



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a
Significant Modification to a
Part 70 Operating Permit

for Nucor Vulcraft Group - St. Joe Division in DeKalb County

Significant Source Modification No.: T033-36260-00027
Significant Permit Modification No.: T033-36280-00027

The Indiana Department of Environmental Management (IDEM) has received an application from Nucor Vulcraft Group - St. Joe Division, located at 6610 County Road 60, St. Joe, Indiana 46785, for a significant modification of its Part 70 Operating Permit issued on May 15, 2013. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Nucor Vulcraft Group - St. Joe Division to make certain changes at its existing source. Nucor Vulcraft Group - St. Joe Division has applied to add a new paint spray coater and emergency generator to the source.

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

Eckart Public Library
603 South Jackson
Auburn, IN 46706

and

IDEM Northern Regional Office
300 N. Michigan Street, Suite 450
South Bend, IN 46601-1295

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 SSM T033-36260-00027 and SPM T033-36280-00027 in all correspondence.

Comments should be sent to:

Ms. Renee Traivaranon
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-5615
Or dial directly: (317) 234-5615
Fax: (317) 232-6749 attn: Renee Traivaranon
E-mail: Rtraivar@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, at the IDEM Regional Office 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 Renee Traivaranon or my staff at the above address.


Iryn Cajilung, Section Chief
Permits Branch
Office of Air Quality



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Mr. Tim Jones
Nucor Vulcraft Group - St. Joe Division
P.O. Box 1000
St. Joe, IN 46785

Re: T033-36280-00027
Significant Permit Modification to
Part 70 Renewal No.: T033-32592-00027

Dear Mr. Jones:

Nucor Vulcraft Group - St. Joe Division was issued Part 70 Operating Permit Renewal No. T033-32592-00027 on May 15, 2013 for a stationary steel joist and deck fabrication operation located at 6610 County Road 60, St. Joe, Indiana 46785. An application requesting changes to this permit was received on September 18, 2015. Pursuant to the provisions of 326 IAC 2-7-12, a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

Please find attached the entire Part 70 Operating Permit as modified. The permit references the below listed attachments. Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this modification:

- Attachment A: 40 CFR 60, Subpart TT, NSPS for Metal Coil Coating
- Attachment B: 40 CFR 63, Subpart XXXXXX, NESHAP for Nine Metal Fabrication and Finishing Source Categories
- Attachment C: 40 CFR 60, Subpart JJJJ, NSPS for Stationary Spark Ignition Internal Combustion Engines
- Attachment D: 40 CFR 63, Subpart ZZZZ, NESHAP for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Previously issued approvals for this source containing these attachments are available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

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

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

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If you have any questions on this matter, please contact Renee Traivaranon of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Renee Traivaranon or extension 4-5615 or dial (317) 234-5615.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Significant Permit Modification and Technical Support Document and Calculations

cc: File – DeKalb County
DeKalb County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch
IDEM Northern Regional Office



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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Nucor Vulcraft Group - St. Joe Division
6610 County Road 60
St. Joe, Indiana 46785**

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

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. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 2-7 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.

Operation Permit No.: T033-32592-00027	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: May 15, 2013 Expiration Date: May 18, 2018
Significant Permit Modification No.:033-34369-00027, issued on August 12, 2014	
Significant Permit Modification No.:033-36280-00027	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date: May 18, 2018

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary stationary steel joist and deck fabrication operation.

Source Address:	6610 County Road 60, St. Joe, Indiana 46785
General Source Phone Number:	(260) 337-1884
SIC Code:	3441 (Fabricated Structural Metal) and 3444 (Sheet Metal Work)
County Location:	DeKalb
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 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 Part 70 Source Definition [326 IAC 2-7-1(22)]

This source consists of two (2) plants:

- (a) Nucor Vulcraft Group – St. Joe Division is located at 6610 County Road 60, St. Joe, Indiana 46785 (Plant ID 033-00027); and
- (b) Nucor Fastener is located at 6730 County Road 60, St. Joe, Indiana 46785, and (Plant ID 033-00038).

On October 11, 2006, in Significant Permit Modification (033-22929-00027), a source determination concluded that Nucor Vulcraft Group – St. Joe Division and Nucor Fastener are under the common control of Nucor Corporation, and will be considered one source. These two plants are considered one source because they are located on adjacent properties, are under common ownership, and belong to the same industrial grouping. Nucor Fastener's operations are included as part of Nucor Vulcraft's Part 70 operating source. Therefore, the term "source" in the Part 70 documents refers to both Nucor Vulcraft Group – St. Joe Division and Nucor Fastener as one source.

Separate Part 70 renewal permits have been issued to Nucor Vulcraft Group – St. Joe Division and Nucor Fastener, solely for administrative purposes.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

- (a) One (1) steel joist fabrication line, identified as Super Long Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, constructed in August 1991, including the following:
 - (1) a GMAW welding area and
 - (2) one (1) dip-and-drain paint tank.

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (b) One (1) steel joist fabrication line, identified as Long Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, including the following:
- (1) a GMAW welding area (constructed in September 1974) and
 - (2) two (2) dip-and drain paint tanks (constructed in September 1974, with the original solvent-based paint dip tanks replaced with water-based paint dip tanks in January 1993).

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (c) One (1) steel joist fabrication line, identified as Middle Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, approved in 2015 for modification to change coating materials, including the following:
- (1) a GMAW welding area (constructed in March 1972) and
 - (2) a dip-and-drain paint tank (constructed in 2011).

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (d) One (1) steel joist fabrication line, identified as Short Span Line, with a maximum production capacity of nine (9) tons of steel joists per hour, including the following:
- (1) a GMAW welding area (constructed in March 1972) and
 - (2) one (1) vacuum-assisted flow coater (constructed in September 1994 by replacing the original paint dip tanks).

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (e) One (1) steel joist fabrication line, identified as Combo Line, with a maximum production capacity of twelve (12) tons of steel joists per hour, including the following:
- (1) a GMAW welding area (constructed in October 1985), and
 - (2) two (2) dip-and drain paint tanks (constructed in October 1985, and replaced with water-based paint dip tanks in September 1994).

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (f) One (1) steel bridging fabrication line, identified as Bridging Line, with a maximum production capacity of ten (10) tons per hour, approved in 2015 for modification to remove a dip and drain paint tank and a vacuum coating and replaced by a coater, including the following:
- (1) a GMAW welding area (constructed in March 1972),
 - (2) One (1) Bridging Line Spray Coater, approved in 2015 for construction, utilizing airless method, with a maximum throughput rate of 10 tons per hour of bridging steel, with particulate emissions controlled by dry filters, and exhausting through a vent.

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

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- (g) One (1) steel deck fabrication line, identified as Deck Line, with a maximum production capacity of forty (40) tons of steel deck per hour, approved in 2015 for modification to change coating materials, including the following:
- (1) three (3) double-side roll coaters (with 2 roll coaters constructed in October 1977 and the third roll coater constructed in February 1998),
 - (2) three (3) electric infra-red drying ovens,
 - (3) two (2) airless spray edge coaters (constructed in February 1998) and
 - (4) Quench water stations.

Under NSPS Subpart TT, the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations are considered an affected metal coil surface coating facility.

- (h) Two (2) mobile steel joist fabrication line spray coating operations, identified as Spray Coating Unit 1 and Spray Coating Unit 2, constructed in 2013, and approved in 2015 for modification, with a maximum production capacity of 12 tons of steel joists per hour each, to be used at the Super Long Span, Long Span, Middle Span, Short Span or Combo Joist fabrication line, using work practices for particulate control.

A.4 Specifically Regulated Insignificant Activities
[326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, and are not subject to 326 IAC 20-6. [326 IAC 8-3-2]
- (b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (c) Natural gas-fired space heaters with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (d) Propane or LPG, or butane-fired space heaters with heat input equal to or less than six million (6,000,000) Btu per hour.
- (e) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hr.
- (f) Combustion source flame safety purging on startup.
- (g) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles having a storage capacity less than or equal to 10,500 gallons.
- (h) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
- (i) Vessels storing lubricating oils, hydraulic oils, and machining fluids.
- (j) Packaging lubricants or greases.

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- (k) Filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.
 - (l) Application of oils, greases, lubricants, or nonvolatile materials applied as temporary protective coatings.
 - (m) Machining where an aqueous cutting coolant continuously floods the machining interface.
 - (n) Cleaners and solvents characterized as follows:
 - (1) having vapor pressure equal to or less than 2kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100 o F); or
 - (2) having a vapor pressure equal to or less than 0.7 kPa; 5mmHg; or 0.1 psi measured at 20 o C (68 o F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
 - (o) Infrared cure equipment.
 - (p) Cutting 200,000 linear feet or less of one (1) inch plate for structural steel and bridge fabrication activities.
 - (q) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
 - (r) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs.
 - (s) Process vessel degassing and cleaning to prepare for internal repairs.
 - (t) Purging gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
 - (u) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
 - (v) On-site fire and emergency response training approved by the department.
 - (w) Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower,
 - (x) Stationary fire pumps, and
 - (y) Activities with emissions equal to or less than the following thresholds: 5 tons per year PM or PM10, 10 tons per year SO₂, NO_x, or VOC, 0.2 tons per year Pb, 1.0 tons per year of a single HAP, or 2.5 tons per year of any combination of HAPs:
 - (1) Two (2) storage tanks, each capable of holding 6,000 gallons of water-based paint, associated with the Deck Line.
 - (2) Two (2) underground storage tanks, each capable of holding 12,000 gallons of diesel fuel, associated with the Truck Maintenance building.

- DRAFT
- (z) Aerosol Touch-Up operation, constructed in 2013 and approved in 2015 for modification to change touch-up materials, using less than 5 gallons of coating per day, no control, exhausting inside the building.

Above 2015 modification is to lower particulate emissions limits.

- (aa) One (1) natural gas emergency generator, with a maximum capacity rate of 150 kilowatts, approved in 2015 for installation.

Under 40 CFR 60, Subpart JJJJ this 150 kilowatts emergency generator is considered a stationary spark ignition internal combustion engine.

Under 40 CFR 63, Subpart ZZZZ, this natural gas generator is considered a new stationary reciprocating internal combustion engine (RICE) located at an area source.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

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 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

- (a) This permit, T033-32592-00027, 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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

B.5 Severability [326 IAC 2-7-5(5)]

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

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(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.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), 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) A "responsible official" is defined at 326 IAC 2-7-1(35).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (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. All 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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(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.

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The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (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.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

- (c) 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

B.11 Emergency Provisions [326 IAC 2-7-16]

- (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.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a 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, or Northern Regional Office 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
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877.

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(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.

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The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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 2-7-4(c)(8) 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 2-7 and any other applicable rules.
- (g) 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.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the

permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T033-32592-00027 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 2-7-5(6)(C)] The notification by the Permittee does require a certification that

meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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 2-7-9(a)(3)]
- (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 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(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 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (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 2-7-4. 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(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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 2-7 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 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs

[326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 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 2-7-20(b)(1) and (c)(1). 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 2-7-20(b)(1) and (c)(1).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (c) **Emission Trades [326 IAC 2-7-20(c)]**
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 2-7-20(c).
- (d) **Alternative Operating Scenarios [326 IAC 2-7-20(d)]**
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 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) 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.

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B.20 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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

- (a) Enter upon the Permittee's premises where a Part 70 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 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 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 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.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within 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) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(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 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.3 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.4 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.5 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). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 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:

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- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

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C.7 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (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.8 Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(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 **DRAFT**

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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(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 2-7-5][326 IAC 2-7-6]

C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.12 Risk Management Plan [326 IAC 2-7-5(12)] [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 2-7-5] [326 IAC 2-7-6]

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system);
or

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- (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 2-7-5][326 IAC 2-7-6]

- (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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue

MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

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The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(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 Part 70 permit.

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.17 General Reporting Requirements [326 IAC 2-7-5(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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). 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

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- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) 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.18 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

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Emissions Unit Description:

- (a) One (1) steel joist fabrication line, identified as Super Long Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, constructed in August 1991, including the following:

- (1) a GMAW welding area and
- (2) one (1) dip-and-drain paint tank.

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (b) One (1) steel joist fabrication line, identified as Long Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, including the following:

- (1) a GMAW welding area (constructed in September 1974) and
- (2) two (2) dip-and drain paint tanks (constructed in September 1974, with the original solvent-based paint dip tanks replaced with water-based paint dip tanks in January 1993).

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (c) One (1) steel joist fabrication line, identified as Middle Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, approved in 2015 for modification to change coating materials, including the following:

- (1) a GMAW welding area (constructed in March 1972) and
- (2) a dip-and-drain paint tank (constructed in 2011).

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (d) One (1) steel joist fabrication line, identified as Short Span Line, with a maximum production capacity of nine (9) tons of steel joists per hour, including the following:

- (1) a GMAW welding area (constructed in March 1972) and
- (2) one (1) vacuum-assisted flow coater (constructed in September 1994 by replacing the original paint dip tanks).

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (e) One (1) steel joist fabrication line, identified as Combo Line, with a maximum production capacity of twelve (12) tons of steel joists per hour, including the following:

- (1) a GMAW welding area (constructed in October 1985), and
- (2) two (2) dip-and drain paint tanks (constructed in October 1985, and replaced with water-based paint dip tanks in September 1994).

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Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (f) One (1) steel bridging fabrication line, identified as Bridging Line, with a maximum production capacity of ten (10) tons per hour, approved in 2015 for modification to remove a dip and drain paint tank and a vacuum coating and replaced by a coater, including the following:
 - (1) a GMAW welding area (constructed in March 1972),
 - (2) One (1) Bridging Line Spray Coater, approved in 2015 for construction, utilizing airless method, with particulate emissions controlled by dry filters, and exhausting through a vent.

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (g) One (1) steel deck fabrication line, identified as Deck Line, with a maximum production capacity of forty (40) tons of steel deck per hour, approved in 2015 for modification to change coating materials, including the following:
 - (1) three (3) double-side roll coaters (with 2 roll coaters constructed in October 1977 and the third roll coater constructed in February 1998),
 - (2) three (3) electric infra-red drying ovens,
 - (3) two (2) airless spray edge coaters (constructed in February 1998) and
 - (4) Quench water stations.

Under NSPS Subpart TT, the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations are considered an affected metal coil surface coating facility.

- (h) Two (2) mobile steel joist fabrication line spray coating operations, identified as Spray Coating Unit 1 and Spray Coating Unit 2, constructed in 2013, and approved in 2015 for modification to change coating materials, with a maximum production capacity of 12 tons of steel joists per hour each, to be used at the Super Long Span, Long Span, Middle Span, Short Span or Combo Joist fabrication line, using work practices for particulate control.

Insignificant Activities

- (z) Aerosol Touch-Up operation, constructed in 2013 and approved in 2015 for modification to change touch-up materials, using less than 5 gallons of coating per day, no control, exhausting inside the building.

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

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Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 VOC PSD Minor Limit [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, the VOC input, including coatings, dilution solvents, and cleaning solvents, to the following:

Super Long Span Line,
Long Span Line,
Middle Span Line,
Short Span Line,
Combo Line,
Bridging Line Spray Coater,
Deck Line,
Spray Coating Unit 1,
Spray Coating Unit 2 and
Aerosol Touch-Up Operation

shall not exceed 210 tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limit, in conjunction with the potential to emit VOC from other emission units at the source, shall limit the source-wide PTE of VOC from the entire source (Nucor Vulcraft Group – St. Joe Division and Nucor Fastener) to less than 250 tons per twelve (12) consecutive month period and renders the source minor under 326 IAC 2-2, PSD.

D.1.2 PM, PM10 and PM2.5 PSD Minor Limits [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

- (i) For Spray Coating Units 1 and 2
 - (a) The spray coatings applied at the Spray Coating Units 1 and 2 shall be limited such that the total PM emissions from the Spray Coating Units 1 and 2 shall not exceed 40 tons per twelve consecutive month period with compliance determined at the end of each month.
 - (b) The spray coatings applied at the Spray Coating Units 1 and 2 shall be limited such that total PM10 emissions from the Spray Coating Units 1 and 2 shall not exceed 40 tons per twelve consecutive month period with compliance determined at the end of each month.
 - (c) The spray coatings applied at the Spray Coating Units 1 and 2 shall be limited such that total PM2.5 emissions from the Spray Coating Units 1 and 2 shall not exceed 40 tons per twelve consecutive month period with compliance determined at the end of each month.
- (ii) For Bridging Line Spray Coater
 - (a) The spray coatings applied at the Bridging Line Spray Coater shall be limited such that the PM emissions from Bridging Line Spray Coater shall not exceed 12.10 tons per twelve consecutive month period with compliance determined at the end of each month.
 - (b) The spray coatings applied at the Bridging Line Spray Coater shall be limited such that the PM10 emissions from the Bridging Line Spray Coater shall not exceed 12.10 tons per twelve consecutive month period with compliance determined at the end of each month.

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- (c) The spray coatings applied at the Bridging Line Spray Coater shall be limited such that the PM_{2.5} emissions from the Bridging Line Spray Coater shall not exceed 12.10 tons per twelve consecutive month period with compliance determined at the end of each month.

Compliance with the above limits, in conjunction with the potential to emit PM, PM₁₀ and PM_{2.5} from all other emission units at the source, shall limit the source-wide PTE of PM, PM₁₀, and PM_{2.5} from the entire source (Nucor Vulcraft Group – St. Joe Division and Nucor Fastener) to less than 250 tons per twelve (12) consecutive month period, each, and renders the requirements of 326 IAC 2-2 (PSD) not applicable.

D.1.3 Volatile Organic Compound (VOC) (Miscellaneous Metal Coating) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9(c)(2), the VOC content of the primer coatings delivered to the applicators of the following:
 - Super Long Span Line,
 - Long Span Line,
 - Middle Span Line,
 - Short Span Line,
 - Combo Line,
 - Bridging Line Spray Coater
 - Spray Coating Unit 1 and
 - Spray Coating Unit 2shall be limited to 3.5 pounds of VOC per gallon of coating less water, for forced warm air dried coatings.
- (b) Pursuant to 326 IAC 8-2-9(c)(1), the VOC content of the clear coatings delivered to the applicators of the Deck Line edge coaters shall be limited to 4.3 pounds of VOC per gallon of coating less water.
- (c) Pursuant to 326 IAC 8-2-9(f), the work practices shall include the following:
 - (1) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
 - (2) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
 - (3) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
 - (4) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
 - (5) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

D.1.4 Volatile Organic Compound (VOC) [326 IAC 8-2-4]

Pursuant to IAC 8-2-4 (Coil Coating Operations), the volatile organic compound (VOC) content of coatings applied to any flat metal sheets or strips that are delivered in rolls or coils to the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations shall be limited to 2.6 pounds of VOC per gallon of coating, excluding water.

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D.1.5 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d):

- (i) the particulate emissions from Spray Coating Unit 1 and Spray Coating Unit 2 shall be controlled by a dry particulate filter, waterwash, or an equivalent control device. The Permittee shall use following work practices as equivalent control for Spray Coating Unit 1 and Spray Coating Unit 2:
 - (a) Conduct all spray coating operations within an enclosed building.
 - (b) Close main doors, overhead doors and powered vents located within 100 feet of the spray equipment, and keep them closed during spray operations.
 - (c) Collect coating overspray on drip boards or disposable media such as cardboard or plastic sheets, and/or collect dry-fall paint on floor surfaces.
 - (d) Contain and dispose dry-fall paint from drip boards, disposable media and floor surfaces to prevent re-entrainment to exhaust air.
- (ii) the particulate emissions from Bridging Line Spray Coater shall be controlled by a dry particulate filter, waterwash, or an equivalent control device.

D.1.6 Preventative Maintenance Plan [326 IAC 2-7-5(12)]

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

Compliance Determination Requirements

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

Compliance with the VOC content and usage limitations contained in Conditions D.1.1, D.1.3 and D.1.4 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.8 Particulate Matter (PM/PM10/PM2.5) Emissions Determination [326 IAC 2-2]

- (a) Spray Coating Unit 1 and Spray Coating Unit 2

In order to comply with Condition D.1.2(i), the PM, PM10 and PM2.5 emissions from Spray Coating Unit 1 and Spray Coating Unit 2 shall be determined as follows:

$$PM/PM10/PM2.5 = (\sum CU \times D \times W\%S) \times (1-TE/100) \times (1-CE/100) \times 1/2000$$

Where:

PM/PM10/PM2.5 = The total PM/PM10/PM2.5 emissions (ton/month) for all coatings.

CU = The total coating use (gal coating/month) of each coating.

D = The density (lb coating/gal coating) of each coating.

W%S = The weight percent solids (lb solids/lb coating) of each coating.

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TE = The transfer efficiency (%) of the spray applicators. This value shall equal 60% unless an IDEM approved test is conducted, in which case the value shall equal that determined from the most recent IDEM approved test.

(b) Bridging Line Spray Coater

In order to comply with Conditions D.1.2(ii) and D.1.5(ii), the PM, PM10 and PM2.5 emissions from the Bridging Line Spray Coater shall be controlled and shall be determined as follows:

$$PM/PM10/PM2.5 = (\sum CU \times D \times W\%S) \times (1-TE/100) \times (1-CE/100) \times 1/2000$$

Where:

PM/PM10/PM2.5 = The total PM/PM10/PM2.5 emissions (ton/month) for all coatings.

CU =The total coating use (gal coating/month) of each coating.

D =The density (lb coating/gal coating) of each coating.

W%S =The weight percent solids (lb solids/lb coating) of each coating.

TE =The transfer efficiency (%) of the spray coater. This value shall equal 60% unless an IDEM approved test is conducted, in which case the value shall equal that determined from the most recent IDEM approved test.

CE =The controlled efficiency (%) of the spray coater. This value shall equal 90% unless an IDEM approved test is conducted, in which case the value shall equal that determined from the most recent IDEM approved test.

Compliance Monitoring Requirements

D.1.9 Monitoring

(a) Spray Coating Unit 1 and Spray Coating Unit 2

Weekly observations shall be made of the overspray from the Spray Coating Unit 1 and Spray Coating Unit 2 while these units are in operation. If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) Bridging Line Spray Coater

(1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the Bridging Line Spray Coater vent while it is in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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- (2) Monthly inspections shall be performed of the Bridging Line Spray Coater emissions from the vent and the presence of overspray on the nearby ground. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable 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 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.3, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken as indicated below and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.3.
 - (1) VOC and HAP content of each coating material and solvent used;
 - (2) The amount of coating material and solvent used less water on daily basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
 - (6) The VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (7) The cleanup solvent usage for each month;
- (b) To document the compliance status with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to demonstrate compliance with the PM, PM10 and PM2.5 emission limits established in Condition D.1.2.
 - (1) The amount of each coating material used (as applied) at Spray Coating Unit 1, Spray Coating Unit 2, and Bridging Line Spray Coater. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (2) The density and weight percent solids of each coating material used (as applied) Spray Coating Unit 1, Spray Coating Unit 2, and Bridging Line Spray Coater.

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- (3) The PM, PM10 and PM2.5 emissions for each compliance period.
- (c) To document the compliance status with Condition D.1.9(a), the Permittee shall maintain a log of weekly overspray observations. The Permittee shall include in its weekly record when weekly overspray observation is not made and the reason for the lack of a weekly overspray observations, (i.e. the process did not operate that day).
- (d) To document the compliance status with Condition D.1.9(b), the Permittee shall maintain a log of daily filter inspections, a log of weekly observations for overspray from Bridging Line Spray Coater vent while one is in operation, a log of monthly inspections of coating emissions from the vent and the presence of overspray nearby ground. The Permittee shall include in its daily record when an overspray observation is not taken and the reason for the lack of an overspray observation (e.g. the process did not operate that day).
- (e) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days-following the end of each calendar quarter. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities - Degreasers

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2]

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2(a), the Permittee shall comply with the following requirements for the degreasers:

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

SECTION E.1 Standards of Performance for Metal Coil Coating NSPS

Emissions Unit Description:

- (g) One (1) steel deck fabrication line, identified as Deck Line, with a maximum production capacity of forty (40) tons of steel deck per hour, approved in 2015 for modification to change coating materials, including the following:
- (1) three (3) double-side roll coaters (with 2 roll coaters constructed in October 1977 and the third roll coater constructed in February 1998),
 - (2) three (3) electric infra-red drying ovens,
 - (3) two (2) airless spray edge coaters (constructed in February 1998) and
 - (4) Quench water stations.

Under NSPS Subpart TT, the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations are considered an affected metal coil surface coating facility.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A] [326 IAC 12]

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations except when otherwise specified in 40 CFR 60 Subpart TT.

E.1.2 Standards of Performance for Metal Coil Coating NSPS [40 CFR Part 60, Subpart TT]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart TT, which is incorporated by reference and included as Attachment A to this permit, for the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations:

- (a) 40 CFR 60.460
- (b) 40 CFR 60.461
- (c) 40 CFR 60.462(a)(1)
- (d) 40 CFR 60.463(a), (b), and (c)(1)
- (e) 40 CFR 60.464(a)
- (f) 40 CFR 60.465(a), (c), and (e)
- (g) 40 CFR 60.466(a)(1) and (b)

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) steel joist fabrication line, identified as Super Long Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, constructed in August 1991, including the following:

(1) a GMAW welding area and

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

(b) One (1) steel joist fabrication line, identified as Long Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, including the following:

(1) a GMAW welding area (constructed in September 1974) and

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

(c) One (1) steel joist fabrication line, identified as Middle Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, approved in 2015 for modification to change coating materials, including the following:

(1) a GMAW welding area (constructed in March 1972) and

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

(d) One (1) steel joist fabrication line, identified as Short Span Line, with a maximum production capacity of nine (9) tons of steel joists per hour, including the following:

(1) a GMAW welding area (constructed in March 1972) and

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

(e) One (1) steel joist fabrication line, identified as Combo Line, with a maximum production capacity of twelve (12) tons of steel joists per hour, including the following:

(1) a GMAW welding area (constructed in October 1985), and

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

(f) One (1) steel bridging fabrication line, identified as Bridging Line, with a maximum production capacity of ten (10) tons per hour, approved in 2015 for modification to remove a dip and drain paint tank and a vacuum coating and replaced by a coater, including the following:

(1) a GMAW welding area (constructed in March 1972),

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

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

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National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to NESHAP [40 CFR Part 63, Subpart A] [326 IAC 20-1]

Pursuant to 40 CFR 63, 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, except as otherwise specified in 40 CFR 63, Subpart XXXXXX.

E.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Nine Metal Fabrication and Finishing Source Categories [40 CFR Part 63, Subpart XXXXXX]

The Permittee, which is primarily engaged in operations of manufacturing fabricated structural metal products at an area source of HAP emissions, shall comply with the following provisions of 40 CFR Part 63, Subpart XXXXXX (included as Attachment B of this permit):

- (a) 40 CFR 63.11514(a), (b), and (c)
- (b) 40 CFR 63.11515(a)
- (c) 40 CFR 63.11516(f)
- (d) 40 CFR 63.11517
- (e) 40 CFR 63.11519(a), (b), (c)(1 through 4), (c)(11 through 15)
- (f) 40 CFR 63.11521
- (g) 40 CFR 63.11522
- (h) 40 CFR 63.11523
- (i) Table 1
- (j) Table 2

SECTION E.3

FACILITY OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

- (aa) One (1) natural gas emergency generator, with a maximum capacity rate of 150 kilowatts, approved in 2015 for construction.

Under 40 CFR 60, Subpart JJJJ this 150 kilowatts emergency generator is considered a stationary spark ignition internal combustion engine.

Under 40 CFR 63, Subpart ZZZZ, this natural gas generator is considered a new stationary reciprocating internal combustion engine (RICE) located at an area source.

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

New Source Performance Standards (NSPS) Requirements

E.3.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, except when otherwise specified in 40 CFR Part 60, Subpart JJJJ.

E.3.2 New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines [326 IAC 12] [40 CFR Part 60, Subpart JJJJ]

The natural gas-fired emergency generator shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ (included as Attachment C of this permit), which are incorporated by reference in 326 IAC 12:

- (1) 40 CFR Part 60.4230
- (2) 40 CFR Part 60.4233
- (3) 40 CFR Part 60.4234
- (4) 40 CFR Part 60.4236
- (5) 40 CFR Part 60.4237
- (6) 40 CFR Part 60.4243
- (7) 40 CFR Part 60.4244
- (8) 40 CFR Part 60.4245
- (9) 40 CFR Part 60.4246
- (10) 40 CFR Part 60.4248
- (11) Table 1
- (12) Table 2
- (13) Table 3

SECTION E.4

FACILITY OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

- (aa) One (1) natural gas emergency generator, with a maximum capacity rate of 150 kilowatts, approved in 2015 for construction.

Under 40 CFR 60, Subpart JJJJ this 150 kilowatts emergency generator is considered a stationary spark ignition internal combustion engine.

Under 40 CFR 63, Subpart ZZZZ, this natural gas generator is considered a new stationary reciprocating internal combustion engine (RICE) located at an area source.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements

E.4.1 National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The natural gas-fired emergency generator shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 20-82:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585 (a), (c) and (d)
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Nucor Vulcraft Group - St. Joe Division
Source Address: 6610 County Road 60, St. Joe, Indiana 46785
Part 70 Permit No.: T033-32592-00027

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:

Phone:

Date:

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

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Nucor Vulcraft Group - St. Joe Division
Source Address: 6610 County Road 60, St. Joe, Indiana 46785
Part 70 Permit No.: T033-32592-00027

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) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Nucor Vulcraft Group - St. Joe Division
Source Address: 6610 County Road 60, St. Joe, Indiana 46785
Part 70 Permit No.: T033-32592-00027
Facility: Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line,
Combo Line, Bridging Line, Deck Line, Spray Coating Unit 1, Spray Coating Unit
2 and Aerosol Touch-Up
Parameter: VOC Usage
Limit: 210 tons/year with compliance determined at the end of each month

QUARTER: _____ YEAR: _____

Month	VOC Usage for This Month (tons)	VOC Usage for Previous 11 Months (tons)	VOC Usage for 12-Month Period (tons)

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

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Nucor Vulcraft Group - St. Joe Division
Source Address: 6610 County Road 60, St. Joe, Indiana 46785
Part 70 Permit No.: T033-32592-00027
Facility: Spray Coating Unit 1 and Spray Coating Unit 2
Parameter: total PM, PM10 and PM2.5 emissions, each
Limit: 40 tons/year with compliance determined at the end of each month

QUARTER: _____ YEAR: _____

Month	total PM, PM10 and PM2.5 emissions for This Month (tons)	total PM, PM10 and PM2.5 emissions for Previous 11 Months (tons)	total PM, PM10 and PM2.5 emissions for 12-Month Period (tons)

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

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Nucor Vulcraft Group - St. Joe Division
Source Address: 6610 County Road 60, St. Joe, Indiana 46785
Part 70 Permit No.: T033-32592-00027
Facility: Bridging Line Spray Coater
Parameter: Total PM, PM10 and PM2.5 emissions
Limit: 12.10 tons/year with compliance determined at the end of each month

QUARTER: _____ YEAR: _____

Month	total PM, PM10 and PM2.5 emissions for This Month (tons)	total PM, PM10 and PM2.5 emissions for Previous 11 Months (tons)	total PM, PM10 and PM2.5 emissions for 12-Month Period (tons)

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

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Nucor Vulcraft Group - St. Joe Division
Source Address: 6610 County Road 60, St. Joe, Indiana 46785
Part 70 Permit No.: T033-32592-00027

Months: _____ to _____ Year: _

Page 1 of 2

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

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Page 2 of 2

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: _____

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

**Technical Support Document (TSD) for a Part 70 Significant Source
Modification and Significant Permit Modification**

Source Description and Location

Source Name:	Nucor Vulcraft Group - St. Joe Division
Source Location:	6610 County Road 60, St. Joe, Indiana 46785
County:	DeKalb
SIC Code:	3441 (Fabricated Structural Metal) and 3444 (Sheet Metal Work)
Operation Permit No.:	T 033-32592-00027
Operation Permit Issuance Date:	May 15, 2013
Significant Source Modification No.:	T 033-36260-00027
Significant Permit Modification No.:	T 033-36280-00027
Permit Reviewer:	Renee Traivaranon

Source Definition

This source consists of two (2) plants:

- (a) Nucor Vulcraft Group – St. Joe Division (Plant ID 033-00027) is located at 6610 County Road 60, St. Joe, Indiana 46785; and
- (b) Nucor Fastener (Plant ID 033-00038) is located at 6730 County Road 60, St. Joe, Indiana 46785.

On October 11, 2006, a source determination, in Significant Permit Modification (033-22929-00027), concluded that Nucor Vulcraft Group – St. Joe Division and Nucor Fastener are under the common control of Nucor Corporation, and will be considered one source. These two plants are considered one source because they are located on adjacent properties, are under common ownership, and belong to the same industrial grouping. Nucor Fastener's operations are included as part of Nucor Vulcraft's Part 70 operating source. Therefore, the term "source" in the Part 70 documents refers to both Nucor Vulcraft Group – St. Joe Division and Nucor Fastener as one source.

Separate Part 70 renewal permits have been issued to Nucor Vulcraft Group – St. Joe Division and Nucor Fastener, solely for administrative purposes.

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. 033-32592-00027 on May 15, 2013. The source has since received the following approvals:

- (a) Significant Source Modification No.033-32598-00027, issued on April 25, 2014; and
- (b) Significant Permit Modification No.033-34369-00027, issued on August 12, 2014

County Attainment Status

The source is located in DeKalb 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 or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (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. DeKalb 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}**
 DeKalb County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **Other Criteria Pollutants**
 DeKalb 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.

Source Status- Existing Source

The table below summarizes the potential to emit of the entire source (Nucor Vulcraft Group - St. Joe Division and Nucor Fastener), prior to the proposed modification at Nucor Vulcraft Group - St. Joe Division, after consideration of all enforceable limits established in the effective permits:

Process/ Emission Unit	Potential to Emit prior to the Modification (tons/year)									
	PM	PM10 ¹	PM2.5 ¹	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e	Total HAPs	Worst Single HAP
Nucor Vulcraft Group - St. Joe Division (033-00027)										
Dip Coating, Flow Coating, or Roll Coating Application ²	0	0	0	0	0	210.00	0	0	0	0
Spray Coating Unit 1 & Spray Coating Unit 2 ^{2,3}	40.00	40.00	40.00	0	0		0	0	0	0
Aerosol Touch- Up ²	1.26	1.26	1.26	0	0		0	0	0	0
Welding	11.67	11.67	11.67	0	0	0	0	0	7.14	Man- ganese
Natural Gas Combustion	0.20	0.80	0.80	0.06	10.48	0.58	8.80	12,648	0.20	0.19
Nucor Fastener (033-00038) ⁴	121.47	125.27	125.27	7.95	79.27	36.02	64.43	75,371	1.43	1.34 Hexane
Total PTE of Entire Source	174.61	179.00	179.00	8.01	89.74	246.60	73.23	88,019	8.77	7.14 Man- ganese
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000	NA	NA

¹ 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".

² The VOC potential to emit for the dip, flow, and roll coating application process, spray coating units, and aerosol touch-up is based on PSD minor limits.

³ The PM, PM10 and PM2.5 potential to emit for the spray coating units is based on PSD minor limits.

⁴ Limited PTE based on proposed emission limits in pending Significant Permit Modification No. 033-34368-00038.

The above table is from TSD of Significant Permit Modification No: 033-34369-00027, issued on August 12, 2014.

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant, excluding GHGs, is emitted at a rate of two hundred fifty (250) tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).
- (c) These emissions are based upon TSD to Part 70 Operating Permit Renewal No. 033-34369-00027, issued on August 12, 2014 for Nucor Vulcraft Group - St. Joe Division.
- (d) 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_4q18.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.

Description of Proposed Modification

On September 18, 2015, the Office of Air Quality (OAQ) reviewed an application, submitted by Nucor Vulcraft Group - St. Joe Division, to modify the source as follows:

- (1) To add a new paint spray coater to the Bridging Line.
- (2) To add a 150 kilowatts natural gas fired emergency generator.
- (3) To remove the Bridging Line Vacuum Coater of the Bridging Line.
- (4) To remove the Bridging Line dip and drain tank of the Bridging Line.
- (5) To change coating materials of the Middle Span Line, which increases the unlimited PTE.
- (6) To change coating materials of the Spray Coating Unit 1 and Spray Coating Unit 2, which increases the unlimited PTE.
- (7) To change coating materials of the Aerosol Touch-Up operation, which decrease the unlimited and limited PTE.

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

- (1) One (1) Bridging Line Spray Coater, approved in 2015 for construction, utilizing airless method, with a maximum throughput rate of 10 tons per hour of bridging steel, with particulate emissions controlled by dry filters, and exhausting through a vent.
- (2) One (1) natural gas-fired emergency generator, approved in 2015 for construction, with the maximum capacity rate at 150 kiloWatts.

The following emission units were removed from the steel bridging fabrication line, identified as Bridging Line.

- (1) One (1) dip-and drain paint tank (constructed in March 1972 and replaced with water-based dip-and drain tank in September 1992), and
- (2) One (1) vacuum coater (constructed in December 1992).

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

- (1) One (1) steel joist fabrication line, identified as Middle Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, approved in 2015 for modification to change coating materials.
- (2) One (1) steel deck fabrication line, identified as Deck Line, with a maximum production capacity of forty (40) tons of steel deck per hour, approved in 2015 for modification to change coating materials.
- (3) Two (2) mobile steel joist fabrication line spray coating operations, identified as Spray Coating Unit 1 and Spray Coating Unit 2, constructed in 2013, and approved in 2015 for modification to change coating materials, with a maximum production capacity of 12 tons of steel joists per hour each, to be used at the Super Long Span, Long Span, Middle Span, Short Span or Combo Joist fabrication line, using work practices for particulate control

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

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

Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.

Process / Emission Unit	PTE Before Controls of the Modification (new units) (tons/year)								
	PM	PM ₁₀	PM _{2.5} *	SO ₂	NO _x	VOC	CO	Total HAPs	Highest Single HAP
Bridging Line Spray Coater	120.97	120.97	120.97	0	0	36.61	0	0	0
Natural gas emergency generator	0.005	0.01	0.01	negl	1.08	0.01	1.81	0.02	negl
Total for Source	120.97	120.98	120.98	negl	1.08	36.62	1.81	0.02	negl

*PM_{2.5} listed is direct PM_{2.5}.

See Appendix A of this TSD for detail calculations of new units.

PTE Change of the Modified Process			
Pollutant	PTE Before Modification (ton/yr)	PTE After Modification (ton/yr)	Increase from Modification (ton/yr)
PM	762.7	1231.21	468.5*
PM ₁₀	762.7	1231.21	468.5*
PM _{2.5}	762.7	1231.21	468.5*
SO ₂	0.0	0.0	0.0
VOC	140.14	417.35	277.21**
CO	0.0	0.0	0.0
NO _x	0.0	0.0	0.0
HAPs	0.0	0.0	0.0

* Total modification of the two (2) mobile steel joist fabrication line spray coating operations, identified as Spray Coating Unit 1 and Spray Coating Unit 2.

** Total modification of the steel joist fabrication line, identified as Middle Span Line, and steel deck fabrication line, identified as Deck Line.

See detail of each of these 4 lines above including the aerosol touch-up operation in Appendix A calculations.

Total PTE Increase due to the New and Modification Units			
Pollutant	PTE New Emission Units (ton/yr)	Net Increase to PTE of Modified Emission Units (ton/yr)	Total PTE for New and Modified Units (ton/yr)
PM	120.97	468.5	589.44
PM ₁₀	120.98	468.5	589.44
PM _{2.5}	120.98	468.5	589.44
SO ₂	negl	0.0	negl
VOC	36.62	277.21	313.84
CO	1.81	0.0	1.81
NO _x	1.08	0.0	1.08
HAPs	0.02	0.0	0.02

- (a) **Approval to Construct**
 This source modification is considered a significant source modification, for the following reasons:
- (1) pursuant to 326 IAC 2-7-10.5(g)(4)(A), the potential to emit PM, PM₁₀, and direct PM_{2.5} is greater than twenty-five (25) tons per year before control.
 - (2) pursuant to 326 IAC 2-7-10.5(g)(4)(D), the potential to emit VOC is greater than twenty-five (25) tons per year before control.
- (b) **Approval to Operate**
 This permit modification is considered a significant permit modification, pursuant to 326 IAC 2-7-12(d)(1), because this modification does not qualify as a minor permit modification or as administrative amendment. This modification requires a case-by-case determination of an emission limitation or other standard (e.g. PSD Minor limit).

Permit Level Determination – PSD

The table below summarizes the potential to emit of the entire source after issuance of this modification, reflecting all limits, of the emission units, with updated emissions shown as **bold** values and previous emissions shown as ~~strike through~~ values.

Any control equipment is considered federally enforceable only after issuance of this Part 70 permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential to Emit to Accommodate the Modification (tons/year)									
	PM	PM10 ¹	PM2.5 ¹	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e	Total HAPs	Worst Single HAP
Nucor Vulcraft Group - St. Joe Division (033-00027)										
Dip Coating, Flow Coating, or Roll Coating Application ²	0	0	0	0	0	210.00	0	0	0	0
Spray Coating Unit 1 & Spray Coating Unit 2 ^{2,3}	40.00	40.00	40.00	0	0		0	0	0	0
Aerosol Touch- Up ²	4.26 0.30	4.26 0.30	4.26 0.30	0	0		0	0	0	0
New Bridging Line Spray Coater²	12.10	12.10	12.10	0	0		0	-	0	0
Welding	11.67	11.67	11.67	0	0	0	0	0	7.14	7.14 Man- ganese
Natural Gas Emergency Generator	0.00	0.01	0.01	0.00	1.08	0.01	1.81	-	0.02	0.01
Natural Gas Combustion	0.20	0.80	0.80	0.06	10.48	0.58	8.80	42,648	0.20	0.19
Nucor Fastener (033-00038) ⁴	121.47 121.27	125.27 125.07	125.27 125.07	7.95 7.84	79.27	36.02 35.74	64.43	75,374	1.43	1.34 Hexane
Total PTE of Entire Source	174.64 185.54	179.00 189.93	179.00 189.93	8.01 7.90	89.74	246.60 246.31	73.23	88,019	8.77	7.14 Man- ganese
Title V Major Source Thresholds	NA	100	100	100	100	100	100	400,000	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	400,000	NA	NA
¹ 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". ² The VOC potential to emit for the dip, flow, and roll coating application process, spray coating units, and aerosol touch-up and new Bridging Line Spray Coater is based on PSD minor limits. ³ The PM, PM10 and PM2.5 potential to emit for the spray coating units is based on PSD minor limits. ⁴ Limited PTE based on proposed emission limits in pending Significant Permit Modification No. 033-34368-00038 Administrative Amendment No 033 - 36258 – 00038, issued on October 23, 2015.										

The table below summarizes the potential to emit of the entire source after issuance of this revision. The table below was generated from the above table, with bold text un-bolded and strikethrough text deleted.

Process/ Emission Unit	Source Wide Emissions after Issuance (ton/yr)								
	PM	PM10 ¹	PM2.5 ¹	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
Nucor Vulcraft Group - St. Joe Division (033-00027)									
Dip Coating, Flow Coating, or Roll Coating Application ²	0	0	0	0	0	210.00	0	0	0
Spray Coating Unit 1 & Spray Coating Unit 2 ^{2,3}	40.00	40.00	40.00	0	0		0	0	0
Aerosol Touch-Up ²	0.30	0.30	0.30	0	0		0	0	0
New Bridging Line Spray Coater ²	12.10	12.10	12.10	0	0		0	0	0
Welding	11.67	11.67	11.67	0	0	0	0	7.14	7.14 Manganese
Natural Gas Emergency Generator	0.00	0.01	0.01	0.00	1.08	0.01	1.81	0.02	0.01
Natural Gas Combustion	0.20	0.80	0.80	0.06	10.48	0.58	8.80	0.20	0.19
Nucor Fastener (033-00038) ⁴	121.27	125.07	125.07	7.84	79.27	35.74	64.43	1.43	1.34 Hexane
Total PTE of Entire Source	185.54	189.93	189.93	7.90	89.74	246.31	73.23	8.77	7.14 Manganese
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
¹ 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". ² The VOC potential to emit for the dip, flow, and roll coating application process, spray coating units, and aerosol touch-up and new Bridging Line Spray Coater is based on PSD minor limits. ³ The PM, PM10 and PM2.5 potential to emit for the spray coating units is based on PSD minor limits. ⁴ Limited PTE based on emission limits in Administrative Amendment No 033-36258-00038, issued on October 23, 2015.									

This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

In order to continue to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the source shall comply with the following:

(i) VOC for Bridging Line Spray Coater:

The VOC input of the new **Bridging Line Spray Coater** shall be limited such that when it combines with the VOC input, including coatings, dilution solvents, and cleaning solvents, of the existing Super Long Span Line, Long Span Line, **Middle Span Line**, Short Span Line, Combo Line, **Deck Line**, Spray Coating Unit 1, Spray Coating Unit 2 and **Aerosol Touch-Up Operation**, shall not exceed 210 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

This is an existing PSD minor limit and the Bridging Line Spray Coater is being added to it, while the Bridging Line Vacuum Coater and the dip and drain tank were removed. Also, the following modified units are existing units that were included in this limit:

Middle Span Line,
Deck Line, and
Aerosol Touch-Up Operation

Compliance with the above limit, in conjunction with the potential to emit VOC from other emission units at the source, shall limit the source-wide PTE of VOC from the entire source (Nucor Vulcraft Group – St. Joe Division and Nucor Fastener) to less than 250 tons per twelve (12) consecutive month period and renders the source minor under 326 IAC 2-2, PSD.

The source is maintaining its PSD minor status after this modification.

(ii) PM, PM10 and PM2.5

(A) for Bridging Line Spray Coater:

- (a) The spray coating applied at the Bridging Line Spray Coater shall be limited such that the PM emissions from the Bridging Line Spray Coater shall not exceed 12.10 tons per twelve consecutive month period with compliance determined at the end of each month.
- (b) The spray coating applied at the Bridging Line Spray Coater shall be limited such that PM10 emissions from the Bridging Line Spray Coater shall not exceed 12.10 tons per twelve consecutive month period with compliance determined at the end of each month.
- (c) The spray coating applied at the Bridging Line Spray Coater shall be limited such that PM2.5 emissions from the Bridging Line Spray Coater shall not exceed 12.10 tons per twelve consecutive month period with compliance determined at the end of each month.

The above are new limits for the source.

The above limits shall be determined as follows.

$$PM/PM10/PM2.5 = (\sum CU \times D \times W\%S) \times (1-TE/100) \times (1-CE/100) \times 1/2000$$

Where:

PM/PM10/PM2.5 = The total PM/PM10/PM2.5 emissions (ton/month) for all coatings.

CU = The total coating use (gal coating/month) of each coating.

D = The density (lb coating/gal coating) of each coating.

W%S = The weight percent solids (lb solids/lb coating) of each coating.

TE = The transfer efficiency (%) of the spray coater. This value shall equal 60% unless an IDEM approved test is conducted, in which case the value shall equal that determined from the most recent IDEM approved test.

CE = The controlled efficiency (%) of the spray coater. This value shall equal 90% unless an IDEM approved test is conducted, in which case the value shall equal that determined from the most recent IDEM approved test.

(B) for Spray Coating Units 1 and 2:

- (a) The spray coatings applied at the Spray Coating Units 1 and 2 shall be limited such that the total PM emissions from Spray Coating Unit 1 and 2 shall not exceed 40 tons per twelve consecutive month period with compliance determined at the end of each month.
- (b) The spray coatings applied at Spray Coating Units 1 and 2 shall be limited such that total PM10 emissions from Spray Coating Units 1 and 2 shall not exceed 40 tons per twelve consecutive month period with compliance determined at the end of each month.
- (c) The spray coatings applied at Spray Coating Units 1 and 2 shall be limited such that total PM2.5 emissions from Spray Coating Units 1 and 2 shall not exceed 40 tons per twelve consecutive month period with compliance determined at the end of each month.

The above are existing limits for the source, and there are no changes to the existing compliance determine with the above limits.

Compliance with the above limits, in conjunction with the potential to emit PM, PM10 and PM2.5 from all other emission units at the source, shall limit the source-wide PTE of PM, PM10, and PM2.5 from the entire source (Nucor Vulcraft Group – St. Joe Division and Nucor Fastener) to less than 250 tons per twelve (12) consecutive month period, each, and renders the requirements of 326 IAC 2-2 (PSD) not applicable.

The source is maintaining it PSD minor status after this modification.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS):

- (a) **Standard of Performance for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ):**

The requirements of New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ (326 IAC 12) apply to an emergency engines with a maximum engine power greater than 19 KW and constructed after January 1, 2009

The natural gas-fired emergency generator is subject to the requirements since it is a new emergency generator with a power of 150 kilowatts and will be constructed in 2015.

This natural gas-fired emergency generator is subject to the following portions of the NSPS, Subaprt JJJJ:

- (1) 40 CFR Part 60.4230
- (2) 40 CFR Part 60.4233
- (3) 40 CFR Part 60.4234
- (4) 40 CFR Part 60.4236
- (5) 40 CFR Part 60.4237
- (6) 40 CFR Part 60.4243
- (7) 40 CFR Part 60.4244
- (8) 40 CFR Part 60.4245
- (9) 40 CFR Part 60.4246
- (10) 40 CFR Part 60.4248
- (11) Table 1
- (12) Table 2
- (13) Table 3

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the engine except as otherwise specified in 40 CFR Part 60, Subpart JJJJ.

These are new requirements for this source for this permit.

- (b) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included to this proposed modification.

National Emissions Standards for Hazardous Air Pollutants (NESHAP):

- (a) **NESHAP for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ):**

The natural gas-fired emergency generator is subject to the requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ (326 IAC 20-82), because this generator is considered a new (construction commenced on or after June 12, 2006) stationary reciprocating internal combustion engine (RICE) at an area source of hazardous air pollutants (HAP).

The natural gas-fired emergency generator is subject to the following portions of the NESHAP, Subpart ZZZZ:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585(a), (c) and (d)
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)

Pursuant to 40 CFR 63.6665, the natural gas-fired emergency generator does not have to meet the requirements of 40 CFR 63, Subpart A (General Provisions), since it is considered a new stationary RICE located at an area source of HAP emissions.

These are new requirements for this source for this permit.

- (b) **National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources:**

The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Metal Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH, are not included in the modification for the spray coater, because the spray application in this modification does not contain the target HAP, as defined in §63.11180. Therefore, the requirements of 40 CFR Part 63, Subpart HHHHHH do not apply.

- (c) 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 modification.

CAM:

- (d) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
- (1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to new emission units involved:

CAM Applicability Analysis							
Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
Bridging Line Spray Coater (VOC)	N	-	-	-	100	N	-
Bridging Line Spray Coater (PM, PM10 and PM2.5)	Y	Y	>100	12.10	100	Y	N
Middle Span Line (VOC)	N	-	-	-	100	N	-
Deck Line (VOC)	N	-	-	-	100	N	-
Spray Coating Unit 1 & Spray Coating Unit 2 ² (VOC)	N	-	-	-	100	N	-
Spray Coating Unit 1 & Spray Coating Unit 2 ² (PM, PM10 and PM2.5)	N	-	-	-	100	N	-

Based on this evaluation: the requirements of 40 CFR Part 64, CAM, apply to the Bridging Line Spray Coater for PM, PM10 and PM2.5 in the next renewal, since this Bridging Line Spray Coater is not considered a large unit.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 (PSD)

PSD applicability is discussed under the Permit Level Determination – PSD Section.

326 IAC 6-3-2 (Particulate emission limitations)

Pursuant to 326 IAC 6-3-2(d), the particulate emissions from the Bridging Line Spray Coater shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the source shall operate the control device in accordance with manufacturer's specifications.

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

The Bridging Line Spray Coater is subject to this rule because it will be constructed after July 1, 1990, and coated metal parts or products (under the Standard Industrial Classification (SIC) Code of major group #34), and will have actual emissions of greater than fifteen (15) pounds of VOC per day

Pursuant to 326 IAC 8-2-9(c)(2), the VOC content of the coatings delivered to the Bridging Line Spray Coater shall be limited to 3.5 pounds of VOC per gallon of coating less water.

The source will use compliance coatings for this Bridging Line Spray Coater (see Appendix A calculations)

Pursuant to 326 IAC 8-2-9(f), the work practices shall include the following:

- (1) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
- (2) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
- (3) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
- (4) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
- (5) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

Compliance Determination and Monitoring Requirements

The compliance determination requirements apply to this modification for the new Bridging Line Spray Coater (see how to determine compliance in PSD limits above.)

The compliance monitoring requirements apply to this modification as follows:

Emission Unit/Control	Operating Parameters	Frequency
Bridging Line Spray Coater/Dry filters	Overspray observations	Daily, weekly and monthly observations

Testing is not required for this modification.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 033-32592-00027.

- (1) The description of the following units has been added to Section A.3 and Section D.1.
Middle Span Line,
Bridging Line Spray Coater,
Deck Line, and
Spray Coating Unit 1 and Spray Coating Unit 2
- (2) The dip and drain paint tank and the vacuum coater were removed from Section A.3 and Section D.1.
- (3) The description of aerosol touch-up has been revised and natural gas emergency generator has been added to Section A.4.
- (4) The requirements for the Bridging Line Spray Coater have been added to Section D.1 in Conditions D.1.1, D.1.2, D.1.3, D.1.5, D.1.8, D.1.9, and D.1.10.
- (5) The description and requirements of natural gas emergency generator have been added in Section E.3 and Section E.4.
- (6) The quarterly report form for total PM, PM10 and PM2.5 emissions has been added to the permit.

The permit has been revised as follows with deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

...

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

....

- (c) One (1) steel joist fabrication line, identified as Middle Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, **approved in 2015 for modification to change coating materials**, including the following:

- (1) a GMAW welding area (constructed in March 1972) and
- (2) a dip-and-drain paint tank (constructed in 2011).

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

.....

- (f) One (1) steel bridging fabrication line, identified as Bridging Line, with a maximum production capacity of ten (10) tons per hour, **approved in 2015 for modification to remove a dip and drain paint tank and a vacuum coating and replaced by a coater**, including the following:

- (1) a GMAW welding area (constructed in March 1972),
- ~~(2) one (1) dip and drain paint tank (constructed in March 1972 and replaced with water-based dip and drain tank in September 1992), and~~

~~(3) — one (1) vacuum coater (constructed in December 1992).~~

- (2) One (1) Bridging Line Spray Coater, approved in 2015 for construction, utilizing airless method, with particulate emissions controlled by dry filters, and exhausting through a vent.**

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

.....

- (g) One (1) steel deck fabrication line, identified as Deck Line, with a maximum production capacity of forty (40) tons of steel deck per hour, **approved in 2015 for modification to change coating materials**, including the following:

- (1) three (3) double-side roll coaters (with 2 roll coaters constructed in October 1977 and the third roll coater constructed in February 1998),
- (2) three (3) electric infra-red drying ovens,
- (3) two (2) airless spray edge coaters (constructed in February 1998) and
- (4) Quench water stations.

Under NSPS Subpart TT, the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations are considered an affected metal coil surface coating facility.

- (h) Two (2) mobile steel joist fabrication line spray coating operations, identified as Spray Coating Unit 1 and Spray Coating Unit 2, ~~approved in 2013 for construction~~ **constructed in 2013, and approved in 2015 for modification to change coating materials**, with a maximum production capacity of 12 tons of steel joists per hour each, to be used at the Super Long Span, Long Span, Middle Span, Short Span or Combo Joist fabrication line, using work practices for particulate control.

A.4 Specifically Regulated Insignificant Activities
[326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

....

- (z) Aerosol Touch-Up operation, ~~approved~~ **constructed in 2013 and approved in 2015 for modification to change touch-up materials**, using less than 5 gallons of coating per day, no control, exhausting inside the building.

- (aa) One (1) natural gas emergency generator, with a maximum capacity rate of 150 kilowatts, approved in 2015 for construction.**

Under 40 CFR 60, Subpart JJJJ this 150 kilowatts emergency generator is considered a stationary spark ignition internal combustion engine. Under 40 CFR 63, Subpart ZZZZ, this natural gas generator is considered a new stationary reciprocating internal combustion engine (RICE) located at an area source.

...

Emissions Unit Description:

...

- (c) One (1) steel joist fabrication line, identified as Middle Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, **approved in 2015 for modification to change coating materials**, including the following:

- (1) a GMAW welding area (constructed in March 1972) and
- (2) a dip-and-drain paint tank (constructed in 2011).

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

....

- (f) One (1) steel bridging fabrication line, identified as Bridging Line, with a maximum production capacity of ten (10) tons per hour, **approved in 2015 for modification to remove a dip and drain paint tank and a vacuum coating and replaced by a coater**, including the following:

- (1) a GMAW welding area (constructed in March 1972),
- ~~(2) one (1) dip and drain paint tank (constructed in March 1972 and replaced with water based dip and drain tank in September 1992), and~~
- ~~(3) one (1) vacuum coater (constructed in December 1992).~~

- (2) One (1) Bridging Line Spray Coater, approved in 2015 for construction, utilizing airless method, with particulate emissions controlled by dry filters, and exhausting through a vent.**

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

.....

- (g) One (1) steel deck fabrication line, identified as Deck Line, with a maximum production capacity of forty (40) tons of steel deck per hour, **approved in 2015 for modification to change coating materials**, including the following:

- (1) three (3) double-side roll coaters (with 2 roll coaters constructed in October 1977 and the third roll coater constructed in February 1998),
- (2) three (3) electric infra-red drying ovens,
- (3) two (2) airless spray edge coaters (constructed in February 1998) and
- (4) Quench water stations.

Under NSPS Subpart TT, the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations are considered an affected metal coil surface coating facility

- (h) Two (2) mobile steel joist fabrication line spray coating operations, identified as Spray Coating Unit 1 and Spray Coating Unit 2, ~~approved in 2013 for construction~~ **constructed in 2013, and approved in 2015 for modification to change coating materials**, with a maximum production capacity of 12 tons of steel joists per hour

each, to be used at the Super Long Span, Long Span, Middle Span, Short Span or Combo Joist fabrication line, using work practices for particulate control.

Insignificant Activities

(z) Aerosol Touch-Up operation, ~~approved~~ **constructed** in 2013 **and approved in 2015 for modification to change touch-up materials**, using less than 5 gallons of coating per day, no control, exhausting inside the building.

(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 2-7-5(1)]

D.1.1 VOC PSD Minor Limit [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, the VOC input, including coatings, dilution solvents, and cleaning solvents, to the **following**:

Super Long Span Line,
Long Span Line,
Middle Span Line,
Short Span Line,
Combo Line,
Bridging Line **Spray Coater**,
Deck Line,
Spray Coating Unit 1,
Spray Coating Unit 2 and
Aerosol Touch-Up Operation

shall not exceed 210 tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limit, in conjunction with the potential to emit VOC from other emission units at the source, shall limit the source-wide PTE of VOC from the entire source (Nucor Vulcraft Group – St. Joe Division and Nucor Fastener) to less than 250 tons per twelve (12) consecutive month period and renders the source minor under 326 IAC 2-2, PSD.

D.1.2 PM, PM10 and PM2.5 PSD Minor Limits [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, the Permittee shall comply with the following:

(i) For Spray Coating Units 1 and 2

- (a) The spray coatings applied at the Spray Coating Units 1 and 2 shall be limited such that the total PM emissions from **the** Spray Coating Units 1 and 2 shall not exceed 40 tons per twelve consecutive month period with compliance determined at the end of each month.
- (b) The spray coatings applied at **the** Spray Coating Units 1 and 2 shall be limited such that total PM10 emissions from **the** Spray Coating Units 1 and 2 shall not exceed 40 tons per twelve consecutive month period with compliance determined at the end of each month.
- (c) The spray coatings applied at **the** Spray Coating Units 1 and 2 shall be limited such that total PM2.5 emissions from **the** Spray Coating Units 1 and 2 shall not exceed 40 tons per twelve consecutive month period with compliance determined at the end of each month.

(ii) For Bridging Line Spray Coater

- (a) **The spray coatings applied at the Bridging Line Spray Coater shall be limited such that the PM emissions from Bridging Line Spray Coater shall**

not exceed 12.10 tons per twelve consecutive month period with compliance determined at the end of each month.

- (b) The spray coatings applied at the Bridging Line Spray Coater shall be limited such that the PM10 emissions from the Bridging Line Spray Coater shall not exceed 12.10 tons per twelve consecutive month period with compliance determined at the end of each month.**
- (c) The spray coatings applied at the Bridging Line Spray Coater shall be limited such that the PM2.5 emissions from the Bridging Line Spray Coater shall not exceed 12.10 tons per twelve consecutive month period with compliance determined at the end of each month.**

Compliance with the above limits, in conjunction with the potential to emit PM, PM10 and PM2.5 from all other emission units at the source, shall limit the source-wide PTE of PM, PM10, and PM2.5 from the entire source (Nucor Vulcraft Group – St. Joe Division and Nucor Fastener) to less than 250 tons per twelve (12) consecutive month period, each, and renders the requirements of 326 IAC 2-2 (PSD) not applicable.

D.1.3 Volatile Organic Compound (VOC) (Miscellaneous Metal Coating) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9(c)(2), the VOC content of the primer coatings delivered to the applicators of the **following:**
 - Super Long Span Line,
 - Long Span Line,
 - Middle Span Line,
 - Short Span Line,
 - Combo Line,
 - Bridging Line Spray Coater**
 - Spray Coating Unit 1 and
 - Spray Coating Unit 2shall be limited to 3.5 pounds of VOC per gallon of coating less water, for forced warm air dried coatings.
- (b) ~~Pursuant to 326 IAC 8-2-9(c)(2), the VOC content of the primer coatings delivered to the applicators of the Bridging Line shall be limited to 3.5 pounds of VOC per gallon of coating less water, for forced warm air dried coatings.~~
- (c) Pursuant to 326 IAC 8-2-9(c)(1), the VOC content of the clear coatings delivered to the applicators of the Deck Line edge coaters shall be limited to 4.3 pounds of VOC per gallon of coating less water.
- (d) Pursuant to 326 IAC 8-2-9(f), the ~~Work~~ **work** practices shall include the following:
 - (1) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
 - (2) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
 - (3) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
 - (4) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
 - (5) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without

atomizing the cleaning solvent and all spent solvent is captured in closed containers.

...

D.1.5 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d);:

- (i) the particulate emissions from Spray Coating Unit 1 and Spray Coating Unit 2 shall be controlled by a dry particulate filter, waterwash, or an equivalent control device. The Permittee shall use following work practices as equivalent control for Spray Coating Unit 1 and Spray Coating Unit 2:
 - (a) Conduct all spray coating operations within an enclosed building.
 - (b) Close main doors, overhead doors and powered vents located within 100 feet of the spray equipment, and keep them closed during spray operations.
 - (c) Collect coating overspray on drip boards or disposable media such as cardboard or plastic sheets, and/or collect dry-fall paint on floor surfaces.
 - (d) Contain and dispose dry-fall paint from drip boards, disposable media and floor surfaces to prevent re-entrainment to exhaust air.
- (ii) **the particulate emissions from Bridging Line Spray Coater shall be controlled by a dry particulate filter, waterwash, or an equivalent control device.**

....

D.1.8 Particulate Matter (PM/PM10/PM2.5) Emissions Determination [326 IAC 2-2]

(a) Spray Coating Unit 1 and Spray Coating Unit 2

In order to comply with Condition D.1.2(i), the PM, PM10 and PM2.5 emissions from Spray Coating Unit 1 and Spray Coating Unit 2 shall be determined as follows:

$$PM/PM10/PM2.5 = (\sum CU \times D \times W\%S) \times (1-TE/100) \times (1-CE/100) \times 1/2000$$

Where:

PM/PM10/PM2.5 = The total PM/PM10/PM2.5 emissions (ton/month) for all coatings.

CU = The total coating use (gal coating/month) of each coating.

D = The density (lb coating/gal coating) of each coating.

W%S = The weight percent solids (lb solids/lb coating) of each coating.

TE = The transfer efficiency (%) of the spray applicators. This value shall equal 60% unless an IDEM approved test is conducted, in which case the value shall equal that determined from the most recent IDEM approved test.

(b) Bridging Line Spray Coater

In order to comply with D.1.2(ii) and D.1.5(ii), the PM, PM10 and PM2.5 emissions from the Bridging Line Spray Coater shall be controlled and shall be determined as follows:

$$PM/PM10/PM2.5 = (\sum CU \times D \times W\%S) \times (1-TE/100) \times (1-CE/100) \times 1/2000$$

Where:

PM/PM10/PM2.5 =The total PM/PM10/PM2.5 emissions (ton/month) for all coatings.

CU =The total coating use (gal coating/month) of each coating.

D =The density (lb coating/gal coating) of each coating.

W%S =The weight percent solids (lb solids/lb coating) of each coating.

TE =The transfer efficiency (%) of the spray coater. This value shall equal 60% unless an IDEM approved test is conducted, in which case the value shall equal that determined from the most recent IDEM approved test.

CE =The controlled efficiency (%) of the spray coater. This value shall equal 90% unless an IDEM approved test is conducted, in which case the value shall equal that determined from the most recent IDEM approved test.

Compliance Monitoring Requirements

D.1.9 Monitoring

(a) Spray Coating Unit 1 and Spray Coating Unit 2

Weekly observations shall be made of the overspray from the Spray Coating Unit 1 and Spray Coating Unit 2 while these units are in operation. If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) Bridging Line Spray Coater

(1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the Bridging Line Spray Coater vent while it is in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(2) Monthly inspections shall be performed of the Bridging Line Spray Coater emissions from the vent and the presence of overspray on the nearby ground. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable 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 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and D.1.3, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken as indicated below and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.3.

- (1) VOC and HAP content of each coating material and solvent used;
 - (2) The amount of coating material and solvent used less water on daily basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
 - (6) The VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (7) The cleanup solvent usage for each month;
- (b) To document the compliance status with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to demonstrate compliance with the PM, PM10 and PM2.5 emission limits established in Condition D.1.2.
- (1) The amount of each coating material used (as applied) at Spray Coating Unit 1, ~~and Spray Coating Unit 2,~~ **and Bridging Line Spray Coater**. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (2) The density and weight percent solids of each coating material used (as applied) Spray Coating Unit 1, ~~and Spray Coating Unit 2,~~ **and Bridging Line Spray Coater**.
 - (3) The PM, PM10 and PM2.5 emissions for each compliance period.
- (c) To document the compliance status with Condition D.1.9(a), the Permittee shall maintain a log of weekly overspray observations. The Permittee shall include in its weekly record when weekly overspray observation is not made and the reason for the lack of a weekly overspray observations, (i.e. the process did not operate that day).
- (d) To document the compliance status with Condition D.1.9(b), the Permittee shall maintain a log of daily filter inspections, a log of weekly observations for overspray from Bridging Line Spray Coater vent while one is in operation, a log of monthly inspections of coating emissions from the vent and the presence of overspray nearby ground. The Permittee shall include in its daily record when an overspray observation is not taken and the reason for the lack of an overspray observation (e.g. the process did not operate that day).**
- (de) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

SECTION E.1 Standards of Performance for Metal Coil Coating NSPS

Emissions Unit Description:

- (g) One (1) steel deck fabrication line, identified as Deck Line, with a maximum production capacity of forty (40) tons of steel deck per hour, **approved in 2015 for modification to change coating materials**, including the following:

- (1) three (3) double-side roll coaters (with 2 roll coaters constructed in October 1977 and the third roll coater constructed in February 1998),
- (2) three (3) electric infra-red drying ovens,
- (3) two (2) airless spray edge coaters (constructed in February 1998) and
- (4) Quench water stations.

Under NSPS Subpart TT, the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations are considered an affected metal coil surface coating facility.

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

.....

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) steel joist fabrication line, identified as Super Long Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, constructed in August 1991, including the following:

- (1) a GMAW welding area and

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (b) One (1) steel joist fabrication line, identified as Long Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, including the following:

- (1) a GMAW welding area (constructed in September 1974) and

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (c) One (1) steel joist fabrication line, identified as Middle Span Line, with a maximum production capacity of ten (10) tons of steel joists per hour, **approved in 2015 for modification to change coating materials**, including the following:

- (1) a GMAW welding area (constructed in March 1972) and

Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

- (d) One (1) steel joist fabrication line, identified as Short Span Line, with a maximum production capacity of nine (9) tons of steel joists per hour, including the following:
- (1) a GMAW welding area (constructed in March 1972) and
- Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.
- (e) One (1) steel joist fabrication line, identified as Combo Line, with a maximum production capacity of twelve (12) tons of steel joists per hour, including the following:
- (1) a GMAW welding area (constructed in October 1985), and
- Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.
- (f) One (1) steel bridging fabrication line, identified as Bridging Line, with a maximum production capacity of ten (10) tons per hour, **approved in 2015 for modification to remove a dip and drain paint tank and a vacuum coating and replaced by a coater**, including the following:
- (1) a GMAW welding area (constructed in March 1972),
- Under 40 CFR 63, Subpart XXXXXX, the welding area is considered an affected facility.

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

....

SECTION E.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

- (aa) **One (1) natural gas emergency generator, with a maximum capacity rate of 150 kilowatts, approved in 2015 for construction.**

**Under 40 CFR 60, Subpart JJJJ this 150 kilowatts emergency generator is considered a stationary spark ignition internal combustion engine.
Under 40 CFR 63, Subpart ZZZZ, this natural gas generator is considered a new stationary reciprocating internal combustion engine (RICE) located at an area source.**

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

New Source Performance Standards (NSPS) Requirements

E.3.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, except when otherwise specified in 40 CFR Part 60, Subpart JJJJ.

E.3.2 New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines [326 IAC 12] [40 CFR Part 60, Subpart JJJJ]

The natural gas-fired emergency generator shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ (included as Attachment C of this permit), which are incorporated by reference in 326 IAC 12:

- (1) 40 CFR Part 60.4230
- (2) 40 CFR Part 60.4233
- (3) 40 CFR Part 60.4234
- (4) 40 CFR Part 60.4236
- (5) 40 CFR Part 60.4237
- (6) 40 CFR Part 60.4243
- (7) 40 CFR Part 60.4244
- (8) 40 CFR Part 60.4245
- (9) 40 CFR Part 60.4246
- (10) 40 CFR Part 60.4248
- (11) Table 1
- (12) Table 2
- (13) Table 3

...
SECTION E.4 FACILITY OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

- (aa) One (1) natural gas emergency generator, with a maximum capacity rate of 150 kilowatts, approved in 2015 for construction.

Under 40 CFR 60, Subpart JJJJ this 150 kilowatts emergency generator is considered a stationary spark ignition internal combustion engine.

Under 40 CFR 63, Subpart ZZZZ, this natural gas generator is considered a new stationary reciprocating internal combustion engine (RICE) located at an area source.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements

E.4.1 National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The natural gas-fired emergency generator shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 20-82:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585 (a), (c) and (d)
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)

....

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

Part 70 Quarterly Report

Source Name: Nucor Vulcraft Group - St. Joe Division
Source Address: 6610 County Road 60, St. Joe, Indiana 46785
Part 70 Permit No.: T033-32592-00027
Facility: Bridging Line Spray Coater
Parameter: Total PM, PM10 and PM2.5 emissions
Limit: 12.10 tons/year with compliance determined at the end of each month

QUARTER: _____ **YEAR:** _____

Month	total PM, PM10 and PM2.5 emissions for This Month (tons)	total PM, PM10 and PM2.5 emissions for Previous 11 Months (tons)	total PM, PM10 and PM2.5 emissions for 12-Month Period (tons)

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

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 033-36260-00027. The staff recommends to the Commissioner that this Part 70 Significant Source Modification be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Renee Traivaranon at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCM 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5615 or toll free at 1-800-451-6027 extension 4-5615.
- (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
Summary of Emissions for the Combined Source

Company Name: NUCOR Vulcraft Group - St. Joe Division and NUCOR Fastener
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Plt ID: 033-00027 and 033-00038
Permit Reviewer: Renee Traivaranon

Unlimited Potential to Emit (tons/year)										
Source	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Highest Single HAP	
NUCOR Vulcraft Group - St. Joe Division (Plant ID 033-00027)	1364.35	1364.94	1364.94	0.06	10.48	725	8.80	7.34	7.14	Manganese
NUCOR Fastener (Plant ID 033-00038)	121.27	125.07	125.07	7.84	79.27	35.74	64.43	1.43	1.34	Hexane
Total	1485.62	1490.01	1490.01	7.90	89.74	761	73.23	8.77	7.14	Manganese

Limited Potential to Emit (tons/year)										
Process/Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Highest Single HAP	
NUCOR Vulcraft Group - St. Joe Division (Plant ID 033-00027)	64.27	64.86	64.86	0.06	10.48	210.58	8.80	7.34	7.14	Manganese
NUCOR Fastener (Plant ID 033-00038)	121.27	125.07	125.07	7.84	79.27	35.74	64.43	1.43	1.34	Hexane
Total	185.54	189.93	189.93	7.90	89.74	246.31	73.23	8.77	7.14	Manganese

**Appendix A: Emission Calculations
Summary of Emissions**

Company Name: NUCOR Vulcraft Group - St. Joe Division
Address City IN Zip: 6610 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Permit Reviewer: Renee Traivaranon

Unlimited Potential to Emit (tons/year)										
Process/Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Highest Single HAP	
Dip Coating, Flow Coating, or Roll Coating Application	0	0	0	0	0	545.68	0	0	0	
Spray Coating Unit 1 and Spray Coating Unit 2	1231.21	1231.21	1231.21	0	0	141.88	0	0	0	
Bridging Line Spray Coater	120.97	120.97	120.97	0	0	36.61	0	0	0	
Aerosol Touch-Up	0.30	0.30	0.30	0	0	0.04	0	0	0	
Welding	11.67	11.67	11.67	0	0	0	0	7.14	7.14	Manganese
Natural Gas Combustion	0.20	0.80	0.80	0.06	10.48	0.58	8.80	0.20	0.19	Hexane
Natural Gas Emergency Generator	0.00	0.01	0.01	0.00	1.08	0.01	1.81	0.02	0.01	Formaldehyde
Total	1364.35	1364.94	1364.94	0.06	10.48	724.79	8.80	7.34	7.14	Manganese

Limited Potential to Emit (tons/year)										
Process/Emission Unit	PM*	PM10*	PM2.5*	SO2	NOx	VOC**	CO	Total HAPs	Highest Single HAP	
Dip Coating, Flow Coating, or Roll Coating Application	0	0	0	0	0	210.00	0	0	0	
Spray Coating Unit 1 and Spray Coating Unit 2	40.00	40.00	40.00	0	0		0	0	0	
Bridging Line Spray Coater	12.10	12.10	12.10	0	0		0	0	0	
Aerosol Touch-Up	0.30	0.30	0.30	0	0		0	0	0	
Welding	11.67	11.67	11.67	0	0	0	0	7.14	7.14	Manganese
Natural Gas Combustion	0.20	0.80	0.80	0.06	10.48	0.58	8.80	0.20	0.19	Hexane
Natural Gas Emergency Generator	0.00	0.01	0.01	0.00	1.08	0.01	1.81	0.02	0.01	Formaldehyde
Total	64.27	64.86	64.86	0.06	10.48	210.58	8.80	7.34	7.14	Manganese

* The PM, PM10 and PM2.5 potential to emit for the spray coating units is based on PSD minor limits.

** The VOC potential to emit for the dip, flow, and roll coating application process, spray coating units, and aerosol touch-up is based on PSD minor limits.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: NUCOR Vulcraft Group - St. Joe Division
Address City IN Zip: 6610 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Permit Reviewer: Renee Traivaranon

Dip coating, Flow coating, or Roll coating application

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Super Long Span Line	9.9	63.75%	52.20%	11.60%	62.30%	21.88%	1.77	10	3.05	1.15	20.33	487.84	89.03	0.00	5.25	100%
Long Span Line	9.9	63.75%	52.20%	11.60%	62.30%	21.88%	2.09	10	3.05	1.15	24.00	576.04	105.13	0.00	5.25	100%
Middle Span Line	11.1	1.80%	0.00%	1.80%	0.00%	38.46%	2.1	10	0.20	0.20	4.20	100.70	18.38	0.00	0.52	100%
Short Span Line	9.9	63.75%	52.20%	11.60%	62.30%	21.88%	3.26	9	3.05	1.15	33.69	808.66	147.58	0.00	5.25	100%
Combo Line	9.9	63.75%	52.20%	11.60%	62.30%	21.88%	3.23	12	3.05	1.15	44.51	1068.29	194.96	0.00	5.25	100%
Bridging Line	9.9	63.75%	52.20%	11.60%	62.30%	21.88%	2.1	10	3.05	1.15	24.12	578.79	105.63	0.00	5.25	100%
Deck Line	9.1	54.44%	51.30%	3.10%	56.00%	39.55%	1.3	40	0.64	0.28	14.67	352.06	64.25	0.00	0.71	100%
	10.1	46.61%	44.10%	2.50%	53.30%	41.19%	1.3	40	0.54	0.25	13.13	315.12	57.51	0.00	0.61	100%
Deck Line - Edge Coater	9.2	67.02%	55.50%	11.50%	61.50%	23.61%	0.03	40	2.75	1.06	1.27	30.47	5.56	0.00	4.48	100%
788.03													0.00			

Spray Coating Unit 1 and Spray Coating Unit 2, each

Line	Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
Super Long Span Line	Armitage WD-27185VW	10.8	48.00%	43.2%	4.8%	0.0%	0.00%	1.77000	10.000	0.52	0.52	9.19	220.68	40.27	174.15	60%
Long Span Line	Armitage WD-27185VW	10.8	48.00%	43.2%	4.8%	0.0%	0.00%	2.09000	10.000	0.52	0.52	10.86	260.57	47.55	205.64	60%
Combo Line	Armitage WD-27185VW	10.8	48.00%	43.2%	4.8%	0.0%	0.00%	3.23000	12.000	0.52	0.52	20.14	483.24	88.19	381.37	60%
Middle Span Line	Century 220-D-407	11.1	41.55%	34.3%	7.3%	0.0%	0.00%	3.26000	10.000	0.81	0.81	26.40	633.68	115.65	370.89	60%
Short Span Line	Century 220-D-509A	10.9	52.13%	47.3%	4.8%	0.0%	0.00%	3.26000	9.000	0.52	0.52	15.38	369.18	67.38	268.22	60%
Uncontrolled Potential Emissions for One Spray Coating Unit													115.65	381.37		
Uncontrolled Potential Emissions for Two Spray Coating Units													231.29	762.74		

Aerosol Touch-Up

Line	Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Usage (gal/yr)	Pounds VOC per gallon of coating less water	Potential VOC tons per year	Particulate Potential (ton/yr)
Bridging Line	Marcus SP-12598-7	9.8	50.46%	37.4%	13.0%	0.0%	52.000	1.276	0.13	0.13
Deck Line	Century 220-W-203C	9.5	54.27%	38.2%	16.1%	0.0%	52.000	1.527	0.13	0.11
	Century 220-W-167C	11.1	43.86%	30.4%	13.5%	0.0%	52.000	1.490	0.13	0.16
Deck Line - Edge Coater	Century 220-C-403	9.0	46.64%	25.6%	21.1%	0.0%	52.000	1.890	0.11	0.12
Super Long Span Line	Armitage WD-27185VW	10.8	48.00%	43.2%	4.8%	0.0%	52.000	0.519	0.13	0.15
Long Span Line	Armitage WD-27185VW	10.8	48.00%	43.2%	4.8%	0.0%	52.000	0.519	0.13	0.15
Combo Span Line	Armitage WD-27185VW	10.8	48.00%	43.2%	4.8%	0.0%	52.000	0.534	0.13	0.15
Middle Span Line	Century 220-D-406	11.1	41.55%	34.3%	7.3%	0.0%	52.000	0.757	0.12	0.17
Short Span Line	Century 220-D-509A	10.4	52.13%	47.3%	4.8%	0.0%	52.000	0.500	0.14	0.13
1.16									1.26	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
 Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
 Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1-Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
 Total = Worst Coating + Sum of all solvents used

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: NUCOR Vulcraft Group - St. Joe Division
Address City IN Zip: 6610 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Permit Reviewer: Renee Traivaranon

Dip coating, Flow coating, or Roll coating application

Line	Process	Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency	
Super Long Span Line	Dip Tank	Armitage WD-27185VW	10.63	48.80%	46.44%	2.36%	59.19%	39.00%	1.77	10	0.61	0.25	4.44	106.57	19.45	0.00	0.64	100%	
Long Span Line	Dip Tank	Century 220-D-406	11.07	41.71%	37.96%	3.75%	50.39%	43.58%	2.09	10	0.84	0.42	8.68	208.23	38.00	0.00	0.95	100%	
Middle Span Line	Dip Tank	Century 220-D-406	11.07	41.71%	37.96%	3.75%	50.39%	43.58%	2.10	10	0.84	0.42	8.72	209.22	38.18	0.00	0.95	100%	
Short Span Line	Flow Coater	Century 220-D-509D	10.37	52.30%	50.47%	1.83%	62.75%	34.75%	3.26	9	0.51	0.19	5.57	133.63	24.39	0.00	0.55	100%	
Combo Line	Dip Tank	Armitage WD-27185VW	10.63	48.80%	46.44%	2.36%	59.19%	39.00%	3.23	12	0.61	0.25	9.72	233.37	42.59	0.00	0.64	100%	
Deck Line	Roll Coater 1	Bonderite 1455 SF	9.21	80.85%	80.85%	0.00%	84.42%	15.58%	1.30	40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%	
	Roll Coater 2	Century 220-W-203C	9.52	54.27%	46.17%	8.10%	53.32%	36.95%	1.30	40	1.65	0.77	40.10	962.36	175.63	0.00	2.09	100%	
	Roll Coater 3	Century 220-W-167C	11.06	43.86%	35.78%	8.08%	49.23%	40.73%	1.30	40	1.76	0.89	46.47	1,115.27	203.54	0.00	2.19	100%	
Deck Line - Edge Coater	Edge Spray	Century 220-C403	8.96	64.71%	56.42%	8.29%	60.64%	29.44%	0.03	40	1.89	0.74	0.89	21.39	3.90	0.00	2.52	100%	
															545.68	0.00			

Spray Coating Unit 1 and Spray Coating Unit 2, each

Line	Process	Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency		
Super Long Span Line	Mobile Hand Spray	Armitage WD-27185VW	10.63	48.80%	46.44%	2.36%	59.19%	39.00%	2.95	10	0.61	0.25	7.40	177.61	32.41	281.29	60%		
Long Span Line	Mobile Hand Spray	Century 220-D-406	11.07	41.71%	37.96%	3.75%	50.39%	43.58%	3.48	10	0.84	0.42	14.45	346.71	63.28	393.42	60%		
Combo Line	Mobile Hand Spray	Armitage WD-27185VW	10.63	48.80%	46.44%	2.36%	59.19%	39.00%	5.38	12	0.61	0.25	16.20	388.70	70.94	615.60	60%		
Middle Span Line	Mobile Hand Spray	Century 220-D-406	11.07	41.71%	37.96%	3.75%	50.39%	43.58%	3.50	10	0.84	0.42	14.53	348.71	63.64	395.68	60%		
Short Span Line	Mobile Hand Spray	Century 220-D-509D	10.37	52.30%	50.47%	1.83%	62.75%	34.75%	5.43	9	0.51	0.19	9.27	222.58	40.62	423.52	60%		
															Uncontrolled Potential Emissions for One Spray Coating Unit	70.94	615.60		
															Uncontrolled Potential Emissions for Two Spray Coating Units	141.88	1,231.21		

Aerosol Touch-Up

Line	Process	Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Usage (gal/yr)	Pounds VOC per gallon of coating less water	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
Super Long Span Line	Hand Spray	Armitage WD-27185VW	10.63	48.80%	46.44%	2.36%	59.19%	52.0	0.61	0.01	0.06	60%
Long Span Line	Hand Spray	Century 220-D-406	11.07	41.71%	37.96%	3.75%	50.39%	52.0	0.84	0.01	0.07	60%
Combo Line	Hand Spray	Armitage WD-27185VW	10.63	48.80%	46.44%	2.36%	59.19%	52.0	0.64	0.01	0.06	60%
Middle Span Line	Hand Spray	Century 220-D-406	11.07	41.71%	37.96%	3.75%	50.39%	52.0	0.78	0.01	0.07	60%
Short Span Line	Hand Spray	Century 220-D-509D	10.37	52.30%	50.47%	1.83%	62.75%	260.00	0.51	0.00	0.05	60%
										0.04	0.30	

Bridging Line - New Spray Coater

Line	Process	Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency	PM Control Efficiency*	Controlled Particulate (tpy)
Bridging Line - New Spray Coater	Spray Chamber	Century 220-D500-102C WB	9.75	53.41%	47.77%	5.64%	56.04%	36.42%	1.52	10	1.25	0.55	8.36	200.60	36.61	120.97	60%	90%	12.10

*Bridging Line Spray Chamber controlled by dry filters, assume the control efficiency to be 90%

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
 Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
 Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1-Weight % Volatiles) * (Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
 Total = Worst Coating + Sum of all solvents used

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
Modification units**

**Company Name: NUCOR Vulcraft Group - St. Joe Division
Address City IN Zip: 6610 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Permit Reviewer: Renee Traivaranon**

Dip coating, Flow coating, or Roll coating application

Material	Potential PM/PM10/PM2.5 tons per year (new materials)	Potential PM/PM10/PM2.5 tons per year (existing materials)	Potential PM/PM10/PM2.5 tons per year (Increase)	Potential VOC tons per year (new materials)	Potential VOC tons per year (existing materials)	Potential VOC tons per year (Increase)
Super Long Span Line	0.00	0.00	0.00	19.45	89.03	0.00
Long Span Line	0.00	0.00	0.00	38.00	105.13	0.00
Middle Span Line	0.00	0.00	0.00	38.18	18.38	19.81
Short Span Line	0.00	0.00	0.00	24.39	147.58	0.00
Combo Line	0.00	0.00	0.00	42.59	194.96	0.00
Bridging Line	0.00	0.00	0.00	0.00	105.63	0.00
Deck Line	0.00	0.00	0.00	175.63	64.25	111.38
	0.00	0.00	0.00	203.54	57.51	146.03
Deck Line - Edge Coater	0.00	0.00	0.00	3.90	5.56	0.00
				417.35	140.14	277.21

Spray Coating Unit 1 and Spray Coating Unit 2,

Line	Potential PM/PM10/PM2.5 tons per year (new materials)	Potential PM/PM10/PM2.5 tons per year (existing materials)	Potential PM/PM10/PM2.5 tons per year (Increase)	Potential VOC tons per year (new materials)	Potential VOC tons per year (existing materials)	Potential VOC tons per year (Increase)
Spray Coating Unit 1	615.60	381.4	234.2	70.94	115.65	0.00
Spray Coating Unit 2	615.60	381.4	234.2	70.94	115.65	0.00
	1231.21	762.7	468.5	141.88	231.3	0.0

**Appendix A: Emission Calculations
Summary of Modification**

Company Name: NUCOR Vulcraft Group - St. Joe Division
Address City IN Zip: 6610 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Permit Reviewer: Renee Traivaranon

Unlimited Potential to Emit of new units (tons/year)										
Process/Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Highest Single HAP	
Bridging Line Spray Coater	120.97	120.97	120.97	0	0	36.61	0	0	-	-
Natural Gas Emergency Generator	0.00	0.01	0.01	0.00	1.08	0.01	1.81	0.02	0.01	Formaldehyde
Total	120.97	120.98	120.98	0.00	1.08	36.62	1.81	0.02	0.01	Formaldehyde

Total Unlimited Potential to Emit of modification (tons/year)										
Process/Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Highest Single HAP	
Middle Span Line and Deck Line	0	0	0	0	0	277.21	0	0	0	-
Spray Coating Unit 1 and Spray Coating Unit 2	468.47	468.47	468.47	0	0	0.00	0	0	0	-
Total	468.47	468.47	468.47	0.00	0.00	277.21	0.00	0.00	0.00	-

Total Increase due to Modifications (tons/year)										
Process/Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Highest Single HAP	
Bridging Line Spray Coater	120.97	120.97	120.97	0	0	36.61	0	0	-	-
Middle Span Line and Deck Line	0	0	0	0	0	277.21	0	0	0	-
Spray Coating Unit 1 and Spray Coating Unit 2	468.47	468.47	468.47	0	0	0.00	0	0	0	-
Natural Gas Emergency Generator	0.00	0.01	0.01	0.00	1.08	0.01	1.81	0.02	0.01	Formaldehyde
Total	589.44	589.45	589.45	0.00	1.08	313.84	1.81	0.02	0.01	Formaldehyde

**Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Natural Gas
Emergency Generator 150 Kwatts**

**Company Name: NUCOR Vulcraft Group - St. Joe Division
Address City IN Zip: 6610 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Permit Reviewer: Renee Traivaranon**

Maximum Heat Input Capacity (MMBtu/hr)	1.95
Maximum Hours Operated per Year (hr/yr)	500
Potential Fuel Usage (MMBtu/yr)	975
High Heat Value (MMBtu/MMscf)	1020
Potential Fuel Usage (MMcf/yr)	0.96

Criteria Pollutants	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor (lb/MMBtu)	9.50E-03	1.94E-02	1.94E-02	5.88E-04	2.21E+00	2.96E-02	3.72E+00
Potential Emissions (tons/yr)	0.0046	0.01	0.01	0.0003	1.08	0.01	1.81

*PM emission factor is for filterable PM-10. PM10 emission factor is filterable PM10 + condensable PM.

PM2.5 emission factor is filterable PM2.5 + condensable PM.

Hazardous Air Pollutants (HAPs)

Pollutant	Emission Factor (lb/MMBtu)	Potential Emissions (tons/yr)
Acetaldehyde	2.79E-03	0.001
Acrolein	2.63E-03	0.001
Benzene	1.58E-03	0.001
1,3-Butadiene	6.63E-04	0.000
Formaldehyde	2.05E-02	0.010
Methanol	3.06E-03	0.001
Total PAH**	1.41E-04	0.000
Toluene	5.58E-04	0.000
Xylene	1.95E-04	0.000
Total		0.02

HAP pollutants consist of the nine highest HAPs included in AP-42 Table 3.2-3.

**PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

Methodology

Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-3

Potential Fuel Usage (MMBtu/yr) = [Maximum Heat Input Capacity (MMBtu/hr)] * [Maximum Hours Operating per Year (hr/yr)]

Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2000 lb/ton]

**Appendix A: Emissions Calculations
Welding**

Company Name: NUCOR Vulcraft Group - St. Joe Division

Address City IN Zip: 6610 County Road 60, St. Joe, Indiana 46785

Significant Source Modification No: T033-36260-00027

Significant Permit Modification No: T033-36280-00027

Permit Reviewer: Renee Traivaranon

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)	
			PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr		
WELDING												
GMAW	1	512.5	0.0052	0.0032	1.00E-06	1.00E-06	2.67	1.63	5.13E-04	5.13E-04	1.63	
EMISSION TOTALS												
Potential Emissions lbs/hr							2.67	1.63	0.001	0.001	1.63	
Potential Emissions lbs/day							63.96	39.11	0.012	0.012	39.14	
Potential Emissions tons/year							11.67	7.14	0.002	0.002	7.14	

Methodology:

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

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

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

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

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

Company Name: NUCOR Vulcraft Group - St. Joe Division
Address City IN Zip: 6610 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Permit Reviewer: Renee Traivaranon

1. Process Description

Emission Unit ID	Heat Input Capacity (MMBtu/hr)
Space Heaters	17.60
Air Makeup Units	5.80
Combo Line Oven	1.00
Total	24.40

2. Combustion Emissions - Criteria Pollutants

NOx Burner Type	Fuel Heat Value (MMBtu/MMCF)	Emission Factor (lbs/MMCF)						
		PM*	PM10*	direct PM2.5	SO ₂	NOx**	VOC	CO
Ordinary Burners	1,020	1.9	7.6	7.6	0.6	100	5.5	84.0

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

** Emission factors for NOx: Uncontrolled = 100 lbs/MMCF, Low NOx Burners = 50 lbs/MMCF

Emission factors are from AP 42, Chapter 1.4, Tables 1.4-1, and 1.4-2, SCC 1-01-006-02, 1-02-006-02, 1-03-006-02, 1-03-006-03. (7/98)

Emission Unit ID	Potential Throughput (MMCF/yr)	Potential To Emit (tons/yr)						
		PM	PM10	direct PM2.5	SO ₂	NOx	VOC	CO
Space Heaters	151.15	0.14	0.57	0.57	0.05	7.56	0.42	6.35
Air Makeup Units	49.81	0.05	0.19	0.19	0.015	2.49	0.14	2.09
Combo Line Oven	8.59	0.008	0.03	0.03	0.003	0.43	0.02	0.36
Total	209.55	0.20	0.80	0.80	0.06	10.48	0.58	8.80

Methodology

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

Potential To Emit (tons/year) = Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2,000 lbs

3. Combustion Emissions - HAP Pollutants

Emission Factor (lbs/MMCF)									
Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Cadmium	Chromium	Manganese	Mercury	Nickel
2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	1.1E-03	1.4E-03	3.8E-04	2.6E-04	2.1E-03

Emission Unit ID	Potential To Emit (tons/yr)										Total HAPs	Single HAP
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Cadmium	Chromium	Manganese	Mercury	Nickel		
Space Heaters	1.59E-04	9.07E-05	5.67E-03	1.36E-01	2.57E-04	8.31E-05	1.06E-04	2.87E-05	1.96E-05	1.59E-04	1.43E-01	1.36E-01
Air Makeup Units	5.23E-05	2.99E-05	1.87E-03	4.48E-02	8.47E-05	2.74E-05	3.49E-05	9.46E-06	6.48E-06	5.23E-05	4.70E-02	4.48E-02
Combo Line Oven	9.02E-06	5.15E-06	3.22E-04	7.73E-03	1.46E-05	4.72E-06	6.01E-06	1.63E-06	1.12E-06	9.02E-06	8.10E-03	7.73E-03
Total	2.20E-04	1.26E-04	7.86E-03	1.89E-01	3.56E-04	1.15E-04	1.47E-04	3.98E-05	2.72E-05	2.20E-04	1.98E-01	1.89E-01

HAP emission factors are from AP 42, Chapter 1.4, Tables 1.4-3 and 1.4-4. (7/98)

Methodology

Potential To Emit (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2,000 lbs

**Appendix A: Emission Calculations
Summary of Emissions**

Company Name: NUCOR Fastener
Address City IN Zip: 6730 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Pit ID: 033-00038
Permit Reviewer: Renee Traivaranon

Unlimited Potential to Emit (tons/year)										
Process/Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Highest Single HAP	
Boiler, Installed in 1994	0.09	0.33	0.33	0.03	6.10	0.47	3.54	0.08	0.08	Hexane
Boiler, EP54	0.08	0.28	0.28	0.02	5.21	0.40	3.02	0.07	0.06	Hexane
Space Heaters	0.07	0.27	0.27	0.02	3.56	0.20	2.99	0.07	0.06	Hexane
Air Makeup Units	0.41	1.64	1.64	0.13	21.57	1.19	18.12	0.41	0.39	Hexane
Eight (8) Annealing Furnaces	0.42	1.68	1.68	0.13	22.05	1.21	18.53	0.42	0.40	Hexane
Four (4) Heat Treat Furnaces	0.36	1.44	1.44	0.11	18.96	1.04	15.93	0.36	0.34	Hexane
Sulfuric Acid Pickling Facility	6.92	6.92	6.92	6.92	0	0	0	0	0	
One (1) Nut Former	4.20	4.20	4.20	0	0	0.17	0	0	0	
Tumble Blaster	17.64	17.64	17.64	0	0	0	0	0	0	
Bolt Formers Using Smog Hog Oil Mist	84.29	84.29	84.29	0	0	0	0	0	0	
Bolt Formers Using Venturi Scrubbers	6.20	6.20	6.20	0	0	31.00	0	0	0	
Endothermic Generators	0.01	0.04	0.04	0.00	0.56	0.03	0.47	0.01	0.01	Hexane
Waste Oil Heaters	0.04	0.04	0.04	0.47	0.17	0.02	0.03	0.01	0.01	Lead
Cooling Towers	0.53	0.09	0.09	0	0	0	0	0	0	
Natural Gas Emergency Generator	0.005	0.01	0.01	0.0003	1.08	0.01	1.81	0.02	0.01	Formaldehyde
Total	121.27	125.07	125.07	7.84	79.27	35.74	64.43	1.43	1.34	Hexane

Limited Potential to Emit (tons/year)										
Process/Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Highest Single HAP	
Boiler, Installed in 1994	0.09	0.33	0.33	0.03	6.10	0.47	3.54	0.08	0.08	Hexane
Boiler, EP54	0.08	0.28	0.28	0.02	5.21	0.40	3.02	0.07	0.06	Hexane
Space Heaters	0.07	0.27	0.27	0.02	3.56	0.20	2.99	0.07	0.06	Hexane
Air Makeup Units	0.41	1.64	1.64	0.13	21.57	1.19	18.12	0.41	0.39	Hexane
Eight (8) Annealing Furnaces	0.42	1.68	1.68	0.13	22.05	1.21	18.53	0.42	0.40	Hexane
Four (4) Heat Treat Furnaces	0.36	1.44	1.44	0.11	18.96	1.04	15.93	0.36	0.34	Hexane
Sulfuric Acid Pickling Facility	6.92	6.92	6.92	6.92	0.00	0.00	0.00	0.00	0.00	
One (1) Nut Former	4.20	4.20	4.20	0.00	0.00	0.17	0.00	0.00	0.00	
Tumble Blaster	17.64	17.64	17.64	0.00	0.00	0.00	0.00	0.00	0.00	
Bolt Formers Using Smog Hog Oil Mist	84.29	84.29	84.29	0.00	0.00	0.00	0.00	0.00	0.00	
Bolt Formers Using Venturi Scrubbers	6.20	6.20	6.20	0.00	0.00	31.00	0.00	0.00	0.00	
Endothermic Generators	0.01	0.04	0.04	0.00	0.56	0.03	0.47	0.01	0.01	Hexane
Waste Oil Heaters	0.04	0.04	0.04	0.47	0.17	0.02	0.03	0.01	0.01	Lead
Cooling Towers	0.53	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	
Natural Gas Emergency Generator	0.00	0.01	0.01	0.00	1.08	0.01	1.81	0.02	0.01	Formaldehyde
Total	121.27	125.07	125.07	7.84	79.27	35.74	64.43	1.43	1.34	Hexane

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

Company Name: NUCOR Fastener
Address City IN Zip: 6730 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Plt ID: 033-00038
Permit Reviewer: Renee Traivaranon

1. Process Description

Emission Unit ID	Heat Input Capacity (MMBtu/hr)
Boiler (1994)	9.81
Boiler (EP54)	8.37
Space Heaters	8.30
Air Makeup Units	50.23
Eight Annealing Furnaces	51.36
Four Heat Treat Furnaces	44.15
Endothermic Generators	1.30
Total	173.52

2. Combustion Emissions - Criteria Pollutants

NOx Burner Type	Fuel Heat Value (MMBtu/MMCF)	Emission Factor (lbs/MMCF)						
		PM*	PM10*	direct PM2.5	SO ₂	NOx**	VOC	CO
Ordinary Burners	1,020	1.9	7.6	7.6	0.6	100	5.5	84.0

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

** Emission factors for NOx: Uncontrolled = 100 lbs/MMCF, Low NOx Burners = 50 lbs/MMCF

Emission factors are from AP 42, Chapter 1.4, Tables 1.4-1, and 1.4-2, SCC 1-01-006-02, 1-02-006-02, 1-03-006-02, 1-03-006-03. (7/98)

Emission Unit ID	Potential Throughput (MMCF/yr)	Potential To Emit (tons/yr)						
		PM	PM10	direct PM2.5	SO ₂	NOx	VOC	CO
Boiler (1994)	84.22	0.08	0.32	0.32	0.03	4.21	0.23	3.54
Boiler (EP54)	71.88	0.07	0.27	0.27	0.022	3.59	0.20	3.02
Space Heaters	71.28	0.068	0.27	0.27	0.021	3.56	0.20	2.99
Air Makeup Units	431.39	0.41	1.64	1.64	0.13	21.57	1.19	18.12
Eight Annealing Furnaces	441.09	0.419	1.68	1.68	0.132	22.05	1.21	18.53
Four Heat Treat Furnaces	379.17	0.360	1.44	1.44	0.114	18.96	1.04	15.93
Endothermic Generators	11.16	0.011	0.04	0.04	0.003	0.56	0.03	0.47
Total	1,490.20	1.42	5.66	5.66	0.45	74.51	4.10	62.59

Methodology

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

Potential To Emit (tons/year) = Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2,000 lbs

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

3. Combustion Emissions - HAP Pollutants

Emission Factor (lbs/MMCF)									
Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Cadmium	Chromium	Manganese	Mercury	Nickel
2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	1.1E-03	1.4E-03	3.8E-04	2.6E-04	2.1E-03

Emission Unit ID	Potential To Emit (tons/yr)										Total HAPs	Single HAP
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Cadmium	Chromium	Manganese	Mercury	Nickel		
Boiler (1994)	8.84E-05	5.05E-05	3.16E-03	7.58E-02	1.43E-04	4.63E-05	5.90E-05	1.60E-05	1.09E-05	8.84E-05	7.95E-02	7.58E-02
Boiler (EP54)	7.55E-05	4.31E-05	2.70E-03	6.47E-02	1.22E-04	3.95E-05	5.03E-05	1.37E-05	9.34E-06	7.55E-05	6.78E-02	6.47E-02
Space Heaters	7.48E-05	4.28E-05	2.67E-03	6.42E-02	1.21E-04	3.92E-05	4.99E-05	1.35E-05	9.27E-06	7.48E-05	6.73E-02	6.42E-02
Air Makeup Units	4.53E-04	2.59E-04	1.62E-02	3.88E-01	7.33E-04	2.37E-04	3.02E-04	8.20E-05	5.61E-05	4.53E-04	4.07E-01	3.88E-01
Eight Annealing Furnaces	4.63E-04	2.65E-04	1.65E-02	3.97E-01	7.50E-04	2.43E-04	3.09E-04	8.38E-05	5.73E-05	4.63E-04	4.16E-01	3.97E-01
Four Heat Treat Furnaces	3.98E-04	2.28E-04	1.42E-02	3.41E-01	6.45E-04	2.09E-04	2.65E-04	7.20E-05	4.93E-05	3.98E-04	3.58E-01	3.41E-01
Endothermic Generators	1.17E-05	6.70E-06	4.19E-04	1.00E-02	1.90E-05	6.14E-06	7.82E-06	2.12E-06	1.45E-06	1.17E-05	1.05E-02	1.00E-02
Total	1.56E-03	8.94E-04	5.59E-02	1.34E+00	2.53E-03	8.20E-04	1.04E-03	2.83E-04	1.94E-04	1.56E-03	1.41E+00	1.34E+00

HAP emission factors are from AP 42, Chapter 1.4, Tables 1.4-3 and 1.4-4. (7/98)

Methodology

Potential To Emit (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2,000 lbs

Appendix A: Emission Calculations
LPG-Propane - Commercial Boilers
(Heat input capacity: > 0.3 MMBtu/hr and < 10 MMBtu/hr)

Company Name: NUCOR Fastener
Address City IN Zip: 6730 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Plt ID: 033-00038
Permit Reviewer: Renee Traivaranon

1. Process Description

Emission Unit ID	Heat Input Capacity (MMBtu/hr)
Boiler	9.81
Boiler (EP54)	8.37
Total	18.18

SO₂ Emission factor = 0.10 x S

S = Sulfur Content =

0.00 grains/100ft³**2. Combustion Emissions - Criteria Pollutants**

Emission Factor (lbs/kgal)						
PM*	PM10*	direct PM2.5**	SO ₂	NO _x **	VOC	CO
0.20	0.70	0.70	0.00	13.00	1.00	7.50
			(0.10S)		***TOC value	

*PM emission factor is filterable PM only. PM emissions are stated to be all less than 10 microns in aerodynamic equivalent diameter, footnote in Table 1.5-1, therefore PM10 is based on the filterable and condensable PM emission factors.

** No direct PM2.5 emission factor was given. Direct PM2.5 is a subset of PM10. If one assumes all PM10 to be all direct PM2.5, then a worst case assumption of direct PM2.5 can be made.

***The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Emission Unit ID	Potential Throughput (kgals/yr)	Potential To Emit (tons/yr)						
		PM	PM10	direct PM2.5	SO ₂	NO _x	VOC	CO
Boiler	938.90	0.09	0.33	0.33	0.00	6.10	0.47	3.52
Boiler (EP54)	801.32	0.080	0.28	0.28	0.000	5.21	0.40	3.00
Total	1,740.22	0.17	0.61	0.61	0.00	11.31	0.87	6.53

Methodology

1 gallon of LPG has a heating value of 94,000 Btu (Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (7/08), Table 1.5-1 (SCC #1-02-010-02)

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

**Appendix A: Emission Calculations
Non-Combustion
Sulfuric Acid Pickling**

**Company Name: NUCOR Fastener
Address City IN Zip: 6730 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Plt ID: 033-00038
Permit Reviewer: Renee Traivaranon**

Sulfuric Acid Pickling Facility

Maximum Uncontrolled PM/PM10 (lb/hr)*	Maximum Uncontrolled PM/PM10 (ton/yr)	Capture Efficiency Fume Exhaust (%)	Control Efficiency Scrubber and Mist Eliminator (%)	Maximum Controlled Emissions (lb/hr)	Maximum Controlled Emissions (ton/yr)
1.58	6.92	70.0%	98.0%	0.50	2.17

Since the emissions are a sulfuric acid mist, the potential to emit SO₂ is conservatively equal to PM emissions.

Methodology

Maximum controlled emissions (lb/hr) = Maximum uncontrolled PM/PM10 (lb/hr) * (1-Capture Efficiency) + Maximum uncontrolled PM/PM10 (lb/hr) * Capture Efficiency * (1-Control Efficiency)

*Since there is no applicable AP-42 emissions factor available, the pound per hour emission rate is based on 360 grams per hour, as supplied by the vendor.

**Appendix A: Emission Calculations
Nut Former
Miscellaneous Operations**

**Company Name: NUCOR Fastener
Address City IN Zip: 6730 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Plt ID: 033-00038
Permit Reviewer: Renee Traivaranon**

One (1) Nut Former

Facility	Material	Potential Usage (lb/yr)	VOC Content (%)	PM Content (%)	Potential VOC Emissions Before Controls (ton/yr)	Potential PM Emissions Before Controls (lb/hr)	Potential PM Emissions Before Controls (ton/yr)	Control Efficiency (%)	Potential PM Emissions After Controls (lb/hr)	Potential PM Emissions After Controls (ton/yr)
One (1) Nut Former	Cooling Oil	84,000	0.40%	10.00%	0.17	0.96	4.20	0.00	0.96	4.20

Total Emissions (tons/yr): **VOC = 0.17** **PM = 4.20** **PM Controlled = 4.20**

**Appendix A: Emission Calculations
Tumble Blaster
Miscellaneous Operations**

**Company Name: NUCOR Fastener
Address City IN Zip: 6730 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Plt ID: 033-00038
Permit Reviewer: Renee Traivaranon**

Tumble Blaster

Baghouse Collection Rate* (ton/yr)	Potential Baghouse Collection Rate (ton/yr)	Control Efficiency (%)	Potential PM** Emissions (ton/yr)	Potential PM Emissions (lb/hr)	PM Emissions After Controls (ton/yr)	PM Emissions After Controls (lb/hr)
11.7	17.55	99.5%	17.64	4.03	0.09	0.02

*Based on the information supplied by the applicant, the collection rate for the tumble blast dust collector is 11.7 tons of PM per year.

**PM=PM10

Methodology

Potential Baghouse Collection Rate = Collection Rate * 1.5

The Collection Rate is multiplied by a factor of 1.5 to account for annual variability.

Emissions (ton/yr) = Potential Baghouse Collection Rate / Control Efficiency

Emissions (lb/hr) = Emissions (ton/yr) * 2000 lb/ton / 8760 hrs/yr

Emissions After Controls = Potential Emissions * (1 - Control Efficiency)

**Appendix A: Emissions Calculations
Waste Oil Combustion
Space Heater-Vaporizing Burner**

**Company Name: NUCOR Fastener
Address City IN Zip: 6730 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Plt ID: 033-00038
Permit Reviewer: Renee Traivaranon**

Heat Input Capacity
MMBtu/hr

0.50

Potential Throughput
kgals/year

31.51

A = Weight % Ash = 1.00
L = Weight % Lead = 1.00
S = Weight % Sulfur = 0.30

Emission Factor in lb/kgal	Pollutant							
	PM*	PM10*	PM2.5*	SO2	NOx	TOC	CO	Pb
	2.8 (2.8A)	0.00 (ND)	0.00 (ND)	30.0 (100S)	11.0	1.0	1.7	0.41 (0.41L)
Potential Emission in tons/yr	0.04	0.04	0.04	0.47	0.17	0.02	0.03	0.01

*No information was given in AP-42 regarding whether the PM emission factor included filterable and condensable PM.
No Emission factor listed for PM10 or PM2.5. Assumes PM10/PM2.5 = PM

Emission Factor in lb/kgal	HAPs - Metals				
	Arsenic	Chromium	Cobalt	Nickel	Phosphorus
	2.5E-03	1.9E-01	5.7E-03	5.0E-02	3.6E-02
Potential Emission in tons/yr	3.94E-05	2.99E-03	8.98E-05	7.88E-04	5.67E-04

Emission Factor in lb/kgal	HAPs - Organics				
	Naphthalene	Phenanthrene/ anthracene	Pyrene	Benz(a)anthracene/c hrysene	Benzo(a) pyrene
	1.3E-02	1.1E-02	7.1E-03	4.0E-03	4.0E-03
Potential Emission in tons/yr	2.05E-04	1.73E-04	1.12E-04	6.30E-05	6.30E-05

Total HAPs =	0.01	
Single HAP =	0.006	Pb

**Appendix A: Emission Calculations:
Bolt-Former Machines**

Company Name: NUCOR Fastener
 Address City IN Zip: 6730 County Road 60, St. Joe, Indiana 46781
 Significant Source Modification No: T033-36260-00027
 Significant Permit Modification No: T033-36280-00027
 Plt ID: 033-00038
 Permit Reviewer: Renee Traivaranon

Bolt Formers Using Smog Hog Oil Mist Collectors for Particulate Control

Machine #	Rate of Units Processed (ton/hr)	Cooling Oil Usage (gal/yr)	Density of Cooling Oil (lb/gal)	PM Emitted (lb PM/lb Cooling Oil)	Uncontrolled PTE PM ₁₀ /PM _{2.5}		Control Efficiency (%)	Controlled PTE PM ₁₀ /PM _{2.5}		Total Process Weight Rate (ton/hr)	326 IAC 6-3-2 Allowable PM Emissions (lb/hr)
					(lb/hr)	(ton/yr)		(lb/hr)	(ton/yr)		
5 (Moved from Venturi Units)	1.92	7,594.94	7.59	0.5	3.29	14.41	90.0%	0.33	1.44	1.923	6.35
6 (Moved from Venturi Units)	2.21	8,742.09	7.59	0.5	3.79	16.59	90.0%	0.38	1.66	2.214	6.98
20	0.62	2,452.53	7.59	0.5	1.06	4.65	90.0%	0.11	0.47	0.621	2.98
26	1.78	7,041.14	7.59	0.5	3.05	13.36	90.0%	0.31	1.34	1.783	6.04
27	1.73	6,843.35	7.59	0.5	2.96	12.99	90.0%	0.30	1.30	1.733	5.93
28	0.92	3,639.24	7.59	0.5	1.58	6.91	90.0%	0.16	0.69	0.922	3.88
29*	0.30	1,186.71	7.59	0.5	0.51	2.25	90.0%	0.05	0.23	0.301	N/A - exempt
31	1.75	6,922.47	7.59	0.5	3.00	13.14	90.0%	0.30	1.31	1.753	5.97
Total		44,422.47			19.24	84.29		1.92	8.43		32.16 lb/hr or 140.9 tpy

*This is an Insignificant Activity as defined in 326 IAC 2-7-1(21).

Methodology

- Cooling Oil Usage is based on a total potential usage of 37,500 gal/yr for all the bolt formers using Smog Hog oil mist collection systems for particulate control. The Permittee estimates that the rate of oil to each individual bolt former will be approximately proportionate to rate of units processed by each machine.
- Density of Cooling Oil, PM Emitted, and Control Efficiency values are based off of calculations performed in Appendix A to the TSD of Part 70 Operating Permit No. T033-20219-00038.
- The PTE of PM₁₀/PM_{2.5} is assumed to equal the PTE of PM.
- Uncontrolled PTE PM₁₀/PM_{2.5} (lb/hr) = Cooling Oil Usage (gal/yr) * Density of Cooling Oil (lb/gal) * PM Emitted (lb PM/lb Cooling Oil) * (1 yr / 8760 hr)
- Controlled PTE PM₁₀/PM_{2.5} (lb/hr) = Uncontrolled PTE PM₁₀/PM_{2.5} (lb/hr) * (1 - Control Efficiency)
- PTE (ton/yr) = PTE (lb/hr) * (8760 hr/yr) * (1 ton / 2000 lb)
- Total Process Weight Rate (ton/hr) = Rate of Units Processed (ton/hr) + [Cooling Oil Rate (gal/yr) * Density of Cooling Oil (lb/gal) * (1 yr/8760 hr) * (1 ton / 2000 lb)]
- 326 IAC 6-3-2 Allowable PM Emissions (lb/hr) = 4.10 * [Process Weight Rate (ton/hr)]^{0.77}
- Pursuant to 326 IAC 6-3-1(b)(14), manufacturing processes with potential emissions less than 0.551 pounds per hour are exempt from 326 IAC 6-3.

Bolt Formers Using the Venturi Scrubber Systems for Particulate Control

Machine #	Rate of Units Processed (tons/hr)	Cooling Oil Usage (lb/yr)	VOC Content (lb VOC/lb Cooling Oil)	PM Emitted (lb PM/lb Cooling Oil)	PTE VOC (ton/yr)	Uncontrolled PTE PM ₁₀ /PM _{2.5}		Control Efficiency (%)	Controlled PTE PM ₁₀ /PM _{2.5}		Total Process Weight Rate (ton/hr)	326 IAC 6-3-2 Allowable PM Emissions (lb/hr)
						(lb/hr)	(ton/yr)		(lb/hr)	(ton/yr)		
1	6.33	18174	0.5	0.1	4.543	0.207	0.909	98.0%	0.00415	0.0182	6.33	N/A - exempt
2*	1.49	4278	0.5	0.1	1.069	0.049	0.214	98.0%	0.00098	0.0043	1.49	N/A - exempt
3*	1.53	4393	0.5	0.1	1.098	0.050	0.220	98.0%	0.00100	0.0044	1.53	N/A - exempt
4*	3.42	9819	0.5	0.1	2.455	0.112	0.491	98.0%	0.00224	0.0098	3.42	N/A - exempt
7	4.38	12575	0.5	0.1	3.144	0.144	0.629	98.0%	0.00287	0.0126	4.38	N/A - exempt
8*	1.85	5311	0.5	0.1	1.328	0.061	0.266	98.0%	0.00121	0.0053	1.85	N/A - exempt
9*	1.19	3417	0.5	0.1	0.854	0.039	0.171	98.0%	0.00078	0.0034	1.19	N/A - exempt
10 (new)	4.38	12575	0.5	0.1	3.144	0.144	0.629	98.0%	0.00287	0.0126	4.38	N/A - exempt
11	4.02	11542	0.5	0.1	2.885	0.132	0.577	98.0%	0.00264	0.0115	4.02	N/A - exempt
12*	1.52	4364	0.5	0.1	1.091	0.050	0.218	98.0%	0.00100	0.0044	1.52	N/A - exempt
13*	0.59	1694	0.5	0.1	0.423	0.019	0.085	98.0%	0.00039	0.0017	0.59	N/A - exempt
14*	0.51	1464	0.5	0.1	0.366	0.017	0.073	98.0%	0.00033	0.0015	0.51	N/A - exempt
15*	0.77	2211	0.5	0.1	0.553	0.025	0.111	98.0%	0.00050	0.0022	0.77	N/A - exempt
16*	0.84	2412	0.5	0.1	0.603	0.028	0.121	98.0%	0.00055	0.0024	0.84	N/A - exempt
17*	0.54	1550	0.5	0.1	0.388	0.018	0.078	98.0%	0.00035	0.0016	0.54	N/A - exempt
19*	0.30	861	0.5	0.1	0.215	0.010	0.043	98.0%	0.00020	0.0009	0.30	N/A - exempt
21*	0.22	632	0.5	0.1	0.158	0.007	0.032	98.0%	0.00014	0.0006	0.22	N/A - exempt
22*	0.35	1005	0.5	0.1	0.251	0.011	0.050	98.0%	0.00023	0.0010	0.35	N/A - exempt
23*	0.13	373	0.5	0.1	0.093	0.004	0.019	98.0%	0.00009	0.0004	0.13	N/A - exempt
24*	2.44	7005	0.5	0.1	1.751	0.080	0.350	98.0%	0.00160	0.0070	2.44	N/A - exempt
25	4.64	13322	0.5	0.1	3.330	0.152	0.666	98.0%	0.00304	0.0133	4.64	N/A - exempt
30*	1.75	5024	0.5	0.1	1.256	0.057	0.251	98.0%	0.00115	0.0050	1.75	N/A - exempt
		124000			31.00	1.42	6.20		0.03	0.12		

*Insignificant Activity as defined in 326 IAC 2-7-1(21).

Methodology

- Cooling Oil Usage is based on a total potential usage of 124,000 lb/yr for all the bolt formers using the Venturi scrubbers for particulate control. This usage represents an increase in total potential usage from 78,770 pounds per year. The Permittee estimates that the rate of oil to each individual bolt former will be approximately proportional to the rate of units processed by each machine.
- VOC Content, PM Emitted, and Control Efficiency values are based off of calculations performed in Appendix A to the TSD of Part 70 Operating Permit No. T033-20219-00038.
- PTE VOC (ton/yr) = Cooling Oil Usage (lb/yr) * VOC Content (lb VOC/lb Cooling Oil) * (1 ton / 2000 lb)
- The PTE of PM₁₀/PM_{2.5} is assumed to equal the PTE of PM.
- Uncontrolled PTE PM₁₀/PM_{2.5} (lb/hr) = Cooling Oil Usage (lb/yr) * PM Emitted (lb PM/lb Cooling Oil) * (1 yr / 8760 hr)
- Controlled PTE PM₁₀/PM_{2.5} (lb/hr) = Uncontrolled PTE PM₁₀/PM_{2.5} (lb/hr) * (1 - Control Efficiency)
- PTE (ton/yr) = PTE (lb/hr) * (8760 hr/yr) * (1 ton / 2000 lb)
- Total Process Weight Rate (ton/hr) = Rate of Units Processed (ton/hr) + [Cooling Oil Rate (lb/yr) * (1 yr/8760 hr) * (1 ton / 2000 lb)]
- Pursuant to 326 IAC 6-3-1(b)(14), manufacturing processes with potential emissions less than 0.551 pounds per hour are exempt from 326 IAC 6-3.

**Appendix A: Emission Calculations
Cooling Towers**

Company Name: NUCOR Fastener
Address City IN Zip: 6730 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Pit ID: 033-00038
Permit Reviewer: Renee Traivaranon

One (1) Cooling Tower at the concrete pond (1,950 gpm)

Estimated max total dissolved solids concentration of 1,250 ppm

Drift loss rate of 0.005%

$$\begin{aligned} \text{PM} &= 1,950 \text{ (gal/min)} * (1,250/1,000,000) * (8.345 \text{ lb/gal}) * 0.00005 * 60 = && 0.06 \text{ lb/hr} \\ \text{PM} &= 0.061 * 8760 / 2000 = && 0.27 \text{ tpy} \end{aligned}$$

Assume 16% of PM is PM10. Assume PM2.5 = PM10

$$\text{PM10/PM2.5} = 0.16 * 0.2673 \text{ tpy} = 0.04 \text{ tpy}$$

Two (2) Cooling Towers at the Holcroft belt heat reat furnace (each 975 gpm)

Estimated max total dissolved solids concentration of 1,250 ppm

Drift loss rate of 0.005%

$$\begin{aligned} \text{PM} &= 975 \text{ (gal/min)} * (1,250/1,000,000) * (8.345 \text{ lb/gal}) * 0.00005 * 60 = && 0.031 \text{ lb/hr} \\ \text{PM} &= 0.031 * 8760 / 2000 = && 0.13 \text{ tpy} \\ \text{PM for 2 cooling towers} &= && 0.27 \text{ tpy} \end{aligned}$$

Assume 16% of PM is PM10. Assume PM2.5 = PM10

$$\text{PM10/PM2.5} = 0.16 * 0.2673 \text{ tpy} = 0.04 \text{ tpy}$$

**Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Natural Gas
4-Stroke Rich-Burn (4SRB) Engines**

**Company Name: NUCOR Fastener
Address City IN Zip: 6730 County Road 60, St. Joe, Indiana 46785
Significant Source Modification No: T033-36260-00027
Significant Permit Modification No: T033-36280-00027
Plt ID: 033-00038
Permit Reviewer: Renee Traivaranon**

Maximum Heat Input Capacity (MMBtu/hr)	1.95
Maximum Hours Operated per Year (hr/yr)	500
Potential Fuel Usage (MMBtu/yr)	975
High Heat Value (MMBtu/MMscf)	1020
Potential Fuel Usage (MMcf/yr)	0.96

Criteria Pollutants	Pollutant						
	PM*	PM10*	PM2.5*	SO ₂	NO _x	VOC	CO
Emission Factor (lb/MMBtu)	9.50E-03	1.94E-02	1.94E-02	5.88E-04	2.21E+00	2.96E-02	3.72E+00
Potential Emissions (tons/yr)	0.0046	0.01	0.01	0.0003	1.08	0.01	1.81

*PM emission factor is for filterable PM-10. PM10 emission factor is filterable PM10 + condensable PM.
PM2.5 emission factor is filterable PM2.5 + condensable PM.

Hazardous Air Pollutants (HAPs)

Pollutant	Emission Factor (lb/MMBtu)	Potential Emissions (tons/yr)
Acetaldehyde	2.79E-03	0.001
Acrolein	2.63E-03	0.001
Benzene	1.58E-03	0.001
1,3-Butadiene	6.63E-04	0.000
Formaldehyde	2.05E-02	0.010
Methanol	3.06E-03	0.001
Total PAH**	1.41E-04	0.000
Toluene	5.58E-04	0.000
Xylene	1.95E-04	0.000
Total		0.02

HAP pollutants consist of the nine highest HAPs included in AP-42 Table 3.2-3.

**PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

Methodology

Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-3

Potential Fuel Usage (MMBtu/yr) = [Maximum Heat Input Capacity (MMBtu/hr)] * [Maximum Hours Operating per Year (hr/yr)]

Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2000 lb/ton]



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

November 20, 2015
Nucor Vulcraft Group – St. Joe Division
033-36260-00027 & 033-36280-00027

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 8/27/2015



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AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD DRAFT INDIANA AIR PERMIT

November 20, 2015

A 30-day public comment period has been initiated for:

Permit Number: 033-36260-00027 & 033-36280-00027
Applicant Name: Nucor Vulcraft Group – St. Joe Division
Location: St. Joe, DeKalb County, Indiana

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:

<http://www.in.gov/ai/appfiles/idem-caats/>

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

Indiana Department of Environmental Management
Office of Air Quality, Permits Branch
100 North Senate Avenue
Indianapolis, IN 46204

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Affected States Notification.dot 8/27/2015



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Commissioner

November 20, 2015

Mr. Tim Jones
Nucor Vulcraft Group – St. Joe Division
PO Box 1000
St. Joe, IN 46785

Re: Public Notice
Nucor Vulcraft Group – St. Joe Division
Permit Level: Significant Source Modification &
Significant Permit Modification
Permit Number: 033-36260-00027 &
033-36280-00027

Dear Mr. Jones:

Enclosed is a copy of your draft Significant Source Modification, Significant Permit Modification, 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 Auburn Evening Star in Auburn, Indiana publish the abbreviated version of the public notice no later than November 25, 2015. 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 Eckart Public Library, 603 South Jackson Street in Auburn, 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 Renee Traivaranon, 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 4-5615 or dial (317) 234-5615.

Sincerely,

Greg Hotopp

Greg Hotopp
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 8/27/2015



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Governor

Carol S. Comer
Commissioner

November 20, 2015

To: Eckhart 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: Nucor Vulcraft Group – St. Joe Division
Permit Number: 033-36260-00027 & 033-36280-00027

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 8/27/2015



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Michael R. Pence
Governor

Carol S. Comer
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

November 20, 2015

Auburn Evening Star
118 West Ninth Street
Auburn, IN 46706

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Nucor Vulcraft Group – St. Joe Division, DeKalb 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 November 25, 2015.

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 Greg Hotopp at 800-451-6027 and ask for extension 4-3493 or dial 317-234-3493.

Sincerely,

Greg Hotopp

Greg Hotopp
Permit Branch
Office of Air Quality

Permit Level: Significant Source Modification & Significant Permit Modification
Permit Number: 033-36260-00027 & 033-36280-00027

Enclosure

PN Newspaper.dot 8/27/2015

Mail Code 61-53

IDEM Staff	GHOTOPP 11/20/2015 Nucor Vulcraft - St Joe Division 033-36280/36260-00027 Draft		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	 Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Tim Jones Nucor Vulcraft - St Joe Division PO Box 1000 Saint Joe IN 46785 (Source CAATS)										
2		John Hollatz GM Nucor Vulcraft - St Joe Division PO Box 1000 Saint Joe IN 46785 (RO CAATS)										
3		Mr. Steve Christman NISWMD 2320 W 800 S, P.O. Box 370 Ashley IN 46705 (Affected Party)										
4		Ms. Diane Leroy 303 N. Jackson St. Auburn IN 46706 (Affected Party)										
5		Mr. Barry Fordanish R#3 1480 CR 66 Auburn IN 46706 (Affected Party)										
6		DeKalb County Health Department 220 E 7th St #110 Auburn IN 46706 (Health Department)										
7		Daniel & Sandy Trimmer 15021 Yellow River Road Columbia City IN 46725 (Affected Party)										
8		Brown & Sons Fuel Co. P.O. Box 665 Kendallville IN 46755 (Affected Party)										
9		Mr. Marty K. McCurdy 2550 County Road 27 Waterloo IN 46793 (Affected Party)										
10		St. Joe Town Council P.O. Box 293 St. Joe IN 46785 (Local Official)										
11		Eckhart Public Library 603 South Jackson Street Auburn IN 46706 (Library)										
12		DeKalb County Building Department 301 S Union St Auburn IN 46706 (Local Official)										
13												
14												
15												

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12			