Cooling Tower

- (w) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the cooling tower is not subject to the requirements of 326 IAC 6-3-2, since the potential particulate matter emissions (before control) are greater than 0.551 pounds per hour.

Compliance Determination, Monitoring and Testing Requirements
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The compliance determination and monitoring requirements applicable to this source are as follows:

- (a) Emission Controls Operation

The dust collector (DC-1) with Hemipleat filter shall be in operation at all times that the shotblaster (SB-1) is in operation.

(b) Testing Requirements

The Permittee shall perform PM, PM₁₀, and PM_{2.5} testing of the dust collector DC-1 utilizing methods as approved by the Commissioner not later than one hundred and eighty (180) days after initial startup of the shotblaster SB-1 in order to demonstrate compliance with the PM, PM₁₀, and PM_{2.5} limits.

(c) Recordkeeping Requirements

Compliance with the VOC content limits shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets for the machining operation MACH-1. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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 May 20, 2013

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Construction and FESOP No. F059-33231-00042. The staff recommends to the Commissioner that this New Source Construction and FESOP be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Brian Wright at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-6544 or toll free at 1-800-451-6027 extension 4-6544.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

**Appendix A: Emission Calculations
Emissions Summary**

Company Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, IN 46140
FESOP NSR No.: F059-33231-00042
Reviewer: Brian Wright
Date: 6/18/13

Uncontrolled Emissions

Emissions Units	PM	PM ₁₀	PM _{2.5}	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e	Combined HAPs	Highest Single HAP	
	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	
CNC Cutting Machine (CNC-1)	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.38	0.38	Diethanolamine
Heat Treatment	1.50	1.50	1.50	5.46	2.07	0.01	0.66	0	0.00	0.00	
Shotblaster (SB-1)	557.14	479.14	479.14	0.00	0.00	0.00	0.00	0.00	3.90	3.90	Manganese compounds
Bonderizer	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0	0.00	0.00	
Natural Gas Fired Combustion	0.02	0.07	0.07	0.01	0.92	0.05	0.77	1105	0.02	0.02	Hexane
Cold Former	0.00	0.00	0.00	0.00	0.00	10.52	0.00	0	0.00	0.00	
Machining Operations	0.00	0.00	0.00	0.00	0.00	31.71	0.00	0.00	0.17	0.17	Triethanolamine
Welding Operation	0.46	0.46	0.46	0.00	0.00	0.00	0.00	0	0.12	0.12	Manganese compounds
Cooling Tower	3.9E-03	2.5E-03	8.2E-06	0.00	0.00	0.00	0.00	0	0.00	0.00	
Total (tons/yr)	559.12	481.17	481.17	5.47	2.99	42.94	1.43	1105	4.58	4.02	Manganese compounds

Limited Emissions

Emissions Units	PM	PM ₁₀	PM _{2.5}	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e	Combined HAPs	Highest Single HAP	
	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	
CNC Cutting Machine (CNC-1)	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.38	0.38	Diethanolamine
Heat Treatment	1.50	1.50	1.50	5.46	2.07	0.01	0.66	0.00	0.00	0.00	0.00
Shotblaster (SB-1)	92.68	85.41	85.41	0.00	0.00	0.00	0.00	0.00	3.90	3.90	Manganese compounds
Bonderizer	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00
Natural Gas Fired Combustion	0.02	0.07	0.07	0.01	0.92	0.05	0.77	1105	0.02	0.02	Hexane
Cold Former	0.00	0.00	0.00	0.00	0.00	10.52	0.00	0.00	0.00	0.00	0.00
Machining Operations	0.00	0.00	0.00	0.00	0.00	24.00	0.00	0.00	0.17	0.17	Triethanolamine
Welding Operation	0.46	0.46	0.46	0.00	0.00	0.00	0.00	0.00	0.12	0.12	Manganese compounds
Cooling Tower	3.9E-03	2.5E-03	8.2E-06	0.00	0.00	0.00	0.00	0	0.00	0.00	
Total (tons/yr)	94.67	87.45	87.45	5.47	2.99	35.23	1.43	1105	4.58	4.02	Manganese compounds

Controlled Emissions

Emissions Units	PM	PM ₁₀	PM _{2.5}	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e	Combined HAPs	Highest Single HAP	
	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	
CNC Cutting Machine (CNC-1)	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.38	0.38	Diethanolamine
Heat Treatment	1.50	1.50	1.50	5.46	2.07	0.01	0.66	0	0.00	0.00	0.00
Shotblaster (SB-1)	0.56	0.48	0.48	0.00	0.00	0.00	0.00	0.00	0.004	0.004	Manganese compounds
Bonderizer	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0	0.00	0.00	0.00
Natural Gas Fired Combustion	0.02	0.07	0.07	0.01	0.92	0.05	0.77	1105	0.02	0.02	Hexane
Cold Former	0.00	0.00	0.00	0.00	0.00	10.52	0.00	0	0.00	0.00	0.00
Machining Operations	0.00	0.00	0.00	0.00	0.00	31.71	0.00	0.00	0.17	0.17	Triethanolamine
Welding Operation	0.46	0.46	0.46	0.00	0.00	0.00	0.00	0	0.12	0.12	Manganese compounds
Cooling Tower	3.9E-03	2.5E-03	8.2E-06	0.00	0.00	0.00	0.00	0	0.00	0.00	
Total (tons/yr)	2.54	2.52	2.52	5.47	2.99	42.94	1.43	1105	0.69	0.12	Manganese compounds

**Appendix A: Emission Calculations
CNC Cutting Machine Emissions**

Company Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, IN 46140
FESOP NSR No.: F059-33231-00042
Reviewer: Brian Wright
Date: 6/18/13

Potential to Emit VOCs

Unit ID	Material	Material Usage Rate (gal/hr)	Material Usage Rate (gal/yr)	Density (lb/gal)	VOC Content (%)*	Diethanolamine (HAP) Content (%)	Uncontrolled PTE of VOC (tons/year)	Uncontrolled PTE of HAP (tons/year)
CNC-1	CS-58TS Coolant	0.01	83.31	9.01	100.00%	100.00%	0.38	0.38

Methodology

*As a worst case scenario, it is assumed that 100% of the organics contained in the coolant are emitted as VOC.

Densities and VOC contents are from the MSDSs provided by the source.

Material usage rates are from information provided by the source.

Uncontrolled VOC Emissions (tons/yr) = Material Usage Rate (gals/hr) * Density (lb/gal) * VOC Content (%) * 8760 hrs/yr * (1 ton/ 2000 lbs)

**Appendix A: Emission Calculations
Electric Heat Treating Furnaces**

**Company Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, IN 46140
FESOP NSR No.: F059-33231-00042
Reviewer: Brian Wright
Date: 6/18/13**

Emission Unit	Metal Throughput (lbs/hr)	Metal Throughput (tons/hr)	PM EF (lbs/ton metal)	VOC EF (lbs/ton metal)	NOx EF (lbs/ton metal)	SOx EF (lbs/ton metal)	CO EF (lbs/ton metal)	Uncontrolled PM PTE (tons/yr)	Uncontrolled VOC PTE (tons/yr)	Uncontrolled NOx PTE (tons/yr)	Uncontrolled SOx PTE (tons/yr)	Uncontrolled CO PTE (tons/yr)
Annealing	1773	0.89	0.129	0.001	0.178	0.469	0.057	0.50	0.004	0.69	1.82	0.22
Normalizing	1773	0.89	0.129	0.001	0.178	0.469	0.057	0.50	0.004	0.69	1.82	0.22
Tempering	1773	0.89	0.129	0.001	0.178	0.469	0.057	0.50	0.004	0.69	1.82	0.22
Total (tons/yr)								1.50	0.01	2.07	5.46	0.66

Methodology:

The furnaces are all electric.

Emission factors are from Table 1-15 of "Energy and Environmental Profile of the U.S. Iron and Steel Industry", August 2000, U.S. Department of Energy, Office of Industrial Technologies, DOE/EE-0229:

http://www1.eere.energy.gov/manufacturing/resources/steel/pdfs/steel_profile.pdf

Uncontrolled PTE (tons/yr) = Metal throughput (tons/hr) x EF (lbs/ton) x 8760 hours/yr x 1 ton/2000 lbs

**Appendix A: Emission Calculations
Abrasive Blasting**

Company Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, IN 46140
FESOP NSR No.: F059-33231-00042
Reviewer: Brian Wright
Date: 6/18/13

Abrasive Blasting: Mechanical Steel Grit Blast

Emission Factors for Abrasives*	PM (lb PM/lb abrasive)	PM10 (lb PM10/lb of Abrasive)**
Sand	0.041	0.029
Grit	0.010	0.007
Steel Shot	0.004	0.0034
Other	0.01	0.01

Pollutant	Abrasive Flow Rate* (lb abrasive/hr)	Emission Factor** (lb pollutant/ lb of abrasive)	Control Efficiency (%)	Uncontrolled Potential Emissions (lbs/hr)	Uncontrolled Potential Emissions (tons/year)	Controlled Emissions (lbs/hr)	Controlled Emissions (tons/year)	Limited Emissions (lbs/hr)	Limited Emissions (tons/year)
PM	31800	0.004	99.9%	127.20	557.1	0.13	0.56	21.16	92.68
PM10/PM2.5	31800	0.0034	99.9%	109.39	479.1	0.11	0.48	19.50	85.41
HAP (Mn)	31800	0.000028	99.9%	0.890	3.90	0.001	0.004	NA	NA

The blast material is steel grit, as provided by the source.

*The abrasive flow rate was provided by the manufacturer.

**Emission factors for abrasives taken from STAPPA/ALAPCO Abrasive Blasting guidance (5/91)

PM10/PM2.5 emissions derived from STAPPA/ALAPCO PM10/PM2.5 factors which were based on the amount of PM generated:

sand = 0.7 lbs PM10 per lb of PM; grit= 0.7 lb PM10 per lb of PM; Steel shot = 0.86 lb PM10 per lb of PM

Manganese is 0.70% of PM

Uncontrolled Potential Emissions (lbs/hr) = Abrasive Flow Rate (lbs/hr) * Emission Factor (lb pollutant/lb of abrasive)

Uncontrolled Potential Emissions (tons/yr) = Abrasive Flow Rate (lbs/hr) * Emission Factor (lb pollutant/lb of abrasive) * 8760 hrs/yr * 1 ton/2000 lbs

Controlled Emissions (lbs/hr) = Uncontrolled Potential Emissions (lbs/hr) * 1- Control Efficiency (%)

Controlled Emissions (tons/yr) = Uncontrolled Potential Emissions (tons/yr) * 1- Control Efficiency (%)

Limited Emissions (tons/yr) = Limited Emissions (lbs/hr) * 8760 hrs/yr * 1 ton/2000 lbs

Abrasive is propelled by the wheel at the customers parts as they tumble in the mill of the machine. The abrasive removes the contaminants from the parts, in this case heat treat scale. The abrasive and scale then falls through the drain holes in the rubber mill belt down to a screw conveyor which skews the mixture over to the boot of the elevator. The elevator transports the mixture up to the rotary scalping screen located above the machine. The large contaminants are skewed out the rotary screen and down a flexible tube to a refuse container at floor level. The usable abrasive and scales fall through the rotary screen into the air-wash separator which removes the scale and broken down abrasive particles that are too small to be beneficial. The cleansed abrasive falls into the abrasive storage hopper where it can then be fed back into the blast wheel.

**Appendix A: Emission Calculations
Bonderizer**

Company Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, IN 46140
FESOP NSR No.: F059-33231-00042
Reviewer: Brian Wright
Date: 6/18/13

Potential to Emit of PM, PM10 and PM2.5

Unit ID	Material	Density (lb/gal)	Material Usage Rate (lbs/hr)	Solid Content (%)	Transfer Efficiency*	Uncontrolled PTE of PM/PM10/PM2.5 (lbs/hr)	Uncontrolled PTE of PM/PM10/PM2.5 (tons/year)
Bonderizer (Bond-1)	Accelerator 131	11.0	0.01	0.0%	100%	0.0	0.0
	Bonderite 181X	12.6	4.32	0.0%	100%	0.0	0.0
	Parco Cleaner 2087X	11.3	1.23	0.0%	100%	0.0	0.0
	Bonderlube 235	4.0	0.44	0.0%	100%	0.0	0.0
Total (tons/yr)						0.00	0.00

Methodology

* Bonderizing is a dip coat process with negligible particulate emissions

Uncontrolled PTE of PM/PM10/PM2.5 (lbs/hour) = Material Usage Rate (lbs/hr) * Solid Content (%)

Uncontrolled PTE of PM/PM10/PM2.5 (tons/year) = Uncontrolled PTE (lbs/hr) * (8760 hr/yr) * (1 ton/2000lbs)

Potential to Emit VOCs

Unit ID	Material	Density (lb/gal)	Material Usage Rate (lbs/hr)	VOC Content (%)	Uncontrolled PTE of VOC (lbs/hr)	Uncontrolled PTE of VOC (tons/year)
Bonderizer (Bond-1)	Accelerator 131	11.0	0.01	0.0%	0.0	0.0
	Bonderite 181X	12.6	4.32	0.0%	0.0	0.0
	Parco Cleaner 2087X	11.3	1.23	5.00%	0.062	0.27
	Bonderlube 235	4.0	0.44	0.0%	0.0	0.0
Total (tons/yr)						0.27

Methodology

Uncontrolled PTE of VOC (lbs/hour) = Material Usage Rate (lbs/hr) * VOC Content (%)

Uncontrolled PTE of VOC (tons/year) = Uncontrolled PTE (lbs/hr) * (8760 hr/yr) * (1 ton/2000lbs)

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

Company Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, IN 46140
FESOP NSR No.: F059-33231-00042
Reviewer: Brian Wright
Date: 6/18/13

Equipment Name	Heat Input Capacity MMBtu/hr	HHV mmBtu	MMCF/yr
Steam Boiler	1.700		
Air Make-up Unit	0.432		
Total	2.13	1020	18.31

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
Potential Emission in tons/yr	0.02	0.07	0.07	0.01	**see below	0.05	0.77

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
 PM2.5 emission factor is filterable and condensable PM2.5 combined.
 **Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Hazardous Air Pollutants (HAPs)	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.10E-03	1.20E-03	7.50E-02	1.80E+00	3.40E-03
Potential Emission in tons/yr	1.9E-05	1.1E-05	6.9E-04	1.6E-02	3.1E-05

Hazardous Air Pollutants (HAPs)	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03
Potential Emission in tons/yr	4.6E-06	1.0E-05	1.3E-05	3.5E-06	1.9E-05
				TOTAL	1.7E-02

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

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 Cubic Feet of Gas
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Greenhouse Gases (GHGs)	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	1,099	0.02	0.02
Summed Potential Emissions in tons/yr	1,099		
CO2e Total in tons/yr	1,105		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
 Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
 Global Warming Potentials (GWP) from Table A-1 of 100 CFR Part 98 Subpart A.
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
 CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations
Cold Former Emissions**

Company Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, IN 46140
FESOP NSR No.: F059-33231-00042
Reviewer: Brian Wright
Date: 6/18/13

Potential to Emit VOCs

Unit ID	Material	Material Usage Rate (gal/yr)	Density (lb/gal)	VOC Content (%)*	Uncontrolled PTE of VOC (lbs/day)	Uncontrolled PTE of VOC (tons/year)
Cold Former (FORM-1)	Forging Oil	1902.0	8.26	100.00%	43.02	7.85
	Rust Inhibitor & Cleaner	634.0	8.60	98%	14.63	2.67
Totals					57.66	10.52

Methodology

*As a worst case scenario, it is assumed that 100% of the organics contained in the coolant are emitted as VOC.

Densities and VOC contents are from the MSDSs provided by the source.

Material usage rates are from information provided by the source.

Uncontrolled VOC Emissions = Material Usage Rate (gals/yr) * Density (lb/gal) * VOC Content (%) * (1 ton/ 2000 lbs)

**Appendix A: Emission Calculations
Machining Emissions**

**Company Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, IN 46140
FESOP NSR No.: F059-33231-00042
Reviewer: Brian Wright
Date: 6/18/13**

Potential to Emit VOCs, HAPs

Unit ID	Material	Material Usage Rate (gal/hr)	Density (lb/gal)	VOC Content (%)*	Triethanolamine (HAP) (%)*	Uncontrolled PTE of VOC (tons/year)	Uncontrolled PTE of Triethanolamine (HAP) (tons/year)	Control Efficiency of Oil Mist Collector	Controlled PTE of VOC (tons/yr)
Machining (MACH-1)	FGE450 Cutting Fluid	0.34	7.59	59.00%	0.00%	6.68	0.00	95%	0.33
	KC770 Cutting Fluid	0.05	8.09	100.00%	0.00%	1.77	0.00	95%	0.09
	NX-640 Straight Cutting Oil	0.06	7.42	89.00%	0.00%	1.65	0.00	95%	0.08
	NX-305 Straight Cutting Oil	0.01	7.51	99.00%	0.00%	0.31	0.00	95%	0.02
	WSW-89 Cleaner	0.02	8.67	28.00%	19.00%	0.25	0.17	0%	0.25
	P305LT Rust Prevention Oil	0.02	6.76	100.00%	0.00%	0.70	0.00	95%	0.04
	Multiway 68MT Lubricant	0.62	7.42	100.00%	0.00%	20.10	0.00	95%	1.00
	ABAS BM305 Straight Cutting Oil	0.01	7.42	80.00%	0.00%	0.25	0.00	95%	0.01
Total (tons/yr)						31.71	0.17		1.83

Methodology

*As a worst case scenario, it is assumed that 100% of the organics/HAP contained in the coolant are emitted as VOC/HAP.

Densities and VOC contents are from the MSDSs provided by the source.

Material usage rates are from information provided by the source.

Uncontrolled VOC Emissions (tons/yr) = Material Usage Rate (gals/hr) * Density (lb/gal) * VOC Content (%) * 8760 hrs/yr * (1 ton/ 2000 lbs)

Controlled VOC Emissions (tons/yr) = Uncontrolled VOC Emissions (tons/yr) x (1-Control Efficiency)

Note: The oil mist collector control efficiency is estimated.

**Appendix A: Emissions Calculations
Welding and Thermal Cutting**

**Company Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, IN 46140
FESOP NSR No.: F059-33231-00042
Reviewer: Brian Wright
Date: 6/18/13**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	Max. electrode consumption per station (lbs/day)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Arc Welding	1	2.4	57.6	0.036	0.011			0.086	0.026	0.000	0.00	0.026
Projection Welding	3	0.31	7.44	0.0211	0.0009			0.020	0.001	0.000	0.00	0.001
EMISSION TOTALS												
Potential Emissions lbs/hr								0.11	0.03	0.00	0.00	0.03
Potential Emissions lbs/day								2.54	0.65	0.00	0.00	0.65
Potential Emissions tons/year								0.46	0.12	0.00	0.00	0.12

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lb:

**Appendix A: Emission Calculations
Cooling Tower**

Company Name: Tsuda USA Corporation
Source Address: 2984 N Jannetides Blvd., Greenfield, IN 46140
FESOP NSR No.: F059-33231-00042
Reviewer: Brian Wright
Date: 6/18/13

Cooling Tower

Cooling Tower Capacity (each) (gpm)	Total Dissolved Solids (ppm)	Drift Loss (%)	Drift Mass Flow Rate ¹ (lb/hr)	Total TSP Emission Rate ^{2,5}		Total PM ₁₀ Emission Rate ^{3,5,6}		Total PM _{2.5} Emission Rate ^{4,5,6}	
				(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
176	2,000	0.0005%	0.4	8.8E-04	3.9E-03	5.6E-04	2.5E-03	1.9E-06	8.2E-06

1. Drift mass flow rate (lb/hr) = Cooling tower capacity (gpm) x Density of water (8.34 lb/gal) x 60 (min/hour) x Drift loss (%) .
2. TSP emissions (lb/hr) = Drift mass flow rate (lb/hr) x TDS (ppm)/(106)
3. PM10 emissions (lb/hr) = Drift mass flow rate (lb/hr) x TDS (ppm)/(106) x Percent PM smaller than PM10
4. PM2.5 emissions (lb/hr) = Drift mass flow rate (lb/hr) x TDS (ppm)/(106) x Percent PM smaller than PM2.5
5. Annual TSP/PM10/PM2.5 emission rate (ton/yr) = Hourly emission rate (lb/hr) x 8,760 (hours/yr)/(2000 lb/ton).

Cooling Tower Particle Size Distribution

EPRI Droplet Diameter ¹ (μm)	EPRI % Mass Smaller ¹	Droplet Volume (μm ³)	Droplet Mass (μg)	Particle Mass (Solids) (μg)	Solid Particle Volume (μm ³)	Solid Particle Diameter (μm)	
10	0	5.24E+02	5.24E-04	1.05E-06	4.76E-01	0.969	
20	0.196	4.19E+03	4.19E-03	8.38E-06	3.81E+00	1.937	
25.81	0.213	9.00E+03	9.00E-03	1.80E-05	8.18E+00	2.500	PM2.5
30	0.226	1.41E+04	1.41E-02	2.83E-05	1.29E+01	2.906	
40	0.514	3.35E+04	3.35E-02	6.70E-05	3.05E+01	3.875	
50	1.816	6.54E+04	6.54E-02	1.31E-04	5.95E+01	4.844	
60	5.702	1.13E+05	1.13E-01	2.26E-04	1.03E+02	5.812	
70	21.348	1.80E+05	1.80E-01	3.59E-04	1.63E+02	6.781	
90	49.812	3.82E+05	3.82E-01	7.63E-04	3.47E+02	8.719	
103.23	63.501	5.76E+05	5.76E-01	1.15E-03	5.24E+02	10.000	PM10
110	70.509	6.97E+05	6.97E-01	1.39E-03	6.34E+02	10.656	
130	82.023	1.15E+06	1.15E+00	2.30E-03	1.05E+03	12.593	
150	88.012	1.77E+06	1.77E+00	3.53E-03	1.61E+03	14.531	
180	91.032	3.05E+06	3.05E+00	6.11E-03	2.78E+03	17.437	
210	92.468	4.85E+06	4.85E+00	9.70E-03	4.41E+03	20.343	
240	94.091	7.24E+06	7.24E+00	1.45E-02	6.58E+03	23.250	
270	94.689	1.03E+07	1.03E+01	2.06E-02	9.37E+03	26.156	
300	96.288	1.41E+07	1.41E+01	2.83E-02	1.29E+04	29.062	
350	97.011	2.24E+07	2.24E+01	4.49E-02	2.04E+04	33.906	
400	98.34	3.35E+07	3.35E+01	6.70E-02	3.05E+04	38.749	
450	99.071	4.77E+07	4.77E+01	9.54E-02	4.34E+04	43.593	
500	99.071	6.54E+07	6.54E+01	1.31E-01	5.95E+04	48.436	
600	100	1.13E+08	1.13E+02	2.26E-01	1.03E+05	58.124	

TDS 2,000

1. Test data provided by Brentwood Industries for cooling tower with 0.0003% drift rate. The
2. Highlights indicate interpolated values to determine PM₁₀/PM_{2.5} speciation.

Reference

J. Reisman and G. Frisbie, Calculating Realistic PM10 Emissions from Cooling Towers, Presented at Air & Waste Management Association Annual Conference. (June 2001)



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Hiroshi Isoda
Tsuda USA Corporation
9465 Counselors Row, Suite 247
Indianapolis, Indiana 46240

DATE: December 27, 2013

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
FESOP
059-33231-00042

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Tatsuya Kinohita, VP / Tsuda USA Corporation
Katherine Holcomb, August Mack Environmental
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 6/13/2013



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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

December 27, 2013

TO: Hancock County Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Tsuda USA Corporation
Permit Number: 059-33231-00042

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	AWELLS 12/27/2013 Tsuda USA Corporation 059-33231-00042 Final		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Hiroshi Isoda Tsuda USA Corporation 9465 Counselors Row, Ste 247 Indianapolis IN 46240 (Source CAATS) confirmed delivery										
2		Tatsuya Kinohita VP Tsuda USA Corporation 9465 Counselors Row, Ste 400 Indianapolis IN 46240 (RO CAATS)										
3		Hancock County Commissioners 111 American Legion #219 Greenfield IN 46140 (Local Official)										
4		Hancock County Public Library 900 West McKenzie Greenfield IN 46140-1741 (Library)										
5		Hancock County Health Department 111 America Legion Greenfield IN 46140-2365 (Health Department)										
6		Greenfield City Council and Mayors Office 10 S. State St. Greenfield IN 46140 (Local Official)										
7		Timothy Scroggins 3171 W 1000 N Fortville IN 46040 (Affected Party)										
8		Katherine Holcomb August Mack Environmental, Inc. 1302 N. Meridian Street, Suite 300 Indianapolis IN 46202 (Consultant)										
9		University Loft Company 2588 Jannetides Blvd Greenfield IN 46140 (Affected Party)										
10		Indianapolis Regional Airport 3867 N Aviation Way Greenfield IN 46140 (Affected Party)										
11												
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