

Indiana Department of Environmental Management

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Michael R. Pence *Governor*

Carol S. Comer

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a New Source Construction and Federally Enforceable State Operating Permit (FESOP)

for NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana in Shelby County

FESOP No.: F145-37441-00086

The Indiana Department of Environmental Management (IDEM) has received an application from NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana, located at 400 Northbrook Dr, Shelbyville, IN 46176, for a new source construction and FESOP. If approved by IDEM's Office of Air Quality (OAQ), this proposed permit would allow NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana to construct and operate a new stationary steel coil pickling, phosphate coating, cold drawing & annealing plant.

The applicant intends to construct and operate new equipment that will emit air pollutants. The potential to emit regulated pollutants will be limited to less than the TV and/or PSD major threshold levels, respectively. IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several supporting documents, that would allow the applicant to make this change.

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

Shelby County Public Library 57 W Broadway St Shelbyville, IN 46176

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

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

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

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number F145-37441-00086 in all correspondence.



Comments should be sent to:

Doug Logan IDEM, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 (800) 451-6027, ask for extension 4-5328 Or dial directly: (317) 234-5328 Fax: (317) 232-6749 attn: Doug Logan

E-mail: dlogan@idem.IN.gov

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

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

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

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

Jenny Acker, Section Chief

Permits Branch
Office of Air Quality



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Michael R. Pence



Carol S. Comer Commissioner

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

NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana 400 Northbrook Dr Shelbyville, Indiana 46176

(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.

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.: F145-37441-00086	
Issued by:	Issuance Date:
	Expiration Date:
Jenny Acker, Section Chief Permits Branch Office of Air Quality	





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Attachment A: National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, [40 CFR 63, Subpart WWWWWW]

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 steel coil pickling, phosphate coating, cold drawing & annealing plant.

Source Address: 400 Northbrook Dr, Shelbyville, Indiana 46176

General Source Phone Number: not available

SIC Code: 3315 (Steel Wiredrawing and Steel Nails and Spikes)

County Location: Shelby

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) Steel coil annealing operations approved in 2016 for construction, consisting of:
 - (1) One (1) natural gas fired endothermic gas generator, identified as Generator 1, with a maximum production capacity of 100 standard cubic meters of atmosphere gas per hour of which 20 standard cubic meters is carbon monoxide (CO) and a maximum indirect heating capacity of 0.72 MMBtu/hr, discharging atmosphere gas to STC Furnace 1 and combustion products to stack ST-01, with excess atmosphere gas vented to flare FL-GEN01 for CO control.
 - (2) One (1) enclosed flare, identified as FL-GEN01, for control of excess atmosphere gas at Generator 1, with an operating capacity of 100 standard cubic meters of atmosphere gas per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 2.85E-03 MMBtu/hr, exhausting to stack ST-01.
 - (3) One (1) natural gas fired annealing furnace, identified as STC Furnace 1, with a maximum capacity of 2.27 tons of steel per hour and a maximum indirect heating capacity of 5.98 MMBtu/hr, discharging atmosphere gas to enclosed flare FL-STC01 and combustion products to stack ST-01, with excess atmosphere gas vented to flare FL-STC01, for CO control.
 - (4) One (1) enclosed flare, identified as FL-STC01, for control of STC Furnace 1 atmosphere exhaust, with an operating capacity of 100 standard cubic meters of atmosphere gas per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 1.99E-02 MMBtu/hr, exhausting to stack ST-01.

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- (5) One (1) natural gas fired endothermic gas generator, identified as Generator 2, with a maximum production capacity of 100 standard cubic meters of atmosphere gas per hour of which 20 standard cubic meters is carbon monoxide (CO) and a maximum indirect heating capacity of 0.72 MMBtu/hr, discharging atmosphere gas to STC Furnace 2 and combustion products to stack ST-02, with excess atmosphere gas vented to flare FL-GEN02 for CO control.
- (6) One (1) enclosed flare, identified as FL-GEN02, for control of excess atmosphere gas at Generator 2, with an operating capacity of 100 standard cubic meters of atmosphere gas per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 2.85E-03 MMBtu/hr, exhausting to stack ST-02.
- (7) One (1) natural gas fired annealing furnace, identified as STC Furnace 2, with a maximum capacity of 2.27 tons of steel per hour and a maximum indirect heating capacity of 5.98 MMBtu/hr, discharging atmosphere gas to enclosed flare FL-STC02 and combustion products to stack ST-02, with excess atmosphere gas vented to flare FL-STC02, for CO control.
- (8) One (1) enclosed flare, identified as FL-STC02, for control of STC Furnace 2 atmosphere exhaust, with an operating capacity of 100 standard cubic meters of atmosphere gas per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 1.99E-02 MMBtu/hr, exhausting to stack ST-02.
- (b) One (1) automatic steel coil pickling line, with a maximum capacity of 9.07 tons per hour, controlled by venturi scrubber FS-01, consisting of the following:
 - (1) One (1) aqueous degreasing tank, identified as Tank 1, with a nominal capacity of 5,000 gallons.
 - (2) One water rinse tank, identified as Tank 2, with a nominal capacity of 5,000 gallons.
 - One (1) sulfuric acid pickling tank, identified as Tank 3, with a capacity of 4,940 gallons.
 - (4) One (1) sulfuric acid pickling tank, identified as Tank 4, with a capacity of 5,070 gallons.
 - (6) One (1) water rinse tank, identified as Tank 5, with a nominal capacity of 5,000 gallons.
 - (7) One (1) sulfuric acid pickling tank, identified as Tank 6, with a capacity of 5,070 gallons.
 - (8) One (1) sulfuric acid pickling tank, identified as Tank 7, with a capacity of 5,340 gallons.
 - (6) One (1) water spray rinse, identified as Tank 8, with a nominal capacity of 5,000 gallons.
 - (7) One (1) sulfuric acid pickling tank, identified as Tank 9, with a capacity of 5,340 gallons.
 - (8) One (1) lime treatment tank, identified as Tank 10, with a nominal capacity of 5,000 gallons, using no VOC- or HAP-containing materials.

- (9) Two (2) water rinse tanks, identified as Tank 11 and Tank 12, with a nominal capacity of 5,000 gallons, each.
- (10) Two (2) zinc phosphate conversion coating tanks, identified as Tank 14 and Tank 15, with a nominal capacity of 5,000 gallons, each.
- (11) One (1) water rinse tank, identified as Tank 16, with a nominal capacity of 5,000 gallons.
- One (1) neutralization tank, identified as Tank 17, with a nominal capacity of 5,000 gallons, using no VOC- or HAP-containing materials.
- (13) One (1) metallic soap tank, identified as Tank 18, with a nominal capacity of 5,000 gallons, using no VOC- or HAP-containing materials.
- One (1) lime tank, identified as Tank 19, with a nominal capacity of 5,000 gallons, using no VOC- or HAP-containing materials.
- (15) One (1) venturi scrubber, identified as FS-01, with a maximum capacity of 79,629 acfm (2,000 m³/min), exhausting to stack ST-01, for control of particulate matter from the pickling line including aerosol acid mists.
- A.3 Specifically Regulated 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) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of:
 - (1) One (1) boiler, identified as Boiler 1, with a maximum heat input capacity of 6.50 MMBtu/hr
 - (2) Seven (7) indirect-fired office HVAC units, identified as OH-1 OH-7, with a maximum heat input capacity of 0.135 MMBtu/hr, each.
 - (3) Three (3) indirect fired unit heaters, identified as UH-1 UH-3, with a maximum heat input capacity of 0.065 MMBtu/hr, each.
 - (4) One (1) indirect fired water heater, identified as WH-1, with a maximum heat input capacity of 0.13 MMBtu/hr.
 - One (1) indirect fired water heater, identified as WH-2, with a maximum heat input capacity of 0.20 MMBtu/hr.

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) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of:
 - (1) One (1) direct-fired dryer for steel coils, identified as Dryer 1, with a maximum heat input capacity of 1.20 MMBtu/hr.
 - (2) Five (5) direct fired air makeup units, identified as MAU-1 MAU-5, with a maximum heat input capacity of 3.10 MMBtu/hr, each.

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- (b) Forced and induced draft cooling tower systems not regulated under a NESHAP, consisting of:
 - (1) One (1) mechanical draft non-contact cooling tower, identified as CT-1, with a maximum water circulation rate of 7.93 gallons per minute (1.8 m³/hr).
- (c) An emission unit or activity whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(e)(1) or the exemption levels specified in the 326 IAC 2-7-1(21)(E)(i-vi), whichever is lower, consisting of:
 - (1) One (1) steel coil drawing machine, identified as DM-1, with a maximum capacity of 4.53 tons of steel per hour.

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, F145-37441-00086, 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.

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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.

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- (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.

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- (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.

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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 F145-37441-00086 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

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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;

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- (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

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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.

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(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.

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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), 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.
- (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

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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]

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(1)][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:

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- (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.

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(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) Steel coil annealing operations approved in 2016 for construction, consisting of:
 - (1) One (1) natural gas fired endothermic gas generator, identified as Generator 1, with a maximum production capacity of 100 standard cubic meters of atmosphere gas per hour of which 20 standard cubic meters is carbon monoxide (CO) and a maximum indirect heating capacity of 0.72 MMBtu/hr, discharging atmosphere gas to STC Furnace 1 and combustion products to stack ST-01, with excess atmosphere gas vented to flare FL-GEN01 for CO control.
 - (2) One (1) enclosed flare, identified as FL-GEN01, for control of excess atmosphere gas at Generator 1, with an operating capacity of 100 standard cubic meters of atmosphere gas per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 2.85E-03 MMBtu/hr, exhausting to stack ST-01.
 - (3) One (1) natural gas fired annealing furnace, identified as STC Furnace 1, with a maximum capacity of 2.27 tons of steel per hour and a maximum indirect heating capacity of 5.98 MMBtu/hr, discharging atmosphere gas to enclosed flare FL-STC01 and combustion products to stack ST-01, with excess atmosphere gas vented to flare FL-STC01, for CO control.
 - (4) One (1) enclosed flare, identified as FL-STC01, for control of STC Furnace 1 atmosphere exhaust, with an operating capacity of 100 standard cubic meters of atmosphere gas per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 1.99E-02 MMBtu/hr, exhausting to stack ST-01.
 - (5) One (1) natural gas fired endothermic gas generator, identified as Generator 2, with a maximum production capacity of 100 standard cubic meters of atmosphere gas per hour of which 20 standard cubic meters is carbon monoxide (CO) and a maximum indirect heating capacity of 0.72 MMBtu/hr, discharging atmosphere gas to STC Furnace 2 and combustion products to stack ST-02, with excess atmosphere gas vented to flare FL-GEN02 for CO control.
 - (6) One (1) enclosed flare, identified as FL-GEN02, for control of excess atmosphere gas at Generator 2, with an operating capacity of 100 standard cubic meters of atmosphere gas per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 2.85E-03 MMBtu/hr, exhausting to stack ST-02.
 - (7) One (1) natural gas fired annealing furnace, identified as STC Furnace 2, with a maximum capacity of 2.27 tons of steel per hour and a maximum indirect heating capacity of 5.98 MMBtu/hr, discharging atmosphere gas to enclosed flare FL-STC02 and combustion products to stack ST-02, with excess atmosphere gas vented to flare FL-STC02, for CO control.
 - (8) One (1) enclosed flare, identified as FL-STC02, for control of STC Furnace 2 atmosphere exhaust, with an operating capacity of 100 standard cubic meters of atmosphere gas per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 1.99E-02 MMBtu/hr, exhausting to stack ST-02.

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

Shelbyville, Indiana
Permit Reviewer: Doug Logan



Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.1.1 FESOP and Prevention of Significant Deterioration Minor Limits CO [326 IAC 2-8] [326 IAC 2-2]

 In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 not applicable, the Permittee shall comply with the following:
 - (a) The combined carbon monoxide (CO) emissions from the Generator 1 STC Furnace 1 equipment train, including excess atmosphere gas controlled by Generator 1 Flare (FL-GEN01), furnace atmosphere gas controlled by flare FL-STC01, and combustion for indirect heating of Generator 1 and STC Furnace 1, shall not exceed 1.33 pounds per hour, determined at the stack ST-01 outlet.
 - (b) The combined carbon monoxide (CO) emissions from the Generator 2 STC Furnace 2 equipment train, including excess atmosphere gas controlled by Generator 2 Flare (FL-GEN02), furnace atmosphere gas controlled by flare FL-STC02, and combustion for indirect heating of Generator 2 and STC Furnace 2, shall not exceed 1.33 pounds per hour, determined at the stack ST-02 outlet.

Compliance with the above CO emission limits, combined with the potential to emit CO from all other emission units at this source, shall limit the source-wide potential to emit of CO 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) not applicable.

D.1.2 Particulate Emission Limitations [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the following units shall be limited to Pt pounds per MMBtu heat input, as follows:

Emission Unit	Unit ID	Pt (lb/MMBtu)
Endothermic gas generator	Generator 1	0.49
Annealing furnace	STC Furnace 1	0.49
Endothermic gas generator	Generator 2	0.49
Annealing furnace	STC Furnace 2	0.49

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities 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 [326 IAC 2-8-4(1)]

D.1.4 Carbon Monoxide (CO) Control

- (a) In order to assure compliance with Condition D.1.1(a), the enclosed flare, identified as FL-GEN01 for CO control shall be in operation and control excess atmosphere gas emissions from the Generator 1 facility at all times the Generator 1 facility is in operation.
- (b) In order to assure compliance with Condition D.1.1(a), the enclosed flare, identified as FL-STC01 for CO control shall be in operation and control discharged atmosphere gas emissions from the STC Furnace 1 facility at all times the STC Furnace 1 facility is in operation.
- (c) In order to assure compliance with Condition D.1.1(b), the enclosed flare, identified as FL-GEN02 for CO control shall be in operation and control excess atmosphere gas

emissions from the Generator 2 facility at all times the Generator 2 facility is in operation.

(d) In order to assure compliance with Condition D.1.1(b), the enclosed flare, identified as FL-STC02 for CO control shall be in operation and control discharged atmosphere gas emissions from the STC Furnace 2 facility at all times the STC Furnace 2 facility is in operation.

D.1.5 Testing Requirements [326 IAC 2-1.1-11]

- (a) Not later than 180 days after the startup of STC Furnace 1, in order to demonstrate compliance with Condition D.1.1(a), the Permittee shall perform CO testing of Generator 1 STC Furnace 1 equipment train utilizing methods approved by the commissioner 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 condition.
- (b) Not later than 180 days after the startup of STC Furnace 2, in order to demonstrate compliance with Condition D.1.1(b), the Permittee shall perform CO testing of Generator 2 STC Furnace 2 equipment train utilizing methods approved by the commissioner 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 condition.

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

D.1.6 Flare Pilot Flame

- (a) In order to comply with Condition D.1.1(a), the Permittee shall monitor the presence of a flare pilot flame for flare FL-GEN01, using a thermocouple or any other equivalent device to detect the presence of a flame when Generator 1 is in operation.
- (b) In order to comply with Condition D.1.1(a), the Permittee shall monitor the presence of a flare pilot flame for flare FL-STC01, using ultraviolet monitoring or any other equivalent device to detect the presence of a flame when STC Furnace 1 is in operation.
- (c) In order to comply with Condition D.1.1(b), the Permittee shall monitor the presence of a flare pilot flame for flare FL-GEN02, using a thermocouple or any other equivalent device to detect the presence of a flame when Generator 2 is in operation.
- (d) In order to comply with Condition D.1.1(b), the Permittee shall monitor the presence of a flare pilot flame for flare FL-STC02, using ultraviolet monitoring or any other equivalent device to detect the presence of a flame when STC Furnace 2 is in operation.
- (e) If a condition exists which should result in a response step, the Permittee shall take a reasonable response. Section C Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.7 Record Keeping Requirement

(a) To document the compliance status with Condition D.1.6(a) the Permittee shall maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when Generator 1 is in operation.

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- (b) To document the compliance status with Condition D.1.6(b) the Permittee shall maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when STC Furnace 1 is in operation.
- (c) To document the compliance status with Condition D.1.6(c) the Permittee shall maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when Generator 2 is in operation.
- (d) To document the compliance status with Condition D.1.6(d) the Permittee shall maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when STC Furnace 2 is in operation.
- (e) Section C General Record Keeping Requirements contains the Permittee's obligation with regard to the record keeping requirements of this permit.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (b) One (1) automatic steel coil pickling line, with a maximum capacity of 9.07 tons per hour, controlled by venturi scrubber FS-01, consisting of the following:
 - One (1) sulfuric acid pickling tank, identified as Tank 3 (EU02), with a capacity of 4,940 gallons.
 - (4) One (1) sulfuric acid pickling tank, identified as Tank 4 (EU02), with a capacity of 5,070 gallons.
 - (7) One (1) sulfuric acid pickling tank, identified as Tank 6 (EU02), with a capacity of 5,070 gallons.
 - (8) One (1) sulfuric acid pickling tank, identified as Tank 7 (EU02), with a capacity of 5,340 gallons.
 - (7) One (1) sulfuric acid pickling tank, identified as Tank 9 (EU02), with a capacity of 5,340 gallons.
 - (10) Two (2) zinc phosphate conversion coating tanks, identified as Tank 14 and Tank 15 (EU03), with a nominal capacity of 5,000 gallons, each.
 - (15) One (1) venturi scrubber, identified as FS-01, with a maximum capacity of 79,629 acfm (2,000 m³/min), exhausting to stack ST-01, for control of particulate matter from the pickling line including aerosol acid mists.

(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.2.1 Particulate Emission Limitation [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions rate from the following operations shall not exceed the pound per hour limit (E) when operating at the associated process weight rate (P) as listed in the table below

		Р	Е
Unit ID	Unit Description	Process Weight	Particulate Emission
		Rate (tons/hr)	Limit (lbs/hr)
EU02	Sulfuric acid pickling	9.07	17.96
EU03	Zinc phosphate conversion coating	9.07	17.96

D.2.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities 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.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of:
 - (1) One (1) boiler, identified as Boiler 1, with a maximum heat input capacity of 6.50 MMBtu/hr
 - (2) Seven (7) indirect-fired office HVAC units, identified as OH-1 OH-7, with a maximum heat input capacity of 0.135 MMBtu/hr, each.
 - (3) Three (3) indirect fired unit heaters, identified as UH-1 UH-3, with a maximum heat input capacity of 0.065 MMBtu/hr, each.
 - One (1) indirect fired water heater, identified as WH-1, with a maximum heat input capacity of 0.13 MMBtu/hr.
 - One (1) indirect fired water heater, identified as WH-2, with a maximum heat input capacity of 0.20 MMBtu/hr.

(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.3.1 Particulate Emission Limitations [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the following units shall be limited to Pt pounds per MMBtu heat input, as follows:

Emission Unit	Unit ID	Pt (lb/MMBtu)
Boiler	Boiler 1	0.49
Office HVAC unit	OH-1 - OH-7	0.49
Unit heater	UH-1 - UH-3	0.49
Water heater	WH-1 - WH-2	0.49

D.3.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities 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.

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SECTION E.1 NESHAP

Emissions Unit Description:

- (b) One (1) automatic steel coil pickling line, with a maximum capacity of 9.07 tons per hour, controlled by venturi scrubber FS-01, consisting of the following:
 - (10) Two (2) zinc phosphate conversion coating tanks, identified as Tank 14 and Tank 15 (EU03), with a nominal capacity of 5,000 gallons, each.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-8-4(1)]

- E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]
 - (a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart WWWWWW.
 - (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 Area Source Standards for Plating and Polishing Operations NESHAP [40 CFR Part 63, Subpart WWWWWW]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart WWWWWW (included as Attachment A to the operating permit), for the emission unit(s) listed above:

- (1) 40 CFR 63.11504(a)(1)(ii)
- (2) 40 CFR 63.11504(a)(2)
- (3) 40 CFR 63.11504(a)(3)
- (4) 40 CFR 63.11505(a)(1)
- (5) 40 CFR 63.11505(c)
- (6) 40 CFR 63.11505(e)
- (7) 40 CFR 63.11506(c)
- (8) 40 CFR 63.11507(g)
- (9) 40 CFR 63.11508(a)
- (10) 40 CFR 63.11508(b)
- (11) 40 CFR 63.11508(d)(8)
- (12) 40 CFR 63.11509
- (14) 40 CFR 63.11510
- (15) 40 CFR 63.11511
- (16) 40 CFR 63.11512
- (17) Table 1 to Subpart WWWWWW of Part 63

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

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

Source Address: 400 Northbrook Dr, Shelbyville, Indiana 46176

FESOP Permit No.: F145-37441-00086

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:

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Permit Reviewer: Doug Logan

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: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

Source Address: 400 Northbrook Dr, Shelbyville, Indiana 46176

FESOP Permit No.: F145-37441-00086

This form consists of 2 pages

Page 1 of 2

- ☐ This is an emergency as defined in 326 IAC 2-7-1(12)
 - The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime 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 2-8-12

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:

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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:

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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: Source Address: FESOP Permit No.:	NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana 400 Northbrook Dr, Shelbyville, Indiana 46176 F145-37441-00086						
Мо	nths:	to	Year:	 Page 1 of 2			
Section B -Emergence General Reporting. A the probable cause of required to be reported shall be reported accorded in this re	by Provisions says Provisions for the deviation of the deviation of the says o	satisfies the rep from the required in, and the respo is an applicable r schedule stated all pages may b	ments of this permit, the ense steps taken must be equirement that exists in in the applicable require	notice submittal under aragraph (a) of Section C-date(s) of each deviation, e reported. A deviation adependent of the permit, ement and does not need to If no deviations occurred,			
□ NO DEVIATIONS	OCCURRED	THIS REPORT	ING PERIOD.				
☐ THE FOLLOWING	G DEVIATION	IS OCCURRED	THIS REPORTING PER	RIOD			
Permit Requirement	t (specify perr	mit condition #)					
Date of Deviation:			Duration of Deviatio	n:			
Number of Deviatio	ns:						
Probable Cause of I	Deviation:						
Response Steps Ta	ken:						
Permit Requirement	t (specify perr	mit condition #)					
Date of Deviation:			Duration of Deviatio	n:			
Number of Deviatio	ns:						
Probable Cause of I	Deviation:						
Response Steps Ta	ken:						

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Page 2 of 2

	3						
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:							

Permit Reviewer: Doug Logan



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

NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana 400 Northbrook Dr Shelbyville, Indiana 46176

Affidavit of Construction , being duly sworn upon my oath, depose and say: (Name of the Authorized Representative) County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit. I hold the position of _____ 2. (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) I hereby certify that NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana 400 Northbrook Dr, Shelbyville, 4. Indiana 46176, completed construction of the steel coil pickling, phosphate coating, cold drawing & annealing plant on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on July 27, 2016 and as permitted pursuant to New Source Construction Permit and Federally Enforceable State Operating Permit No. F145-37441-00086, Plant ID No. 145-00086 issued on Permittee, please cross out the following statement if it does not apply: Additional (operations/facilities) 5. 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. 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

Signature______(typed or printed)

Attachment A

Federally Enforceable State Operating Permit (FESOP) No: 145-37441-00086

[Downloaded from the eCFR on July 15, 2013]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

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

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

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

Applicability and Compliance Dates

§ 63.11504 Am I subject to this subpart?

- (a) You are subject to this subpart if you own or operate a plating and polishing facility that is an area source of hazardous air pollutant (HAP) emissions and meets the criteria specified in paragraphs (a)(1) through (3) of this section.
- (1) A plating and polishing facility is a plant site that is engaged in one or more of the processes listed in paragraphs (a)(1)(i) through (vi) of this section.
- (i) Electroplating other than chromium electroplating (i.e., non-chromium electroplating).
- (ii) Electroless or non-eletrolytic plating.
- (iii) Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.
- (iv) Dry mechanical polishing of finished metals and formed products after plating or thermal spraying.
- (v) Electroforming.
- (vi) Electropolishing.
- (2) A plating or polishing facility is an area source of HAP emissions, where an area source is any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 9.07 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more and any combination of HAP at a rate of 22.68 Mg/yr (25 tpy) or more.
- (3) Your plating and polishing facility uses or has emissions of compounds of one or more plating and polishing metal HAP, which means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, as defined in § 63.11511, "What definitions apply to this subpart?" With the exception of lead, plating and polishing metal HAP also include any of these metals in the elemental form.
- (b) [Reserved]

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[73 FR 37741, July 1, 2008, as amended at 76 FR 57919, Sept. 19, 2011]

§ 63.11505 What parts of my plant does this subpart cover?

- (a) This subpart applies to each new or existing affected source, as specified in paragraphs (a)(1) through (3) of this section, at all times. A new source is defined in § 63.11511, "What definitions apply to this subpart?"
- (1) Each tank that contains one or more of the plating and polishing metal HAP, as defined in § 63.11511, "What definitions apply to this subpart?", and is used for non-chromium electroplating; electroforming; electropolishing; electroless plating or other non-electrolytic metal coating operations, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.
- (2) Each thermal spraying operation that applies one or more of the plating and polishing metal HAP, as defined in § 63.11511, "What definitions apply to this subpart?"
- (3) Each dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP, as defined in § 63.11511, "What definitions apply to this subpart?"
- (b) An affected source is existing if you commenced construction or reconstruction of the affected source on or before March 14, 2008.
- (c) An affected source is new if you commenced construction or reconstruction of the affected source after March 14, 2008.
- (d) This subpart does not apply to any of the process units or operations described in paragraphs (d)(1) through (6) of this section.
- (1) Process units that are subject to the requirements of 40 CFR part 63, subpart N (National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks).
- (2) Research and development process units, as defined in § 63.11511, "What definitions apply to this subpart?"
- (3) Process units that are used strictly for educational purposes.
- (4) Plating, polishing, coating, or thermal spraying conducted to repair surfaces or equipment.
- (5) Dry mechanical polishing conducted to restore the original finish to a surface.
- (6) Any plating or polishing process that uses process materials that contain cadmium, chromium, lead, or nickel (as the metal) in amounts less than 0.1 percent by weight, or that contain manganese in amounts less than 1.0 percent by weight (as the metal), as used. Information used to determine the amount of plating and polishing metal HAP in materials used in the plating or polishing process may include information reported on the Material Safety Data Sheet for the material, but is not required. For plating or polishing tanks, the HAP content may be determined from the final bath contents "as used" to plate or to polish.
- (e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, "Title V," provided you are not otherwise required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57919, Sept. 19, 2011]

§ 63.11506 What are my compliance dates?

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than July 1, 2010.

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

Standards and Compliance Requirements

§ 63.11507 What are my standards and management practices?

- (a) If you own or operate an affected new or existing non-cyanide electroplating, electroforming, or electropolishing tank (hereafter referred to as an "electrolytic" process tank, as defined in § 63.11511, "What definitions apply to this subpart?") that contains one or more of the plating and polishing metal HAP and operates at a pH of less than 12, you must comply with the requirements in paragraph (a)(1), (2), or (3) of this section, and implement the applicable management practices in paragraph (g) of this section, as practicable.
- (1) You must use a wetting agent/fume suppressant in the bath of the affected tank, as defined in § 63.11511, "What definitions apply to this subpart?" and according to paragraphs (a)(1)(i) through (iii) of this section.
- (i) You must initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process.
- (ii) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the bath, as in the original make-up of the bath, or in proportions such that the bath contents are returned to that of the original make-up of the bath.
- (iii) If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank to comply with this rule.
- (2) You must capture and exhaust emissions from the affected tank to any one of the following emission control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator, according to paragraphs (a)(2)(i) and (ii) of this section.
- (i) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.
- (ii) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (3) You must cover the tank surface according to paragraph (a)(3)(i) or (ii) of this section.
- (i) For batch electrolytic process tanks, as defined in § 63.11511, "What definitions apply to this subpart?", you must use a tank cover, as defined in § 63.11511, over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time.
- (ii) For continuous electrolytic process tanks, as defined in § 63.11511, "What definitions apply to this subpart?", you must cover at least 75 percent of the surface of the tank, as defined in § 63.11511, whenever the electrolytic process tank is in operation.
- (b) If you own or operate an affected new or existing "flash" or short-term electroplating tank, as defined in § 63.11511, "What definitions apply to this subpart?", that uses or emits one or more of the plating and polishing metal HAP, you must comply with the requirements specified in paragraph (b)(1) or (b)(2), and implement the applicable management practices in paragraph (g) of this section, as practicable.

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- (1) You must limit short-term or "flash" electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
- (2) You must use a tank cover, as defined in § 63.11511, "What definitions apply to this subpart?", for at least 95 percent of the plating time.
- (c) If you own or operate an affected new or existing process tank that is used both for short-term electroplating and for electrolytic processing of longer duration (i.e., processing that does not meet the definition of short-term or flash electroplating) and contains one or more of the plating and polishing metal HAP, you must meet the requirements specified in paragraph (a) or (b) of this section, whichever apply to the process operation, and implement the applicable management practices in paragraph (g) of this section, as practicable.
- (d) If you own or operate an affected new or existing electroplating tank that uses cyanide in the plating bath, operates at pH greater than or equal to 12, and contains one or more of the plating and polishing metal HAP, you must comply with the requirements in paragraphs (d)(1) and (2) of this section:
- (1) You must measure and record the pH of the bath upon startup of the bath, as defined in § 63.11511, "What definitions apply to this subpart?" No additional pH measurements are required.
- (2) You must implement the applicable management practices in paragraph (g) of this section, as practicable.
- (e) If you own or operate an affected new or existing dry mechanical polishing machine that emits one or more of the plating and polishing metal HAP, you must operate a capture system that captures particulate matter (PM) emissions from the dry mechanical polishing process and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter, according to paragraphs (e)(1) and (2) of this section.
- (1) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.
- (2) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (f) If you own or operate an affected thermal spraying operation that applies one or more of the plating and polishing metal HAP, you must meet the applicable requirements specified in paragraphs (f)(1) through (3) of this section, and the applicable management practices in paragraph (g) of this section.
- (1) For existing permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a water curtain, fabric filter, cartridge, or HEPA filter, according to paragraphs (f)(1)(i) and (ii) of this section.
- (2) For new permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a fabric, cartridge, or HEPA filter, according to paragraphs (f)(2)(i) and (ii) of this section.
- (3) For temporary thermal spraying operations, as defined in § 63.11511 "What definitions apply to this subpart?", you must meet the applicable requirements specified in paragraphs (f)(3)(i) and (ii) of this section.
- (i) You must document the amount of time the thermal spraying occurs each day, and where it is conducted.
- (ii) You must implement the applicable management practices specified in paragraph (g) of this section, as practicable.
- (g) If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in paragraphs (g)(1) through (12) of this section, as practicable.

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- (1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.
- (2) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.
- (3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.
- (4) Use tank covers, if already owned and available at the facility, whenever practicable.
- (5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).
- (6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.
- (7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.
- (8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.
- (9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.
- (10) Minimize spills and overflow of tanks, as practicable.
- (11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.
- (12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

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

§ 63.11508 What are my compliance requirements?

- (a) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with § 63.11509(b) of "What are my notification, reporting, and recordkeeping requirements?"
- (b) You must be in compliance with the applicable management practices and equipment standards in this subpart at all times.
- (c) To demonstrate initial compliance, you must satisfy the requirements specified in paragraphs (c)(1) through (11) of this section.
- (1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(1)(i) through (iv) of this section.
- (i) You must add wetting agent/fume suppressant to the bath of each affected tank according to manufacturer's specifications and instructions.

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- (ii) You must state in your Notification of Compliance Status that you add wetting agent/fume suppressant to the bath according to manufacturer's specifications and instructions.
- (iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (2) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you use a control system, as defined in § 63.11511, "What definitions apply to this subpart?", to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(2)(i) through (v) of this section.
- (i) You must install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.
- (ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.
- (iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (v) You must follow the manufacturer's specifications and operating instructions for the control systems at all times.
- (3) If you own or operate an affected batch electrolytic process tank, as defined in § 63.11511, "What definitions apply to this subpart?" that contains one or more of the plating and polishing metal HAP and which is subject to the requirements in § 63.11507(a), "What are my standards and management practices?" and you use a tank cover, as defined in § 63.11511, to comply with § 11507(a), (b) or (c) of this subpart, you must demonstrate initial compliance according to paragraphs (c)(3)(i) through (iv) of this section.
- (i) You must install a tank cover on the affected tank.
- (ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.
- (iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (4) If you own or operate an affected continuous electrolytic process tank, as defined in § 63.11511, "What definitions apply to this subpart?" that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?" and you cover the tank surface to comply with § 11507(a), (b) or (c) of this subpart, you must demonstrate initial compliance according to paragraphs (c)(4)(i) through (iv) of this section.
- (i) You must cover at least 75 percent of the surface area of the affected tank.
- (ii) You must state in your Notification of Compliance Status that you operate the tank with the surface cover in place whenever the continuous electrolytic process is in operation.

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- (iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), "What are my standards and management practices?" and you comply with § 11507(a), (b) or (c) of this subpart by limiting the plating time of the affected tank, you must demonstrate initial compliance according to paragraphs (c)(5)(i) through (iii) of this section.
- (i) You must state in your Notification of Compliance Status that you limit short-term or flash electroplating to no more than 1 cumulative hour per day, or 3 cumulative minutes per hour of plating time.
- (ii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (6) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), "What are my standards and management practices?" and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must demonstrate initial compliance according to paragraphs (c)(6)(i) through (iv) of this section.
- (i) You must install a tank cover on the affected tank.
- (ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the plating time.
- (iii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (7) If you own or operate an affected tank that contains one or more of the plating and polishing metal HAP, uses cyanide in the bath, and is subject to the management practices specified in § 63.11507(d), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(7)(i) through (iii) of this section.
- (i) You must report in your Notification of Compliance Status the pH of the bath solution that was measured at startup, as defined in § 63.11511, according to the requirements of § 63.11507(d)(1).
- (ii) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11490(g), "What are my standards and management practices?", as practicable.
- (8) If you own or operate an affected dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(e), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(8)(i) through (iii) of this section.
- (i) You must install a control system that is designed to capture PM emissions from the polishing operation and exhaust them to a cartridge, fabric, or HEPA filter.

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

- (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (9) If you own or operate an existing affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(f)(1), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(9)(i) through (iii) of this section.
- (i) You must install a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a water curtain, or a cartridge, fabric, or HEPA filter.
- (ii) You must state in your Notification of Compliance Status that you have installed and are operating the control system according to the manufacturer's specifications and instructions.
- (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (10) If you own or operate a new affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(f)(2), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(10)(i) through (iii) of this section.
- (i) You must install and operate a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a cartridge, fabric, or HEPA filter.
- (ii) You must state in your Notification of Compliance Status that you have installed and operate the control system according to the manufacturer's specifications and instructions.
- (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (11) If you own or operate an affected temporary thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(f)(3), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(11)(i) and (ii) of this section.
- (i) You must implement the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (ii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in § 63.11507(g), "What are my standards and management practices?", as practicable.
- (d) To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must satisfy the requirements specified in paragraphs (d)(1) through (8) of this section.
- (1) You must always operate and maintain your affected source, including air pollution control equipment.
- (2) You must prepare an annual compliance certification according to the requirements specified in § 63.11509(c), "Notification, Reporting, and Recordkeeping," and keep it in a readily-accessible location for inspector review.
- (3) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards

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and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(3)(i) through (iii) of this section.

- (i) You must record that you have added the wetting agent/fume suppressant to the tank bath in the original make-up of the tank.
- (ii) For tanks where the wetting agent/fume suppressant is a separate ingredient from the other tank additives, you must demonstrate continuous compliance according to paragraphs (d)(3)(ii) (A) and (B) this section.
- (A) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank; or in proportion such that the bath is brought back to the original make-up of the tank.
- (B) You must record each addition of wetting agent/fume suppressant to the tank bath.
- (iii) You must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.
- (4) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you use a control system to comply with this subpart; an affected dry mechanical polishing operation that is subject to § 63.11507(e); or an affected thermal spraying operation that is subject to § 63.11507(f)(1) or (2), you must demonstrate continuous compliance according to paragraphs (d)(4)(i) through (v) of this section.
- (i) You must operate and maintain the control system according to the manufacturer's specifications and instructions.
- (ii) Following any malfunction or failure of the capture or control devices to operate properly, you must take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating instructions.
- (iii) You must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.
- (iv) You must record the results of all control system inspections, deviations from proper operation, and any corrective action taken.
- (v) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(b), "What are my standards and management practices?" and you comply with § 11507(a), (b) or (c) of this subpart by limiting the plating time for the affected tank, you must demonstrate continuous compliance according to paragraphs (d)(5)(i) through (iii) of this section.
- (i) You must limit short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
- (ii) You must record the times that the affected tank is operated each day.
- (iii) You must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
- (6) If you own or operate an affected batch electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements of § 63.11507(a), "What are my standards and management

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

- (i) You must operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.
- (ii) You must record the times that the tank is operated and the times that the tank is covered on a daily basis.
- (iii) You must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.
- (7) If you own or operate an affected continuous electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in § 63.11507(a), "What are my standards and management practices?" and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(7)(i) and (ii) of this section.
- (i) You must operate the tank with at least 75 percent of the surface covered during all periods of electrolytic process operation.
- (ii) You must state in your annual certification that you have operated the tank with 75 percent of the surface covered during all periods of electrolytic process operation.
- (8) If you own or operate an affected tank or other operation that is subject to the management practices specified in § 63.11507(g), "What are my standards and management practices?", you must demonstrate continuous compliance according to paragraphs (d)(8)(i) and (ii) of this section.
- (i) You must implement the applicable management practices during all times that the affected tank or process is in operation.
- (ii) You must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

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

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

- (a) If you own or operate an affected source, as defined in § 63.11505(a), "What parts of my plant does this subpart cover?", you must submit an Initial Notification in accordance with paragraphs (a)(1) through (4) of this section by the dates specified.
- (1) The Initial Notification must include the information specified in § 63.9(b)(2)(i) through (iv) of the General Provisions of this part.
- (2) The Initial Notification must include a description of the compliance method (e.g., use of wetting agent/fume suppressant) for each affected source.
- (3) If you start up your affected source on or before July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after July 1, 2008.
- (4) If you startup your new affected source after July 1, 2008, you must submit an Initial Notification when you become subject to this subpart.
- (b) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with paragraphs (b)(1) through (3) of this section.

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- (1) The Notification of Compliance Status must be submitted before the close of business on the compliance date specified in § 63.11506, "What are my compliance dates?"
- (2) The Notification of Compliance Status must include the items specified in paragraphs (b)(2)(i) through (iv) of this section.
- (i) List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources.
- (ii) Methods used to comply with the applicable management practices and equipment standards.
- (iii) Description of the capture and emission control systems used to comply with the applicable equipment standards.
- (iv) Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements.
- (3) If a facility makes a change to any items in (b)(2)(i), iii, and (iv) of this section that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change.
- (c) If you own or operate an affected source, you must prepare an annual certification of compliance report according to paragraphs (c)(1) through (7) of this section. These reports do not need to be submitted unless a deviation from the requirements of this subpart has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report.
- (1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that is subject to the requirements in § 63.11507(a)(1), "What are my standards and management practices?", you must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.
- (2) If you own or operate any one of the affected sources listed in paragraphs (c)(2)(i) through (iii) of this section, you must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.
- (i) Electroplating, electroforming, or electropolishing tank that is subject to the requirements in § 63.11507(a), "What are my standards and management practices?", and you use a control system to comply with this subpart;
- (ii) Dry mechanical polishing operation that is subject to § 63.11507(e); or
- (iii) Permanent thermal spraying operation that is subject to § 63.11507(f)(1) or (2).
- (3) If you own or operate an affected flash or short-term electroplating tank that is subject to the requirements in § 63.11507(b), "What are my standards and management practices?" and you comply with § 11507(a), (b) or (c) of this subpart by limiting the plating time of the affected tank, you must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
- (4) If you own or operate an affected batch electrolytic process tank that is subject to the requirements of § 63.11507(a) or a flash or short-term electroplating tank that is subject to the requirements in § 63.11507(b), "What are my standards and management practices?" and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.
- (5) If you own or operate an affected continuous electrolytic process tank that is subject to the requirements of § 63.11507(a), "What are my standards and management practices?" and you comply with § 11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must state in your annual certification that you have covered at least 75 percent of the surface area of the tank during all periods of electrolytic process operation.

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- (6) If you own or operate an affected tank or other affected plating and polishing operation that is subject to the management practices specified in § 63.11507(g), "What are my standards and management practices?" you must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.
- (7) Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period.
- (d) If you own or operate an affected source, and any deviations from the compliance requirements specified in this subpart occurred during the year, you must report the deviations, along with the corrective action taken, and submit this report to the delegated authority.
- (e) You must keep the records specified in paragraphs (e)(1) through (3) of this section.
- (1) A copy of any Initial Notification and Notification of Compliance Status that you submitted and all documentation supporting those notifications.
- (2) The records specified in § 63.10(b)(2)(i) through (iii) and (xiv) of the General Provisions of this part.
- (3) The records required to show continuous compliance with each management practice and equipment standard that applies to you, as specified in § 63.11508(d), "What are my compliance requirements?"
- (f) You must keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1) of the General Provisions to part 63. You may keep the records offsite for the remaining 3 years.

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

Other Requirements and Information

§ 63.11510 What General Provisions apply to this subpart?

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

§ 63.11511 What definitions apply to this subpart?

Terms used in this subpart are defined in this section.

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

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

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

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device, as part of a complete control system.

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A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

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

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

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

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

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

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

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

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

- (1) Fails to meet any requirement or obligation established by this rule including, but not limited to, any equipment standard (including emissions and operating limits), management practice, or operation and maintenance requirement;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this rule and that is included in the operating permit for any affected facility required to obtain such a permit; or
- (3) Fails to meet any equipment standard (including emission and operating limits), management standard, or operation and maintenance requirement in this rule during startup, shutdown, or malfunction.

Dry mechanical polishing means a process used for removing defects from and smoothing the surface of finished metals and formed products after plating or thermal spraying with any of the plating and polishing metal HAP, as

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defined in this section, using automatic or manually-operated machines that have hard-faced abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles. The affected process does not include polishing with use of pastes, liquids, lubricants, or any other added materials.

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

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

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

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

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

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

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

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

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

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

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

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

Major facility for HAP is any facility that emits greater than 10 tpy of any HAP, or that emits a combined total of all HAP of over 25 tpy, where the HAP used to determine the total facility emissions are not restricted to only plating and polishing metal HAP or from only plating and polishing operations.

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Mesh pad mist eliminator means a type of control device, consisting of layers of interlocked filaments densely packed between two supporting grids that remove liquid droplets and PM from the gas stream through inertial impaction and direct interception.

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

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

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

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

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

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

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

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

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

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PM means solid or particulate matter that is emitted into the air.

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

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

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

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

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

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

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

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

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

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

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

§ 63.11512 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.
- (c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.

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- (1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g), of the General Provisions of this part.
- (2) Approval of an alternative opacity emissions standard under § 63.6(h)(9), of the General Provisions of this part.
- (3) Approval of a major change to test methods under § 63.7(e)(2)(ii) and (f), of the General Provisions of this part. A "major change to test method" is defined in § 63.90.
- (4) Approval of a major change to monitoring under § 63.8(f), of the General Provisions of this part. A "major change to monitoring" is defined in § 63.90.
- (5) Approval of a major change to recordkeeping and reporting under § 63.10(f), of the General Provisions of this part. A "major change to recordkeeping/reporting" is defined in § 63.90.

§ 63.11513 [Reserved]

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

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

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

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

[73 FR 37741, July 1, 2008, as amended at 76 FR 57922, Sept. 19, 2011]

Indiana Department of Environmental Management Office of Air Quality

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

Source Description and Location

Source Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

Source Location: 400 Northbrook Dr, Shelbyville, IN 46176

County: Shelby

SIC Code: 3315 (Steel Wiredrawing and Steel Nails and Spikes)

Operation Permit No.: F145-37441-00086
Permit Reviewer: Doug Logan

On July 25, 2016, the Office of Air Quality (OAQ) received an application from NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana related to the construction and operation of a new stationary steel coil pickling, phosphate coating, cold drawing & annealing plant.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Shelby County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. ¹
PM _{2.5}	Unclassifiable or attainment effective April 5, 2005, for the annual PM _{2.5} standard.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5}
	standard.
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	e or attainment effective October 18, 2000, for the 1-hour ozone standard which was
revoked effect	ive June 15, 2005.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) 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 NO_x emissions are considered when evaluating the rule applicability relating to ozone. Shelby County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM_{2.5}
Shelby County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

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(c) Other Criteria Pollutants
Shelby 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 New Source Construction

The Office of Air Quality (OAQ) has reviewed an application, submitted by NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana on July 27, 2016, relating to construction of a new stationary steel coil pickling, phosphate coating, cold drawing & annealing plant.

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

- (a) Steel coil annealing operations approved in 2016 for construction, consisting of:
 - (1) One (1) natural gas fired endothermic gas generator, identified as Generator 1, with a maximum production capacity of 100 standard cubic meters of atmosphere gas per hour of which 20 standard cubic meters is carbon monoxide (CO) and a maximum indirect heating capacity of 0.72 MMBtu/hr, discharging atmosphere gas to STC Furnace 1 and combustion products to stack ST-01, with excess atmosphere gas vented to flare FL-GEN01 for CO control.
 - (2) One (1) enclosed flare, identified as FL-GEN01, for control of excess atmosphere gas at Generator 1, with an operating capacity of 100 standard cubic meters of atmosphere gas per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 2.85E-03 MMBtu/hr, exhausting to stack ST-01.
 - (3) One (1) natural gas fired annealing furnace, identified as STC Furnace 1, with a maximum capacity of 2.27 tons of steel per hour and a maximum indirect heating capacity of 5.98 MMBtu/hr, discharging atmosphere gas to enclosed flare FL-STC01 and combustion products to stack ST-01, with excess atmosphere gas vented to flare FL-STC01, for CO control.
 - (4) One (1) enclosed flare, identified as FL-STC01, for control of STC Furnace 1 atmosphere exhaust, with an operating capacity of 100 standard cubic meters of atmosphere gas per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 1.99E-02 MMBtu/hr, exhausting to stack ST-01.
 - (5) One (1) natural gas fired endothermic gas generator, identified as Generator 2, with a maximum production capacity of 100 standard cubic meters of atmosphere gas per hour of which 20 standard cubic meters is carbon monoxide (CO) and a maximum indirect heating capacity of 0.72 MMBtu/hr, discharging atmosphere gas to STC Furnace 2 and combustion products to stack ST-02, with excess atmosphere gas vented to flare FL-GEN02 for CO control.
 - (6) One (1) enclosed flare, identified as FL-GEN02, for control of excess atmosphere gas at Generator 2, with an operating capacity of 100 standard cubic meters of atmosphere gas

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per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 2.85E-03 MMBtu/hr, exhausting to stack ST-02.

- (7) One (1) natural gas fired annealing furnace, identified as STC Furnace 2, with a maximum capacity of 2.27 tons of steel per hour and a maximum indirect heating capacity of 5.98 MMBtu/hr, discharging atmosphere gas to enclosed flare FL-STC02 and combustion products to stack ST-02, with excess atmosphere gas vented to flare FL-STC02, for CO control.
- (8) One (1) enclosed flare, identified as FL-STC02, for control of STC Furnace 2 atmosphere exhaust, with an operating capacity of 100 standard cubic meters of atmosphere gas per hour, a maximum heat input capacity of 0.65 MMBtu/hr, and a pilot burner capacity of 1.99E-02 MMBtu/hr, exhausting to stack ST-02.
- (b) One (1) automatic steel coil pickling line, with a maximum capacity of 9.07 tons per hour, controlled by venturi scrubber FS-01, consisting of the following:
 - (1) One (1) aqueous degreasing tank, identified as Tank 1, with a nominal capacity of 5,000 gallons.
 - (2) One water rinse tank, identified as Tank 2, with a nominal capacity of 5,000 gallons.
 - (3) One (1) sulfuric acid pickling tank, identified as Tank 3, with a capacity of 4,940 gallons.
 - (4) One (1) sulfuric acid pickling tank, identified as Tank 4, with a capacity of 5,070 gallons.
 - (6) One (1) water rinse tank, identified as Tank 5, with a nominal capacity of 5,000 gallons.
 - (7) One (1) sulfuric acid pickling tank, identified as Tank 6, with a capacity of 5,070 gallons.
 - (8) One (1) sulfuric acid pickling tank, identified as Tank 7, with a capacity of 5,340 gallons.
 - (6) One (1) water spray rinse, identified as Tank 8, with a nominal capacity of 5,000 gallons.
 - (7) One (1) sulfuric acid pickling tank, identified as Tank 9, with a capacity of 5,340 gallons.
 - (8) One (1) lime treatment tank, identified as Tank 10, with a nominal capacity of 5,000 gallons, using no VOC- or HAP-containing materials.
 - (9) Two (2) water rinse tanks, identified as Tank 11 and Tank 12, with a nominal capacity of 5,000 gallons, each.
 - (10) Two (2) zinc phosphate conversion coating tanks, identified as Tank 14 and Tank 15, with a nominal capacity of 5,000 gallons, each.
 - (11) One (1) water rinse tank, identified as Tank 16, with a nominal capacity of 5,000 gallons.
 - (12) One (1) neutralization tank, identified as Tank 17, with a nominal capacity of 5,000 gallons, using no VOC- or HAP-containing materials.
 - (13) One (1) metallic soap tank, identified as Tank 18, with a nominal capacity of 5,000 gallons, using no VOC- or HAP-containing materials.
 - (14) One (1) lime tank, identified as Tank 19, with a nominal capacity of 5,000 gallons, using no VOC- or HAP-containing materials.

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One (1) venturi scrubber, identified as FS-01, with a maximum capacity of 79,629 acfm (2,000 m³/min), exhausting to stack ST-01, for control of particulate matter from the pickling line including aerosol acid mists.

- (c) Insignificant activities consisting of the following:
 - (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, consisting of:
 - (A) One (1) direct-fired dryer for steel coils, identified as Dryer 1, with a maximum heat input capacity of 1.20 MMBtu/hr.
 - (B) One (1) boiler, identified as Boiler 1, with a maximum heat input capacity of 6.50 MMBtu/hr
 - (C) Seven (7) indirect-fired office HVAC units, identified as OH-1 OH-7, with a maximum heat input capacity of 0.135 MMBtu/hr, each.
 - (D) Three (3) indirect fired unit heaters, identified as UH-1 UH-3, with a maximum heat input capacity of 0.065 MMBtu/hr, each.
 - (E) Five (5) direct fired air makeup units, identified as MAU-1 MAU-5, with a maximum heat input capacity of 3.10 MMBtu/hr, each.
 - (F) One (1) indirect fired water heater, identified as WH-1, with a maximum heat input capacity of 0.13 MMBtu/hr.
 - (G) One (1) indirect fired water heater, identified as WH-2, with a maximum heat input capacity of 0.20 MMBtu/hr.
 - (2) Forced and induced draft cooling tower systems not regulated under a NESHAP, consisting of:
 - (A) One (1) mechanical draft non-contact cooling tower, identified as CT-1, with a maximum water circulation rate of 7.93 gallons per minute (1.8 m³/hr).
 - (3) An emission unit or activity whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(e)(1) or the exemption levels specified in the 326 IAC 2-7-1(21)(E)(i-vi), whichever is lower, consisting of:
 - (A) One (1) steel coil drawing machine, identified as DM-1, with a maximum capacity of 4.53 tons of steel per hour.

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.

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Pollutant	Potential To Emit (tons/year)
PM	0.67
PM10 ⁽¹⁾	1.60
PM2.5 ⁽¹⁾	1.60
SO ₂	0.10
NO _x	17.14
VOC	2.57
CO	496.68

(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)
n-Hexane	0.29
TOTAL HAPs	0.31

- The potential to emit (PTE) (as defined in 326 IAC 2-7-1(30)) of carbon monoxide (CO) is greater (a) 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(30)) 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).

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.

	Pote	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)							
Process/ Emission Unit	PM	PM10*	PM2.5*	SO ₂	NOx	VOC	CO	Total HAPs	
Generator 1 (atmosphere production)						1			
Generator 1 (indirect heating)	5.87E-03	2.35E-02	2.35E-02	1.86 E-03	0.31	1.70E-02		5.83E-03	
Generator 1 Flare Pilot (FL-GEN01)	2.32E-05	9.29E-05	9.29E-05	7.33E-06	1.22E-03	6.72E-05	5.83	2.31E-05	
Generator 1 Flare Operating Emissions (FL-GEN01)					0.19				
STC Furnace 1 (indirect heating)	4.90E-02	0.20	0.20	1.55E-02	2.58	0.14		4.86E-02	

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	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)							
Process/ Emission Unit	PM	PM10*	PM2.5*	SO ₂	NOx	VOC	CO	Total HAPs
STC Furnace 1 Flare Pilot (FL-STC01)	1.63E-04	6.50E-04	6.50E-04	5.13E-05	8.55E-03	4.70E-04		1.61E-04
STC Furnace 1 Flare Operating Emissions (FL-STC01)					0.19			
STC Furnace 1 (atmosphere losses)							1.07	
Generator 2 (atmosphere production)								
Generator 2 (indirect heating)	5.87E-03	2.35E-02	2.35E-02	1.86 E-03	0.31	1.70E-02		5.83E-03
Generator 2 Flare Pilot (FL-GEN-02)	2.32E-05	9.29E-05	9.29E-05	7.33E-06	1.22E-03	6.72E-05		2.31E-05
Generator 2 Flare Operating Emissions (FL-GEN02)					0.19		5.83	
STC Furnace 2 (indirect heating)	4.90E-02	0.20	0.20	1.55E-02	2.58	0.14		4.86E-02
STC Furnace 2 Flare Pilot (FL-STC02)	1.63E-04	6.50E-04	6.50E-04	5.13E-05	8.55E-03	4.70E-04		1.61E-04
STC Furnace 2 Flare Operating Emissions (FL-STC02)					0.19			
STC Furnace 2 (atmosphere losses)							1.07	
Sulfuric acid pickling (EU02)	0.32	0.32	0.32			1.67		
Phosphate conversion coating (EU03)	2.66E-05	2.66E-05	2.66E-05					2.95E-07
Natural gas combustion	0.20	0.81	0.81	6.36E-02	10.59	0.58	8.90	0.20
Cooling tower	3.96E-02	3.96E-02	3.96E-02					
Total PTE of Entire Source	0.67	0.60	1.60	0.10	17.14	2.57	22.68	0.31
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA

negl. = negligible

*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".

FESOP Status (a)

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).

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In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

- (1) The combined carbon monoxide (CO) emissions from the Generator 1 STC Furnace 1 equipment train, including excess atmosphere gas controlled by Generator 1 Flare (FL-GEN01), furnace atmosphere gas controlled by flare FL-STC01, and combustion for indirect heating of Generator 1 and STC Furnace 1, shall not exceed 1.33 pounds per hour, determined at the stack ST-01 outlet.
- (2) The combined carbon monoxide (CO) emissions from the Generator 2 STC Furnace 2 equipment train, including excess atmosphere gas controlled by Generator 2 Flare (FL-GEN02), furnace atmosphere gas controlled by flare FL-STC02, and combustion for indirect heating of Generator 2 and STC Furnace 2, shall not exceed 1.33 pounds per hour, determined at the stack ST-02 outlet.

Compliance with these limits, combined with the potential to emit CO from all other emission units at this source, shall limit the source-wide total potential to emit of CO to less than 100 tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable.

(b) GHGs

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146 4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

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

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) 40 CFR 60, Subpart Dc
 The requirements of the Standards of Performance for Small Industrial-Commercial-Institutional
 Steam Generating Units, 40 CFR 60, Subpart Dc (326 IAC 12), are not included in the permit,
 since Boiler 1 has a maximum design heat input capacity less than 2.9 MW (10 MMBtu/hr).
- (b) There are no other 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)

(c) 40 CFR 63, Subpart Q
The requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers, 40 CFR 63, Subpart Q (326 IAC 20-4), are not included in the permit, since the source is not a major source of HAPs.

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(d) 40 CFR 63, Subpart CCC

The requirements of the National Emission Standards for Hazardous Air Pollutants for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants, 40 CFR 63, Subpart CCC (326 IAC 20-29), are not included in the permit, since the source is not a major source of HAPs and the source uses sulfuric acid for steel pickling.

(e) 40 CFR 63, Subpart SSSS

The requirements of the National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil, 40 CFR 63, Subpart SSSS (326 IAC 20-64), are not included in the permit, since the source is not a major source of HAPs and none of the metal coated is less than 0.15 millimeter (0.006 inch) thick.

(f) 40 CFR 63, Subpart DDDDD

The requirements of the National Emission Standards for Hazardous Air Pollutants 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 the source is not a major source of HAPs.

(g) 40 CFR 63, Subpart JJJJJJ

The requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63, Subpart JJJJJJ, are not included in the permit, since Boiler 1 is a gas-fired boiler.

(h) 40 CFR 63, Subpart WWWWWW

The automatic steel coil pickling line is subject to the National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, 40 CFR 63, Subpart WWWWWW, because the unit is an electroless or non-electrolytic plating process that uses a compound of nickel.

The units subject to this rule include the following:

- One (1) automatic steel coil pickling line, with a maximum capacity of 9.07 tons per hour, controlled by venturi scrubber FS-01, consisting of the following:
 - Two (2) zinc phosphate conversion coating tanks, identified as Tank 14 and Tank 15, with a nominal capacity of 5,000 gallons, each.

Applicable portions of the NESHAP are the following:

- (1) 40 CFR 63.11504(a)(1)(ii)
- (2) 40 CFR 63.11504(a)(2)
- (3) 40 CFR 63.11504(a)(3)
- (4) 40 CFR 63.11505(a)(1)
- (5) 40 CFR 63.11505(c)
- (6) 40 CFR 63.11505(e)
- (7) 40 CFR 63.11506(c)
- (8) 40 CFR 63.11507(g)
- (9) 40 CFR 63.11508(a)
- (10) 40 CFR 63.11508(b)
- (11) 40 CFR 63.11508(d)(8)
- (12) 40 CFR 63.11509
- (14) 40 CFR 63.11510
- (15) 40 CFR 63.11511
- (16) 40 CFR 63.11512
- (17) Table 1 to Subpart WWWWWW of Part 63

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The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the automatic steel coil pickling line except as otherwise specified in 40 CFR 63, Subpart WWWWWW.

(i) There are no other 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)

(j) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to 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)) PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.
- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

 This source is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new units is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.
- (d) 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.
- (e) 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.
- (f) 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-1(d), indirect heating facilities which received permit to construct after September 21, 1983 are subject to the requirements of 326 IAC 6-2-4.

The particulate matter emissions (Pt) shall be limited by the following equation:

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

Where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu).

Q = Total source maximum operating capacity rating in MMBtu/hr heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

Indirect Heating Unite Which								
Indirect Heating Units Which Began Operation After September 21, 1983								
Facility	Construction Date	Operating Capacity (MMBtu/hr)	Q (MMBtu/hr)	Calculated Pt (lb/MMBtu)	Particulate Limitation, (Pt) (lb/MMBtu)	PM PTE based on AP-42 (lb/MMBtu)		
STC Furnace	2016	5.98	21.37	0.49	0.49	0.002		
STC Furnace 2	2016	5.98	21.37	0.49	0.49	0.002		
Gas generator 1	2016	0.72	21.37	0.49	0.49	0.002		
Gas generator 2	2016	0.72	21.37	0.49	0.49	0.002		
Boiler 1	2016	6.50	21.37	0.49	0.49	0.002		
Office HVAC	2016	7 x 0.135	21.37	0.49	0.49	0.002		
Unit heaters	2016	3 x 0.065	21.37	0.49	0.49	0.002		
water heater	2016	0.13	21.37	0.49	0.49	0.002		
water heater	2016	0.20	21.37	0.49	0.49	0.002		

Where: Q = Includes the capacity (MMBtu/hr) of the new unit(s) and the capacities for those unit(s) which were in operation at the source at the time the new unit(s) was constructed.

(g) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The following units are subject to 326 IAC 6-3-2(e). The table below outlines the limits the source must comply with.

Process Description	Process Weight Rate, P (ton/hr)	326 IAC 6-3-2 Limit, E (lb/hr)	Uncontrolled PM Emissions (lb/hr)	Capable of Compliance with 326 IAC 6-3-2
pickling (EU02)	9.07	17.96	0.32	Control device not required for compliance
phosphate (EU03)	9.07	17.96	2.66E-05	Control device not required for compliance

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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 the use of the equation:

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

Where E = Rate of emission in pounds per hour

P = Process weight rate in tons per hour

- (h) 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.
- (i) 326 IAC 8-1-6 (New Facilities: General Reduction Requirements)

 The source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each new unit is less than twenty-five (25) tons per year.
- (j) 326 IAC 12 (New Source Performance Standards)See Federal Rule Applicability Section of this TSD.
- (k) 326 IAC 20 (Hazardous Air Pollutants)
 See Federal Rule Applicability Section of this TSD.

Compliance Determination, Monitoring and Testing Requirements

- (a) The compliance determination requirements applicable to this source are as follows:
 - (1) The enclosed flare, identified as FL-GEN01 for CO control shall be in operation and control excess atmosphere gas emissions from the Generator 1 facility at all times the Generator 1 facility is in operation.
 - (2) The enclosed flare, identified as FL-STC01 for CO control shall be in operation and control discharged atmosphere gas emissions from the STC Furnace 1 facility at all times the STC Furnace 1 facility is in operation.
 - (3) The enclosed flare, identified as FL-GEN02 for CO control shall be in operation and control excess atmosphere gas emissions from the Generator 2 facility at all times the Generator 2 facility is in operation.
 - (4) The enclosed flare, identified as FL-STC02 for CO control shall be in operation and control discharged atmosphere gas emissions from the STC Furnace 2 facility at all times the STC Furnace 2 facility is in operation.

The testing requirements applicable to this source are as follows:

NCSI Nippon Steel & Sumikin Cold Heading Wire Indiana Shelbyville, Indiana

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Summary of Testing Requirements							
Emission Unit (EU ID)	Control Device	Timeframe for Initial Testing	Pollutant	Frequency of Testing	Authority		
Generator 1 and STC Furnace 1	FL- GEN01 and FL- STC01	180 days after startup	СО	Once every 5 years	326 IAC 2-8		
Generator 2 and STC Furnace 2	FL- GEN02 and FL- STC02	180 days after startup	СО	Once every 5 years	326 IAC 2-8		

(b) The compliance monitoring requirements applicable to this source are as follows:

Emission Unit/Control	Operating Parameters	Frequency
FL-GEN01	Presence of pilot flame	Continuous
FL-STC01	Presence of pilot flame	Continuous
FL-GEN02	Presence of pilot flame	Continuous
FL-STC02	Presence of pilot flame	Continuous

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 July 25, 2014.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Construction and FESOP No. 145-37441-00086. 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 Doug Logan 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) 234-5328 or toll free at 1-800-451-6027 extension 4-5328.
- (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 Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emission Calculations PTE Summary

Company Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

Source Address: 400 Northbrook Dr., Shelbyville, IN 46176

 FESOP No.:
 145-37441-00086

 Reviewer:
 Doug Logan

 Date:
 10/13/2016

		Uncontrolled P	otential to Emit	(tons/yr)				
Emission Unit	PM	PM10	PM2.5'	SO ₂	NOx	VOC	co	Total HAPs
Generator 1 (atmosphere production)							241.47	
Generator 1 (indirect heating)	5.87E-03	2.35E-02	2.35E-02	1.86E-03	0.31	1.70E-02	0.26	5.83E-03
Generator 1 Flare Pilot (FL-GEN01)	2.32E-05	9.29E-05	9.29E-05	7.33E-06	1.22E-03	6.72E-05	1.03E-03	2.31E-05
Generator 1 Flare Operating Emissions (FL-GEN01)					0.19			
STC Furnace 1 (indirect heating)	4.88E-02	0.20	0.20	1.54E-02	2.57	0.14	2.16	4.85E-02
STC Furnace 1 Flare Pilot (FL-STC01)	1.63E-04	6.50E-04	6.50E-04	5.13E-05	8.55E-03	4.70E-04	7.18E-03	1.61E-04
STC Furnace 1 Flare Operating Emissions (FL-STC01)					0.19			
STC Furnace 1 (atmosphere losses)							2	
Generator 2 (atmosphere production)							241.47	
Generator 2 (indirect heating)	5.87E-03	2.35E-02	2.35E-02	1.86E-03	0.31	1.70E-02	0.26	5.83E-03
Generator 2 Flare Pilot (FL-GEN02)	2.32E-05	9.29E-05	9.29E-05	7.33E-06	1.22E-03	6.72E-05	1.03E-03	2.31E-05
Generator 2 Flare Operating Emissions (FL-GEN02)					0.19			
STC Furnace 2 (indirect heating)	4.88E-02	0.20	0.20	1.54E-02	2.57	0.14	2.16	4.85E-02
STC Furnace 2 Flare Pilot (FL-STC02)	1.63E-04	6.50E-04	6.50E-04	5.13E-05	8.55E-03	4.70E-04	7.18E-03	1.61E-04
STC Furnace 2 Flare Operating Emissions (FL-STC02)					0.19			
STC Furnace 2 (atmosphere losses)							2	
Sulfuric acid pickling (EU02)	0.32	0.32	0.32			1.67		
Phosphate conversion coating (EU03)	2.66E-05	2.66E-05	2.66E-05					2.95E-07
Natural gas combustion	0.20	0.81	0.81	6.36E-02	10.59	0.58	8.90	0.20
Cooling tower	3.96E-02	3.96E-02	3.96E-02					
Total	0.67	1.60	1.60	0.10	17.14	2.57	496.68	0.31

	F	otential to Emi	t after Issuance	³ (tons/yr)				
Emission Unit	PM	PM10	PM2.51	SO ₂	NOx	VOC	CO	Total HAPs
Generator 1 (atmosphere production)								
Generator 1 (indirect heating)	5.87E-03	2.35E-02	2.35E-02	1.86E-03	0.31	1.70E-02		5.83E-03
Generator 1 Flare Pilot (FL-GEN01)	2.32E-05	9.29E-05	9.29E-05	7.33E-06	1.22E-03	6.72E-05		2.31E-05
Generator 1 Flare Operating Emissions (FL-GEN01)					0.19		5.83	
STC Furnace 1 (indirect heating)	4.88E-02	0.20	0.20	1.54E-02	2.57	0.14		4.85E-02
STC Furnace 1 Flare Pilot (FL-STC01)	1.63E-04	6.50E-04	6.50E-04	5.13E-05	8.55E-03	4.70E-04		1.61E-04
STC Furnace 1 Flare Operating Emissions (FL-STC01)					0.19			
STC Furnace 1 (atmosphere losses)							1.07	
Generator 2 (atmosphere production)								
Generator 2 (indirect heating)	5.87E-03	2.35E-02	2.35E-02	1.86E-03	0.31	1.70E-02		5.83E-03
Generator 2 Flare Pilot (FL-GEN02)	2.32E-05	9.29E-05	9.29E-05	7.33E-06	1.22E-03	6.72E-05		2.31E-05
Generator 2 Flare Operating Emissions (FL-GEN02)					0.19		5.83	
STC Furnace 2 (indirect heating)	4.88E-02	0.20	0.20	1.54E-02	2.57	0.14		4.85E-02
STC Furnace 2 Flare Pilot (FL-STC02)	1.63E-04	6.50E-04	6.50E-04	5.13E-05	8.55E-03	4.70E-04		1.61E-04
STC Furnace 2 Flare Operating Emissions (FL-STC02)					0.19			
STC Furnace 2 (atmosphere losses)							1.07	
Sulfuric acid pickling (EU02)	0.32	0.32	0.32			1.67		
Phosphate conversion coating (EU03)	2.66E-05	2.66E-05	2.66E-05					2.95E-07
Natural gas combustion	0.20	0.81	0.81	0.06	10.59	0.58	8.90	0.20
Cooling tower	3.96E-02	3.96E-02	3.96E-02					
Total	0.67	1.60	1.60	0.10	17.14	2.57	22.68	0.31

Notes

- 1. PM2.5 listed is direct PM2.5
- 2. Uncontrolled process CO PTE for these units included in gas generators 1 and 2, fuel use for heating included in natural gas combustion row.
- 3. The shaded cells indicate where limits are included.
- 4. Uncontrolled losses from the furnace loading gate.

Company Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

Source Address: 400 Northbrook Dr., Shelbyville, IN 46176

FESOP No.: 145-37441-00086 Reviewer: Doug Logan

Date: 10/13/2016

1. Atmosphere Gas Generation

Unit Description Unit Natural Gas
Capacity Consumption¹

(m³ CO/hr) (MMCF/hr) 20 7.06E-04 20 7.06E-04

Endothermic gas reaction:

Generator 1

Generator 2

 $2 CH_4 + O_2 + 4 N_2 \rightarrow 2 CO + 4 H_2 + 4 N_2$

considers air as 80% N2: 20% O2

	Natural Gas	Endo Gas	C	O Potential to Em	it ²
	Consumption	Volume			
	(MMCF/hr)	(ft ³ CO/hr)	(lb-mole/hr)	(lb/hr)	(tons/yr)
Generator 1	7.06E-04	706.29	1.97	55.13	241.47
Generator 2	7.06E-04	706.29	1.97	55.13	241.47

Notes

1. Based on 1,020 MMBtu/MMCF, assuming all natural gas converted to atmosphere gas

2. From the ideal gas law, $\forall = RT/P$. At standard conditions (1 atm, 273 K),

endothermic atmosphere generator

endothermic atmosphere generator

where the ideal gas constant, R = 1.314 (ft³-atm / lb-mole - K), Perry's Chemical Engineers' Handbook, 6th ed., Tbl 1-9

Methodology

In gas-phase calculations, volume fractions are equal to molar fractions.

Natural Gas Consumption (MMCF/hr) = Unit Capacity (m^3 CO/hr) x 35.3147 (ft^3/m^3) x 1 ft^3 natural gas / 1 ft^3 CO / 1,000,000 ($ft^3/MMCF$)

Endo Gas Volume (ft 3 CO/hr) = Unit Capacity (m 3 CO/hr) x 35.3147 (ft 3 /m 3)

CO Potential to Emit (lb-mole/hr) = Endo Gas Volume (ft^3 CO/hr) / ∇ (ft^3 /lb-mole)

PTE (lb/hr) = PTE (lb-mole/hr) x 28 (lb/lb-mole)

PTE (tons yr) = PTE (lb/hr) x 8,760 (hr/yr) / 2,000 (lb/ton)

2. Uncontrolled Furnace Loading Losses³

Unit	Furnace	Operating	Minimum	Maximum	Furnace	Molar Volume	Uncontrolled Furnace Loading Losses		
	Chamber	CO Content	Furnace Closed	Furnace	Temperature	Ŷ ⁴			
	Volume		Cycle	Open Events					
	(ft ³)		(hr)	(yr ⁻¹)	(°C)	(ft ³ /lb-mole)	(lb-mole/yr)	(lb/yr)	(tons/yr)
STC Furnace 1	5,191	4%	19	461	685	1,258	76.13	2131.64	1.07
STC Furnace 2	5,191	4%	19	461	685	1,258	76.13	2131.64	1.07
Total									2.13

Notes

- 3. This table represents the worst-case losses from the furnace loading gate, which are not controlled by the flares. Atmosphere gas supply to the furnace shuts off when the gate is open.
- 4. Furnace operating pressure is 12 mm of water (gauge), 1.001 atm (absolute).

Methodology

Maximum Furnace Open Events (yr-1) = 8,760 (hr/yr) / Minimum Furnace Closed Cycle (hr)

Molar Volume (ft^3 /lb-mole) = RT/P = 1.314 (ft^3 atm/lb-mole K) x [685+273] (K) / 1.001 (atm)

Uncontrolled Furnace Loading Losses (lb-mole/yr) = Furnace Chamber Volume (ft³) x Operating CO Content (%) x Maximum Furnace Open Events (yr⁻¹) x Molar Volume (ft³)lb-mole) Uncontrolled Uncontrolled Furnace Loading Losses (lb/yr) = Uncontrolled CO (lb-mole/yr) x 28 (lb/lb-mole)

 $Uncontrolled\ Uncontrolled\ Furnace\ Loading\ Losses\ (tons/yr) = Uncontrolled\ CO\ (lb/yr)\ /\ 2,000\ (lb/ton)$

Company Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

Source Address: 400 Northbrook Dr., Shelbyville, IN 46176

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3. Natural Gas Combustion for Indirect Heating

Heat Input Capacity (MMBtu/hr)

Unit Unit Generator 1 0.72 STC Furnace 1 5.98 Generator 2 0.72 STC Furnace 2 5.98

> HH\/ MMBtu MMCF 1020

				Pollutant			
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr							
Generator 1	5.87E-03	2.35E-02	2.35E-02	1.86E-03	0.31	1.70E-02	0.26
STC Furnace 1	4.88E-02	0.20	0.20	1.54E-02	2.57	0.14	2.16
Generator 2	5.87E-03	2.35E-02	2.35E-02	1.86E-03	0.31	1.70E-02	0.26
STC Furnace 2	4.88E-02	0.20	0.20	1.54E-02	2.57	0.14	2.16

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

PTE (tons/yr) = Heat Input Capacity (MMBtu/hr) / HHV (MMBtu/MMCF) x 8,760 (hr/yr)) x Emission Factor (lb/MMCF) / 2,000 (lb/ton)

Hazardous Air Pollutants (HAPs)

		HAPs - Organics								
	Benzene	Dichlorobenzene	Formaldehyde	n-Hexane	Toluene	Total - Organics				
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03					
Potential Emission in tons/yr	·	•	•	•	•	·				
Generator 1	6.5E-06	3.7E-06	2.3E-04	5.6E-03	1.1E-05	5.82E-03				
STC Furnace 1	5.4E-05	3.1E-05	1.9E-03	4.6E-02	8.7E-05	4.83E-02				
Generator 2	6.5E-06	3.7E-06	2.3E-04	5.6E-03	1.1E-05	5.82E-03				
STC Furnace 2	5.4E-05	3.1E-05	1.9E-03	4.6E-02	8.7E-05	4.83E-02				

			HAPs	- Metals			Total of
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals	All HAPs
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03		
Potential Emission in tons/yr	<u>.</u>			-			
Generator 1	1.5E-06	3.4E-06	4.3E-06	1.2E-06	6.5E-06	1.7E-05	5.83E-03
STC Furnace 1	1.3E-05	2.8E-05	3.6E-05	9.8E-06	5.4E-05	1.4E-04	4.85E-02
Generator 2	1.5E-06	3.4E-06	4.3E-06	1.2E-06	6.5E-06	1.7E-05	5.83E-03
STC Furnace 2	1.3E-05	2.8E-05	3.6E-05	9.8E-06	5.4E-05	1.4E-04	4.85E-02
Methodology is the same as above.		•	•	•	Total HAPs	0.11	

Worst HAP

0.10

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

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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

Company Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

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4. Flare Pilot Combustion

Flare Rating (MMBtu/hr) (kcal/hr) Generator 1 Flare (FL-GEN01) 3,000 2.85E-03 STC Furnace 1 Flare (FL-STC01) 21,000 1.99E-02 Generator 2 Flare (FL-GEN02) 3,000 2.85E-03 STC Furnace 2 Flare (FL-STC02) 21,000 1.99E-02 Natural gas combustion HHV

MMBtu MMCF 1020

		Pollutant								
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO			
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100	5.5	84			
					**see below					
Potential Emission in tons/yr										
Generator 1 Flare (FL-GEN01)	2.32E-05	9.29E-05	9.29E-05	7.33E-06	1.22E-03	6.72E-05	1.03E-03			
STC Furnace 1 Flare (FL-STC01)	1.63E-04	6.50E-04	6.50E-04	5.13E-05	8.55E-03	4.70E-04	7.18E-03			
Generator 2 Flare (FL-GEN02)	2.32E-05	9.29E-05	9.29E-05	7.33E-06	1.22E-03	6.72E-05	1.03E-03			
STC Furnace 2 Flare (FL-STC02)	1.63E-04	6.50E-04	6.50E-04	5.13E-05	8.55E-03	4.70E-04	7.18E-03			

^{*}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.

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

 $PTE \ (tons/yr) = Heat \ Input \ Capacity \ (MMBtu/hr) \ / \ HHV \ (MMBtu/MMCF) \ x \ 8,760 \ (hr/yr)) \ x \ Emission \ Factor \ (lb/MMCF) \ / \ 2,000 \ (lb/ton) \ / \ Annumber \ / \$

Hazardous Air Pollutants (HAPs)

	HAPs - Organics								
	Benzene	Dichlorobenzene	Formaldehyde	n-Hexane	Toluene	Total - Organics			
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03				
Potential Emission in tons/yr									
Generator 1 Flare (FL-GEN01)	2.57E-08	1.47E-08	9.16E-07	2.20E-05	4.15E-08	2.30E-05			
STC Furnace 1 Flare (FL-STC01)	1.80E-07	1.03E-07	6.41E-06	1.54E-04	2.91E-07	1.61E-04			
Generator 2 Flare (FL-GEN02)	2.57E-08	1.47E-08	9.16E-07	2.20E-05	4.15E-08	2.30E-05			
STC Furnace 2 Flare (FL-STC02)	1.80E-07	1.03E-07	6.41E-06	1.54E-04	2.91E-07	1.61E-04			

		HAPs - Metals						
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals	All HAPs	
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03			
Potential Emission in tons/yr	<u>.</u>							
Generator 1 Flare (FL-GEN01)	6.11E-09	1.34E-08	1.71E-08	4.64E-09	2.57E-08	6.70E-08	2.31E-05	
STC Furnace 1 Flare (FL-STC01)	4.28E-08	9.41E-08	1.20E-07	3.25E-08	1.80E-07	4.69E-07	1.61E-04	
Generator 2 Flare (FL-GEN02)	6.11E-09	1.34E-08	1.71E-08	4.64E-09	2.57E-08	6.70E-08	2.31E-05	
STC Furnace 2 Flare (FL-STC02)	4.28E-08	9.41E-08	1.20E-07	3.25E-08	1.80E-07	4.69E-07	1.61E-04	
Methodology is the same as above	•	•	•		Total HAPs	3 69F-04		

Worst HAP

3.52E-04

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

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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

Company Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

Source Address: 400 Northbrook Dr., Shelbyville, IN 46176

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5. Flare Operating Emissions

Atmosphere gas component	Heat of	Molar Flow	Heat Input
	Combustion		
	(ΔH _c) ⁶		
	(kcal/g-mole)	(lb-mole/hr)	(MMBtu/hr)
carbon monoxide CO	67.64	1.97	0.24
hydrogen H ₂	57.80	3.94	0.41
Total			0.65

from Section 1

2 x CO flow rate, see reaction equation in Section 1

		Pollutant					
Emission Factor in lb/MMBtu	PM ⁷ 	PM10 	direct PM2.5	SO2 	NOx 0.068	VOC ⁸	CO ⁹
Potential Emission in tons/yr	'	•	1				
Generator 1 Flare (FL-GEN01)					0.19		
STC Furnace 1 Flare (FL-STC01)					0.19		
Generator 2 Flare (FL-GEN02)					0.19		
STC Furnace 2 Flare (FL-STC02)					0.19		

NOx emission factor from AP-42 Table 13.5-1..

Worst-case potential to emit for each flare is considered the full output of atmosphere gas from each generator-furnace train.

- 6. From Table 3-206, Perry's
- 7. Particulate emissions negligible for nonsmoking flares.
- 8. VOC and HAP potential to emit is negligible because of the inorganic fuels.
- 9. CO emissions from the flares are considered below in the FESOP limit.

Methodology

Heat Input (MMBtu/hr) = Heat of Combustion (kcal/g-mole) x Molar Flow (lb-mole/hr) x 3.974 (Btu/kcal) x 453.59 (g-mole/lb-mole) / 1,000,000 (btu/MMBtu) PTE (tons/yr) = Heat Input (MMBtu/hr) x Emission Factor (lb/MMBtu) x 8,760 (hr/yr / 2,000 (lb/ton)

6. Annealing Lines FESOP Limits

Stack	Uncontrolled	Overall	Controlled	Uncontrolled	Uncontrolled CO Emissions	
	CO PTE ¹⁰	Control	CO Emissions	(indirect heating)		Emissions
	(atmosphere gas)	Efficiency	(atmosphere gas)	Generator	Furnace	
	(lb/hr)		(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
ST-01	55.13	99%	0.55	5.93E-02	0.49	1.32
ST-02	55.13	99%	0.55	5.93E-02	0.49	1.32

Notes:

10. The uncontrolled CO PTE for atmosphere gas at each stack is the gas produced at the respective generator. The fraction of atmosphere gas not used in the furnace is flared at the generator. CO supplied to the furnace functions as an oxygen scavenger to prevent oxidation of the coil surface. Except for the intermittent CO losses from opening the furnace loading gate described in Section 2 (above), atmosphere gas losses from the furnace are controlled by the furnace flare. Therefore, the CO emissions from each generator-furnace train are considered a single stream at the common stack. The worst case analysis neglects the CO oxidized in the furnace chamber.

Methodology

Uncontrolled CO PTE (atmosphere gas) (lb/hr) = CO PTE (tons/yr) Section 1 x 2,000 (lb/ton) / 8,760 (hr/yr)

Controlled CO Emissions (atmosphere gas) (lb/hr) = Uncontrolled CO PTE (atmosphere gas) (lb/hr) x [1 - Overall Control Efficiency (%)/100] Uncontrolled CO Emissions (lb/hr) = CO PTE (tons/yr) Section 3 x 2,000 (lb/ton) / 8,760 (hr/yr)

Limited Emissions (lb/hr) = 1.2 x [Controlled CO Emissions (atmosphere gas) (lb/hr) + Uncontrolled CO Emissions (Generator + Furnace) (lb/hr)] Limited emissions include a 20% safety factor.

Appendix A: Emission Calculations
PTE of Sulfuric Acid Pickling Tank

Company Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

Source Address: 400 Northbrook Dr., Shelbyville, IN 46176

FESOP No.: 145-37441-00086
Reviewer: Doug Logan
Date: ########

1. Particulate Matter (PM/PM10/PM2.5)

Symbol	Description	Units	Value
A^1	Surface area of the tank, 9 (m ² /tk) x 5 (tk) x 10.76 (ft ² /m ²)	ft ²	484.38
Е	Evaporation rate from tank	lb/(hr ft ²)	1.50E-04
ER ₁	Uncontrolled emission rate ² , A x E	lb/hr	0.07
OY	Operating hours per year	hr	8760
PTE ³	Potential to Emit, ER ₁ x OY / 2.000	tons/yr	0.32

Notes

- 1. Source has 5 pickling tanks, area given as 9 m² per tank, tanks do not use air agitation (sparging).
- 2. As a worst case analysis, the inhibitor additive is assumed to have no fume suppressant effect.
- 3. PTE is considered PM/PM10/PM2.5 because sulfuric acid and iron salts are not VOC or HAPs.

Source: <u>Calculations Guidance Package - Hot Dip Galvanizing</u>, Texas Commission on Environmental Quality http://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/emiss_calc_galv.pdf accessed 8/11/2014

2. VOC

The pickling process uses two additives:

Piclener A1 1920 gallons/yr liquid

Piclener B1 16000 pounds/yr dry powder (inorganic salt)

Worst-case characteristics of Piclener A1 are:

specific gravity 1.04

organics content 20% by weight

Treating the organics as 100% VOC, the worst-case VOC potential to emit is:

1920 (gal/yr) x 8.34 (lb/gal) x 1.04 x 20% VOC = 3,331 (lb VOC/yr)

3,331 (lb VOC/yr) / 2000 (lb/ton) = 1.67 (tons VOC/yr)

Appendix A: Emissions Calculations Zinc Phosphate Conversion Coating

Company Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana Source Address: 400 Northbrook Dr., Shelbyville, IN 46176

FESOP No : 145-37441-00086

Reviewer: Date: 10/13/2016

According to the 2005 AESF training manual, Electroplating & Surface Finishing, the zinc phosphate coating weight range for drawing is 300-2500 mg/m² Since the SDS provided indicates that the product, Bonderite M-ZN 1048 R4 Heavy, is a heavy zinc phosphate, emissions are based on the high end of the range. According to the online article "Phosphate Conversion Coatings", http://www.pfonline.com/articles/phosphate-conversion-coatings, accessed 8/11/16, cold forming zinc phosphates are operated iron-free to extend die life. Thus the general phosphating reaction is:

```
Fe + 3 Zn (H_2PO_4)_2 + 2 H_2O \rightarrow Zn_3(PO_4)_2 • 4 H_2O \rightarrow FeHPO_4 + 3 H_3PO_4 + H_2 \uparrow
```

and the formula weight of the hydrated phosphate complex is: 457 (a/a-mole)

At the target coating weight the molar deposition is:

(mg/m²) / 1000 (mg/g) / 457 (g/g-mole) = 5.47E-03 (g-mole/m²)

and the molar gas generation from the reaction above is:

5.47E-03 (g-mole phosphate/m²) x 1 (g-mole H₂/g-mole phosphate) = 5.47E-03 (g-mole H₂/m²)

According to "Phosphate Conversion Coatings", the highest typical operating temperature for heavy zinc phosphate is

0.08205 (I atm/g mole K) (Table 1-9, Perry's Chemical Engineers' Handbook, 6th ed.) So the actual volume can be found from the ideal gas law, PV = RT, where R =29.40 (I/g mole) at the operating temperature, following the convention of representing molar volume (I/g mole) as ∇

5.47E-03 (g-mole H₂/m²) x 0.16 (l/m²) and the actual volume of gas generated is, V = 29.40 (l/g mole) =

Calculation of average surface area of phosphate coated products:

Density of steel, p Wire diameter, d 10 Wire radius, r 0.005 (m), [d(mm)/2] / 1000 (mm/m) Cross sectional area of wire, a 7.854E-05 (m²), πτ² production mass rate, m 36,000,000 (kg/yr) production volume rate, q 4500 (m³yr), m/p annual length, l 5.73E+07 (m/yr), q/a circumference, c 3.14E-02 (m), 2πr

annual area, A 1,800,000 (m²/yr), cl

Then the gas volume generation rate, V_{total} , is A x V = 1,800,000 (m²/yr) x 0.16 (l/m²) = 289.509 (I/vr) 10,223 (ft³/yr) 1.17 acfh

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

 $\mathsf{E_1} = 100 \; k_1 \; \mathsf{R_b}^2 \; \{ [(1\text{-}2a + 9a^2)^{0.5} + (a\text{-}1)] \; / \; [(1\text{+}3a) \; \text{-} \; (1\text{-}2a + 9a^2)^{0.5}] \}^{0.5}$ Eqn 3, AP-42 Chap 12.20

 $a = 6.45 R_b^2 / k_2$ where

> $k_1 = 56.7 \, \sigma / c_0^2$ $k_2 = 1.79 x 10^5 \sigma / [(\rho_l - \rho_g)g]$

E₁ = emission factor, grain/bubble and

0.002 (assumed diameter 100 µm = 0.1 mm) R_b = average bubble radius, in.

σ = surface tension of bath, lb/ft 5.21E-03

76 dynes/cm (phosphoric acid solution, x=0.1, Fig 6, Wang, et al., "Modeling Surface Tension of Concentrated and Mixed-Solvent Electrolyte Solutions" Ind Eng Chem Res , 50, 4086-4098, 2011)

C_o = speed of sound, ft/sec 1140 AP-42 Chap 12.20

 ρ_l = density of liquid, lb/ft³ 67.70 (8% by vol M-ZN 1048 R4. 8% M-AD 319)

 ρ_a = density of gas, lb/ft³ 0.0043 (hydrogen at 0°C, 1 atm, Tbl 3-30, Perry's, corrected to operating temperature by Charles' Law)

32.2 AP-42, Chap 12.20 g = acceleration due to gravity, ft/sec2

Then $k_1 = 2.27E-07$ k₂ = 4.28E-01

 $E_1 = 6.73E-13$ gr/bubble = 3.64E-02 gr/ft³ of gas generated, E₁ (gr/bubble) / [4/3 π (R_b/12)³)

considering the solution to be 8% by vol M-ZN 1048 R4 and 8% M-AD 319 in water, C = Nickel content (M-ZN 1048 R4 1%, and M-AD 319 10% $Ni(NO_3)_2$), [Ni] = 12.1% solids 0.3% Phosphorus content (M-ZN 1048 R4 30% $Zn(H_2PO_4)_2$ and 10% H_3PO_4), [P] = 0.8%

Phosphate tanks do not use air agitation (sparging).

	P	Potential to Emit					
	gr/hr	lb/hr	tons/yr				
as solution	4.25E-02	6.07E-06	2.66E-05				
solids	5.13E-03	7.33E-07	3.21E-06				
nickel	1.21E-04	1.72E-08	7.54E-08				
phosphorus	3.52E-04	5.02E-08	2.20E-07				
Total HAPs			2.95E-07				

PM/PM10/PM2.5 PTE, excludes uncombined water

Methodology PTE as solution (gr/hr) = E_1 (gr/ft³) x V_{total} (ft³/hr) PTE solids (gr/hr) = $C \times E_1 \times V_{total}$ PTE nickel (gr/hr) = [Ni] x E₁ x V_{tota} PTE phosphorus (gr/hr) = [P] x E_1 x V_{total} PTE (lb/hr) = PTE (gr/hr / 7,000 (gr/lb) PTE (tons/yr) = PTE (lb/hr) x 8,760 (hr/yr) / 2,000 (lb/ton) Total HAP PTE = PTE nickel + PTE phosphorus

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

Company Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

Source Address: 400 Northbrook Dr., Shelbyville, IN 46176

FESOP No.: 145-37441-00086 Reviewer: Doug Logan Date: 10/13/2016

			Capacity (MN	/IBtu/hr)
Unit	Combustion Number		Unit	Total
Coil dryer	direct	1	1.20	1.20
Boiler	indirect	1	6.50	6.50
Office HVAC	indirect	7	0.135	0.95
Unit heaters	indirect	3	0.065	0.20
Makeup air units	direct	5	3.10	15.50
Water heater	indirect	1	0.13	0.13
Water heater	indirect	1	0.20	0.20
			Total	24.67

	HHV
Heat Input Capacity	MMBtu
MMBtu/hr	MMCF
24.67	1020

Potential Throughput MMCF/yr 211.87

		Pollutant					
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.20	0.81	0.81	0.06	10.59	0.58	8.90

^{*}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.

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

Hazardous Air Pollutants (HAPs)

	HAPs - Organics					
	Benzene Dichlorobenzene Formaldehyde n-Hex				Toluene	Total - Organics
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	2.2E-04	1.3E-04	7.9E-03	0.19	3.6E-04	0.20

		HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals	
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03		
Potential Emission in tons/yr	5.3E-05	1.2E-04	1.5E-04	4.0E-05	2.2E-04	5.8E-04	
Methodology is the same as above.						0.20	
The five highest organic and metal HAPs emission factors are provided above.					Worst HAP	0.19	

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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

Appendix A: Emission Calculations Mechanical Draft Cooling Tower

Company Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

Source Address: 400 Northbrook Dr., Shelbyville, IN 46176

FESOP No.: 145-37441-00086

Permit Reviewer: Doug Logan

Date: 10/13/2016

Circulating water flow rate (W _c)	7.93 gal/min

Emission Factor	PM/PM10/PM2.5 Emissions		
(lb/10 ³ gal)	(lb/hr)	(tons/yr)	
0.019	9.04E-03	3.96E-02	

Emission factor source: Table 13.4-1, AP-42 5th ed., January 1995

Methodology

Emissions (lb/hr) = Emission Factor (lb/ 10^3 gal) x Circulating water flow rate (gal/min) / 1,000 (gal/ 10^3 gal) x 60 (min/hr) Emissions (tons/yr) = Emissions (lb/hr) x 8,760 (hr/yr) / 2,000 (lb/ton)



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Michael R. Pence *Governor*

Carol S. Comer Commissioner

October 26, 2016

Mr. Hideoki Kimura NSCI Nippon Steel & Sumikim Cold Heading Wire Indiana 400 Northbrook Drive Shelbyville, Indiana 46176

Re: Public Notice

NSCI Nippon Steel & Sumikim Cold Heading Wire

Indiana

Permit Level: FESOP – New Source Permit Number: 145-37441-00086

Dear Mr. Kimura:

Enclosed is a copy of your draft FESOP – New Source, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that The Shelbyville News in Shelbyville, Indiana publish the abbreviated version of the public notice no later than October 28, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Shelby County Public Library, 57 W. Broadway Street in Shelbyville, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Doug Logan, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension or dial (317) 234-5328.

Sincerely,

Víckí Bíddle

Vicki Biddle Permits Branch Office of Air Quality

Enclosures PN Applicant Cover letter 2/17/2016







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Michael R. Pence *Governor*

Carol S. Comer

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

October 26, 2016

The Shelbyville News 123 E. Washington Street Shelbyville, Indiana 46176

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana, Shelby County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than October 28, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Vicki Biddle at 800-451-6027 and ask for extension 3-6867 or dial 317-233-6867.

Sincerely,

Víckí Bíddle

Vicki Biddle Permit Branch Office of Air Quality

Permit Level: FESOP – New Source Permit Number: 145-37441-00086

Enclosure

PN Newspaper.dot 2/17/2016







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Michael R. Pence Governor Carol S. Comer

October 26, 2016

To: Shelby County Public Library

From: Matthew Stuckey, Branch Chief

Permits Branch Office of Air Quality

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

Permit

Applicant Name: NSCI Nippon Steel & Sumikin Cold Heading Wire Indiana

Permit Number: 145-37441-00086

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

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

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

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

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

Enclosures PN Library.dot 2/16/2016







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100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence Governor

Carol S. Comer
Commissioner

Notice of Public Comment

October 26, 2016 NSCI Nippon Steel & Sumikim Cold Heading Wire Indiana 145-37441-00086

Dear Concerned Citizen(s):

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

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

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

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

Enclosure PN AAA Cover.dot 2/17/2016





Mail Code 61-53

IDEM Staff	VBIDDLE 10/26/	2016		
	NSCI Nippon Ste	el & Sumikim Cold Heading Wire Indiana	AFFIX STAMP	
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1		Hideoki Kimura NSCI Nippon Steel & Sumikim Cold Heading Wire Indi 400 Northbrook	Sr Shelbyvil	le IN 46176 (S	Source CAATS)						Remarks
2		Mr. Hugh Garner 10203 S Degelow Road Milroy IN 46156 (Affected Party)									
3		Shelbyville City Council and Mayors Office 44 West Washington Shelbyville IN 46176 (Local Official)									
4		Shelby County Commissioners 25 West Polk Shelbyville IN 46176 (Local Official)									
5		Shelbyville Shelby Co Public Library 57 W Broadway Shelbyville IN 46176-1294 (Library)									
6		Shelby County Health Department 1600 E. SR 44B Shelbyville IN 46176 (Health De	partment)								
7		Shelby County Council 25 W. Polk Street Shelbyville In 46176 (Affected Party)									
8		Walter Koucky Cornerstone Environmental 880 Lennox Court Zionsville IN 46077 (Co	nsultant)								
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