



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

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

for Rightway Fasteners, Inc. in Bartholomew County

Significant Permit Revision No.: 005-36921-00048

The Indiana Department of Environmental Management (IDEM) has received an application from Rightway Fasteners, Inc., located at 7945 S. International Drive, Columbus, IN 47201, for a significant revision of its MSOP issued on August 29, 2014. If approved by IDEM's Office of Air Quality (OAQ), this proposed revision would allow Rightway Fasteners, Inc. to make certain changes at its existing source. Rightway Fasteners, Inc. has applied to do the following:

- (a) Modify the existing dip spin coating process to incorporate a new coating. The lines that will use the new coating are lines identified as A-Line, B-Line, D-Line, and E-Line.
- (b) Install a new regenerative thermal oxidizer (RTO) to control lines identified as A, B, D, and E because the new coating uses a new coating that is not compliant with the maximum volatile organic compound (VOC) limitations as indicated in 326 IAC 8-2-9.
- (c) Request an exemption to not have to operate the RTO during the months of November through March as allowed by 326 IAC 8-1-2(a)(2). The source will switch over to the non-compliant coating and will not use a compliant coating after the switch. The source cannot use a daily volume weighted average to comply since it will not use a compliant coating after switching to a non-compliant coating.

The commissioner may allow such an exemption if the owner or operator adequately demonstrates that the operation of the natural gas afterburner is not required for control of toxic substances or odor. No justification has been provided by the Permittee on how the source will comply with meeting the VOC emission limitations of a non-compliant coating without using the RTO. The exemption is not granted.

- (d) Correct the description of the natural gas-fired annealing oven, identified as HTA-01. The annealing oven was previously listed as 0.359 MMBtu/hr with a capacity of 730 lbs/hr of metal parts. The annealing oven consists of two (2) burners that each have an input heat capacity of 0.01587 MMBtu/hr and a production rate of 660 lbs/hr of metal parts.
- (e) Construct and operate a second natural gas-fired annealing over, identified as HTA-02, which consists of two (2) burners that each have an input heat capacity of 0.01587 MMBtu/hr and a production rate of 660 lbs/hr of metal parts.

On April 18, 2016, during an applicant review of the permit and supporting documents, the source submitted additional information in regards to twenty (20) cold forming machines to be added to the permit. These units have already been constructed and are in operation.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued

permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

IDEM is aware that the annealing ovens, identified as HTA-01 and HTA-02, have been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This draft MSOP Significant Permit Revision contains provisions to bring unpermitted equipment into compliance with construction and operation permit rules.

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

Bartholomew County Public Library
536 5th Street
Columbus, IN 47201

and

IDEM Southeast Regional Office
820 West Sweet Street
Brownstown, IN 47220-9557

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 SPR 005-36921-00048 in all correspondence.

Comments should be sent to:

Brandon Miller
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-5374
Or dial directly: (317) 234-5374
Fax: (317) 232-6749 attn: Brandon Miller

E-mail: bmiller@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 Brandon Miller of my staff at the above address.



Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Carol S. Comer
Commissioner

DRAFT

Mr. Patrick McCluskey
Rightway Fasteners, Inc.
7945 S. International Drive
Columbus, IN 47201

Re: 005-36921-00048
Significant Revision to
M005-34077-00048

Dear Mr. McCluskey:

Rightway Fasteners, Inc. was issued a Minor Source Operating Permit (MSOP) Renewal No. M005-34077-00048 on August 29, 2014, for a stationary metal products and fasteners manufacturing plant located at 7945 S. International Drive, Columbus, Indiana 47201. On March 8, 2016, the Office of Air Quality (OAQ) received an application from the source requesting to do the following:

- (a) Modify the existing dip spin coating process to incorporate a new coating. The lines that will use the new coating are lines identified as A-Line, B-Line, D-Line, and E-Line.
- (b) Install a new regenerative thermal oxidizer (RTO) to control lines identified as A, B, D, and E because the new coating uses a new coating that is not compliant with the maximum volatile organic compound (VOC) limitations as indicated in 326 IAC 8-2-9.
- (c) Request an exemption to not have to operate the RTO during the months of November through March as allowed by 326 IAC 8-1-2(a)(2). The source will switch over to the non-compliant coating and will not use a compliant coating after the switch. The source cannot use a daily volume weighted average to comply since it will not use a compliant coating after switching to a non-compliant coating.

The commissioner may allow such an exemption if the owner or operator adequately demonstrates that the operation of the natural gas afterburner is not required for toxic substances or odor. No justification has been provided by the Permittee on how the source will comply with the VOC emission limitations of a non-compliant coating without using the RTO. The exemption is not granted.

- (d) Correct the description of the natural gas-fired annealing oven, identified as HTA-01. The annealing oven was previously listed as 0.359 MMBtu/hr with a capacity of 730 lbs/hr of metal parts. The annealing oven consists of two (2) burners that each have an input heat capacity of 0.01587 MMBtu/hr and a production rate of 660 lbs/hr of metal parts.
- (e) Construct and operate a second natural gas-fired annealing over, identified as HTA-02, which consists of two (2) burners that each have an input heat capacity of 0.01587 MMBtu/hr and a production rate of 660 lbs/hr of metal parts.

On April 18, 2016, the source submitted additional information regarding to twenty (20) cold forming machines to be added to the permit. These units have already been constructed and are in operation.

Pursuant to the provisions of 326 IAC 2-6.1-6, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-6.1-6(i).

DRAFT

Pursuant to the provisions of 326 IAC 2-6.1-6, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-6.1-6, this permit shall be revised by incorporating the significant permit revision into the permit.

All other conditions of the permit shall remain unchanged and in effect. Please find attached the entire MSOP as revised.

DRAFT

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. If you have any questions on this matter, please contact Brandon Miller of my staff at 317-234-5374 or 1-800-451-6027, and ask for extension 4-5374.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit

IC/bdm

cc: File - Bartholomew County
Bartholomew County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Carol S. Comer
Commissioner

DRAFT Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**Rightway Fasteners, Inc.
7945 S International Drive
Columbus, Indiana 47201**

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

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

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

Operation Permit No.: M005-34077-00048	
Issued by: Original Signed Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: August 29, 2014 Expiration Date: August 29, 2024
Administrative Amendment No.: 005-35034-00048, issued on November 6, 2014 Administrative Amendment No.: 005-35902-00048, issued on June 25, 2015	
Significant Permit Revision No.: 005-36921-00048	
Issued by: Iryn Calilung, Section Chief, Permits Branch Office of Air Quality	Issuance Date: Expiration Date: August 29, 2024



DRAFT

TABLE OF CONTENTS

SECTION A	SOURCE SUMMARY	4
A.1	General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]	
A.2	Emission Units and Pollution Control Equipment Summary	
SECTION B	GENERAL CONDITIONS	11
B.1	Definitions [326 IAC 2-1.1-1]	
B.2	Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]	
B.3	Term of Conditions [326 IAC 2-1.1-9.5]	
B.4	Enforceability	
B.5	Severability	
B.6	Property Rights or Exclusive Privilege	
B.7	Duty to Provide Information	
B.8	Annual Notification [326 IAC 2-6.1-5(a)(5)]	
B.9	Preventive Maintenance Plan [326 IAC 1-6-3]	
B.10	Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.11	Termination of Right to Operate [326 IAC 2-6.1-7(a)]	
B.12	Permit Renewal [326 IAC 2-6.1-7]	
B.13	Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]	
B.14	Source Modification Requirement	
B.15	Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]	
B.16	Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]	
B.17	Annual Fee Payment [326 IAC 2-1.1-7]	
B.18	Credible Evidence [326 IAC 1-1-6]	
SECTION C	SOURCE OPERATION CONDITIONS.....	16
	Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)].....	16
C.1	Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]	
C.2	Permit Revocation [326 IAC 2-1.1-9]	
C.3	Opacity [326 IAC 5-1]	
C.4	Open Burning [326 IAC 4-1][IC 13-17-9]	
C.5	Incineration [326 IAC 4-2][326 IAC 9-1-2]	
C.6	Fugitive Dust Emissions [326 IAC 6-4]	
C.7	Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]	
	Testing Requirements [326 IAC 2-6.1-5(a)(2)]	18
C.8	Performance Testing [326 IAC 3-6]	
	Compliance Requirements [326 IAC 2-1.1-11]	18
C.9	Compliance Requirements [326 IAC 2-1.1-11]	
	Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)].....	18
C.10	Compliance Monitoring [326 IAC 2-1.1-11]	
C.11	Instrument Specifications [326 IAC 2-1.1-11]	
	Corrective Actions and Response Steps.....	19
C.12	Response to Excursions or Exceedances	
C.13	Actions Related to Noncompliance Demonstrated by a Stack Test	
	Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)].....	20
C.14	Malfunctions Report [326 IAC 1-6-2]	
C.15	General Record Keeping Requirements [326 IAC 2-6.1-5]	
C.16	General Reporting Requirements [326 IAC 2-1.1-11][326 IAC 2-6.1-2][IC 13-14-1-13]	

DRAFT

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS	22
Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)].....	22
D.1.1 Volatile Organic Compound (VOC) [326 IAC 8-2-9]	
D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]	
Compliance Determination Requirements	23
D.1.3 Volatile Organic Compounds [326 IAC 8-1-2][326 IAC 8-1-4]	
D.1.4 Volatile Organic Compounds [326 IAC 8-1-2]	
D.1.5 Volatile Organic Compounds [326 IAC 8-1-2][326 IAC 8-1-4]	
Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)].....	24
D.1.6 Regenerative Thermal Oxidizer	
D.1.7 Parametric Monitoring	
Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)].....	25
D.1.8 Record Keeping Requirement	
SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS	26
Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)].....	27
D.2.1 Particulate Matter [326 IAC 6-3-2]	
D.2.2 Particulate [326 IAC 6-2-4]	
ANNUAL NOTIFICATION	28
MALFUNCTION REPORT	29

DRAFT

SECTION A

SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary metal products and fasteners manufacturing plant.

Source Address:	7945 S International Drive, Columbus, Indiana 47201
General Source Phone Number:	(812) 342-2700
SIC Code:	3452 (Bolts, Nuts, Screws, Rivets, and Washers) 3479 (Coating, Engraving, and Allied Services, NEC)
County Location:	Bartholomew
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

Metal Surface Coating:

- (a) One (1) dip/spin coater, identified as A-Line, constructed in 1991 (coater replaced in 2007), approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.794 million Btu per hour, exhausting to Stack 1.
- (b) One (1) dip/spin coater, identified as B-Line, constructed in 1991, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.794 million Btu per hour, exhausting to Stacks 3 and 4.
- (c) One (1) dip/spin coater, identified as C-Line, constructed in 1993, with a maximum capacity 2,200 pounds of steel fasteners per hour, using no control device, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.780 million Btu per hour, exhausting to Stack 5.
- (d) One (1) dip/spin coater, identified as D-Line, constructed in 2001, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 1.389 million Btu per hour, exhausting to Stacks 10, 11, and 12.
- (e) One (1) D-Line aqueous degreaser, constructed in 2003, with a capacity of 5,200 lbs of steel fasteners per hour, using no control device, and including one (1) natural gas-fired dryer with a maximum heat input capacity of 0.397 million Btu per hour, exhausting to Stack 9.

DRAFT

This degreaser does not use and VOC or HAP-containing solvents.

- (f) One (1) dip/spin coater, identified as E-Line, constructed in 2006, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 1.389 million Btu per hour, exhausting to Stacks 6, 7, and 8.
- (g) One (1) dip/spin coater, identified as Topcoater, constructed in 1993, with a maximum capacity 2,200 pounds of steel fasteners per hour, using no control device, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.265 million Btu per hour, exhausting to Stack 2.

Cold Forming Operations:

- (h) Twenty (20) cold forming machines, as described in the following table:

Unit ID	Year of Construction	Material Used	Material Usage Rate (gal/hr)	Control Device
CTA01	1996	Yumark FL-30	1	Smog Hog CTA01
CTA02	1996	Yumark FL-30	1	Smog Hog CTA02
CTA03	1996	Yumark FL-30	1	Smog Hog CTA03
CTA04	1996	Yumark FL-30	1	Smog Hog CTA04
CTA05	1996	Yumark FL-30	1	Smog Hog CTA05
CTA06	1996	Yumark FL-30	1	Smog Hog CTA06
CTA07	1996	Yumark FL-30	1	Smog Hog CTA07
CTA08	1996	Yumark FL-30	1	Smog Hog CTA08
CTA09	1996	Yumark FL-30	1	Smog Hog CTA09
CTA10	1996	Yumark FL-30	1	Smog Hog CTA10
CTA11	1996	Yumark FL-30	1	Smog Hog CTA11
CTA12	1996	Yumark FL-30	1	Absolent Cabinet CTA12
CTA13	1996	EZ Form 9280	1.5	Smog Hog CTA13
CTA14	2013	Yumark FL-30	1	Smog Hog CTA14
CTA15	2013	Yumark FL-30	1	Smog Hog CTA15
CFA01	1996	Suncreaner G-2000B	1.5	Smog Hog CFA01
		Sunformer M-7948	1.5	
CPA02	1996	CKK Center Oil SFCU	1.5	Smog Hog CPA02
CPA03	1996	Yumark CF-3430	1.5	Smog Hog CPA03
CPA04	1996	Yumark CF-3430	1.5	Smog Hog CPA04
CPA05	2005	EZ Form 9280	1.5	Smog Hog CPA05

Unit CFA01 can use either Suncreaner G-2000B or Sunformer M-7948 but not both at the same time. All of the units exhaust indoors.

Heat Treating Operations:

- (i) One (1) heat treating furnace line, identified as HA-01, constructed in 1996, with a maximum capacity of 2,200 pounds of steel fasteners per hour, using no control, and consisting of the following:
 - (1) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.765 million Btu per hour and exhausting to Stack 19.
 - (2) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.648 million Btu per hour and exhausting to

DRAFT

Stack 22.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.

- (3) One (1) oil quench tank.
 - (4) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.308 million Btu per hour and exhausting to Stack 20.
 - (5) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.205 million Btu per hour and exhausting to Stack 21.
- (j) One (1) heat treating furnace line, identified as HA-02, constructed in 1997, with a maximum capacity of 2,200 pounds of steel fasteners per hour, using no control, and consisting of the following:
- (1) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.765 million Btu per hour and exhausting to Stack 14.
 - (2) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.648 million Btu per hour and exhausting to Stack 13.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.

- (3) One (1) oil quench tank.
 - (4) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.308 million Btu per hour and exhausting to Stack 15.
 - (5) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.205 million Btu per hour and exhausting to Stack 16.
- (k) One (1) heat treating furnace line, identified as HA-03, constructed in 2004, with a maximum capacity of 550 pounds of steel fasteners per hour, using no control, and consisting of the following:
- (1) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.032 million Btu per hour and exhausting to Stack 26.
 - (2) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.119 million Btu per hour and exhausting to Stack 23.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.

- (3) One (1) oil quench tank.
- (4) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.488 million Btu per hour and exhausting to Stack 24.

DRAFT

- (5) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.119 million Btu per hour and exhausting to Stack 25.
- (l) One (1) heat treating furnace line, identified as HA-04, constructed in 2005, with a maximum capacity of 2,200 pounds of steel fasteners per hour, using no control, and consisting of the following:
 - (1) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.765 million Btu per hour and exhausting to Stack 27.
 - (2) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.648 million Btu per hour and exhausting to Stack 30.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.
 - (3) One (1) oil quench tank.
 - (4) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.308 million Btu per hour and exhausting to Stack 28.
 - (5) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.205 million Btu per hour and exhausting to Stack 29.
- (m) One (1) heat treating furnace line, identified as HA-05, construction in 2010, with a maximum capacity of 2,200 pounds of steel fasteners per hour, using no control, and consisting of the following:
 - (1) One (1) natural gas-fired prewash heater with a maximum input capacity of 0.198 million Btu per hour and exhausting to Stack 35.
 - (2) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.119 million Btu per hour and exhausting to Stack 39.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.
 - (3) One (1) oil quench tank.
 - (4) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.714 million Btu per hour and exhausting to Stack 36.
 - (5) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.270 million Btu per hour and exhausting to Stack 38.
 - (6) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.198 million Btu per hour and exhausting to Stack 37.
- (n) One (1) heat treating furnace line, identified as HA-06, construction in 2014, with a maximum capacity of 1,100 pounds of steel fasteners per hour, using no control, and consisting of the following:

DRAFT

- (1) One (1) natural gas-fired prewash heater with a maximum input capacity of 0.02 million Btu per hour and exhausting to Stack 40.
- (2) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 0.91 million Btu per hour and exhausting to Stack 41.
- (3) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.24 million Btu per hour and exhausting to Stack 42.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.

- (4) One (1) oil quench tank.
 - (5) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.11 million Btu per hour and exhausting to Stack 43.
 - (6) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.10 million Btu per hour and exhausting to Stack 44.
- (o) One (1) heat treating furnace line, identified as HA-07, approved in 2015 for construction, with a maximum capacity of 2,200 pounds of steel fasteners per hour, using no control, and consisting of the following:

- (1) One (1) natural gas-fired prewash heater with a maximum input capacity of 0.198 million Btu per hour and exhausting to Stack 45.
- (2) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.714 million Btu per hour and exhausting to Stacks 46 and 47.
- (3) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.24 million Btu per hour and exhausting to Stack 48.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.

- (4) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.667 million Btu per hour and exhausting to Stacks 50 and 51.
 - (5) One (1) natural gas-fired smoke eater with a maximum heat input capacity of 0.198 million Btu per hour and exhausting to Stack 49.
 - (6) One (1) oil quench tank.
- (p) One (1) natural gas-fired annealing furnace, identified as HTA-01, constructed in 1996, with a maximum capacity of 660 pounds of steel fasteners per hour, consisting of two (2) burners with a combined maximum heat input capacity of 0.032 MMBtu per hour (0.016 MMBtu per hour each), using no control, and exhausting to Stacks 17 and 18.
- (q) One (1) natural gas-fired annealing furnace, identified as HTA-02, constructed in 2015, with a maximum capacity of 660 pounds of steel fasteners per hour, consisting of two (2)

DRAFT

burners with a combined maximum heat input capacity of 0.032 MMBtu per hour (0.016 MMBtu per hour each), using no control, and exhausting to Stacks 52 and 53.

Plating operations

- (r) Plating operations, with a maximum line speed of 30 barrels per hour and a maximum loading of 110 pounds of steel fasteners per barrel, and consisting of the following:
- (1) Cleaning and alkaline non-cyanide zinc plating processes, voluntarily controlled by one (1) packed bed scrubber, constructed in 1998, with air flow rate of 24,000 cubic feet per minute (CFM), venting to Stack 32, consisting of:
 - (A) Two (2) alkaline degreasing tanks, identified as #1 and #2 Degreasers, constructed in 1998, with capacities of 370 and 690 gallons, respectively.

These degreasers do not use and VOC or HAP-containing solvents.
 - (B) One (1) alkaline electrocleaning tank, constructed in 1998, with a maximum capacity of 317 gallons.
 - (C) One (1) alkaline non-cyanide zinc electroplating tank, constructed in 1998, with a maximum capacity of 4,100 gallons.
 - (2) Hydrochloric acid pickling and related processes, voluntarily controlled by one (1) packed bed scrubber, constructed in 1998, with air flow rate of 15,500 cubic feet per minute (CFM), venting to Stack 33, consisting of:
 - (A) One (1) pickling tank, designated as #1, constructed in 1998, each with a working capacity of 285 gallons.
 - (B) Two (2) acid electrocleaning tanks, designated as #1 Acid Electrocleaning, constructed in 1998, and #2 Acid Electrocleaning, converted to acid electrocleaning in 2000, with working capacities of 330 and 317 gallons, respectively.
 - (C) One (1) acid storage tank, constructed in 1998, with a capacity of 6,500 gallons.
 - (3) One (1) automated chromate coating system, constructed in 1998, consisting of:
 - (A) Four (4) air-agitated coating tanks;
 - (B) Four (4) sets of two (2) counterflow rinse tanks;
 - (C) One (1) static sealer tank (not in service); and
 - (D) One (1) air-agitated sealer tank.

Each of the above tanks has a capacity of 120 gallons. The chromate coating system is a conversion coating process, in which no electrical current is applied. The chromium-containing mists from the coating processes are voluntarily controlled by one (1) composite mesh pad mist eliminator with an air flow rate of 6,000 cubic feet per minute (CFM), venting to Stack 31.
 - (4) One (1) natural gas-fired boiler, constructed in 1998, with a heat input of 1.5 MMBtu/hr, venting to stack 34.

DRAFT

Abrasive blasting

- (s) One (1) steel shotblasting machine, identified as SBA-01, constructed in 1991, with a maximum throughput of 1,920 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack H;
- (t) One (1) steel shotblasting machine, identified as SBA-02, constructed in 1993, with a maximum throughput of 1,920 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack G;
- (u) One (1) steel shotblasting machine, identified as SBA-03, constructed in 1997, with a maximum throughput of 960 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack F;
- (v) One (1) ceramic bead shotblasting machine, identified as SBA-04, constructed in 2003, with a maximum throughput of 480 pounds of fasteners per hour and an estimated maximum usage rate of 0.5 pound of ceramic beads per hour, using a dust collector for voluntary particulate control, and exhausting to Stack B;
- (w) One (1) steel shotblasting machine, identified as SBA-05, constructed in 2001, with a maximum throughput of 1,920 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack D;
- (x) One (1) steel shotblasting machine, identified as SBA-06, constructed in 2005, with a maximum throughput of 360 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack I;
- (y) One (1) steel shotblasting machine, identified as SBA-07, constructed in 2006, with a maximum throughput of 960 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack E;
- (z) One (1) steel shotblasting machine, identified as SBA-08, constructed in 2008, with a maximum throughput of 1,920 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack C; and
- (aa) One (1) steel shotblasting machine, identified as SBA-09, constructed in 1993, with a maximum throughput of 300 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack A.
- (bb) One (1) natural gas-fired regenerative thermal oxidizer, identified as RTO, approved in 2016 for construction, with a maximum heat input capacity of 5.13 MMBtu/hr, no control device, and exhausting to Stack 54. Stacks 1, 3, 4, 6, 7, 8, 10, 11, and 12 exhaust to the RTO.

DRAFT

SECTION B

GENERAL CONDITIONS

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

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

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

- (a) This permit, M005-34077-00048, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability

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

B.5 Severability

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

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. 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.

DRAFT

B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.9 Preventive Maintenance Plan [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:

DRAFT

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

The Permittee shall implement the PMPs.

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

- (a) All terms and conditions of permits established prior to M005-34077-00048 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

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

B.12 Permit Renewal [326 IAC 2-6.1-7]

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

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and

DRAFT

- (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

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

B.15 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

DRAFT

- (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.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.17 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.18 Credible Evidence [326 IAC 1-1-6]

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

DRAFT

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

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

C.3 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

DRAFT

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

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

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

DRAFT

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

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

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

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date.
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

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

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. The analog instrument shall be capable of measuring values outside of the normal range.

DRAFT

- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system);
or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

DRAFT

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

C.14 Malfunctions Report [326 IAC 1-6-2]

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

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

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

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

C.16 General Reporting Requirements [326 IAC 2-1.1-11][326 IAC 2-6.1-2][IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

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

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

DRAFT

- (c) 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.

DRAFT

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Metal Surface Coating:

- (a) One (1) dip/spin coater, identified as A-Line, constructed in 1991 (coater replaced in 2007), approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.794 million Btu per hour, exhausting to Stack 1.
- (b) One (1) dip/spin coater, identified as B-Line, constructed in 1991, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.794 million Btu per hour, exhausting to Stacks 3 and 4.
- (c) One (1) dip/spin coater, identified as C-Line, constructed in 1993, with a maximum capacity 2,200 pounds of steel fasteners per hour, using no control device, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.780 million Btu per hour, exhausting to Stack 5.
- (d) One (1) dip/spin coater, identified as D-Line, constructed in 2001, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 1.389 million Btu per hour, exhausting to Stacks 10, 11, and 12.
- (e) One (1) D-Line aqueous degreaser, constructed in 2003, with a capacity of 5,200 lbs of steel fasteners per hour, using no control device, and including one (1) natural gas-fired dryer with a maximum heat input capacity of 0.397 million Btu per hour, exhausting to Stack 9.

This degreaser does not use and VOC or HAP-containing solvents.
- (f) One (1) dip/spin coater, identified as E-Line, constructed in 2006, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 1.389 million Btu per hour, exhausting to Stacks 6, 7, and 8.
- (g) One (1) dip/spin coater, identified as Topcoater, constructed in 1993, with a maximum capacity 2,200 pounds of steel fasteners per hour, using no control device, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.265 million Btu per hour, exhausting to Stack 2.

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

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

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

- (a) Pursuant to 326 IAC 8-2-9, the Permittee shall not allow the discharge into the

DRAFT

atmosphere VOC in excess of three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator of each dip/spin coater.

- (b) Pursuant to 326 IAC 8-2-9(f), work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not limited to, 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 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.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

Compliance Determination Requirements

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

Compliance with the VOC content and usage limitations contained in Condition D.1.1(a) shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) 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.1.4 Volatile Organic Compounds [326 IAC 8-1-2]

- (a) Pursuant to 326 IAC 8-1-2(a) and to comply with Condition D.1.1(a), the Permittee shall operate the regenerative thermal oxidizer at all times that a non-compliant coating is used in dip/spin lines A-Line, B-Line, D-Line, or E-Line.
- (b) When using a non-compliant coating for A-Line, B-Line, D-Line, or E-Line, the Permittee shall comply with the following:
- (1) Pursuant to 326 IAC 8-1-2(b), the A-Line, B-Line, D-Line, or E-Line VOC emissions shall be limited to no greater than the equivalent emissions, expressed as pounds of VOC per gallon of coating solids, allowed in D.1.1(a).

This equivalency was determined by the following equation:

$$E = L / (1 - (L/D))$$

DRAFT

Where:

- L= Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating;
- D= Density of VOC in coating in pounds per gallon of VOC;
- E= Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

A solvent density of 7.36 pounds of VOC per gallon of coating shall be used to determine equivalent pounds of VOC per gallon of solids for the applicable emission limit contained in this article.

Actual solvent density shall be used to determine compliance of the surface coating operation using the compliance methods in 326 IAC 8-1-2(a).

- (2) The pounds of VOC per gallon of coating solids shall be limited to less than 6.67.
- (3) Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the regenerative thermal oxidizer shall be no less than the equivalent overall efficiency by the following equation:

$$O = \frac{V - E}{V} \times 100$$

Where:

- V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.
- E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.
- O = Equivalent overall efficiency of the capture system and control device as a percentage.

The overall efficiency of the regenerative thermal oxidizer shall be greater than 63.69%.

D.1.5 Volatile Organic Compounds [326 IAC 8-1-2][326 IAC 8-1-4]

Within one hundred and eighty (180) days after initial startup of using a non-compliant coating in dip/spin line A-Line, B-Line, D-Line, or E-Line, and to verify compliance with Condition D.1.1(a), the Permittee shall conduct a performance test to verify VOC control efficiency (capture and destruction) of the regenerative thermal oxidizer utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

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

D.1.6 Regenerative Thermal Oxidizer

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as 3-hour average. From the date of startup until the stack test results are available, the Permittee shall operate the regenerative thermal

DRAFT

oxidizer at or above the 3-hour rolling average temperature of 1,500 °F.

- (b) The Permittee shall determine the 3-hour rolling average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.1.
- (c) On and after the date the stack test results are available, the Permittee shall operate the regenerative thermal oxidizer at or above the 3-hour rolling average temperature as observed during the complaint stack test.

D.1.7 Parametric Monitoring

- (a) The Permittee shall determine the appropriate fan amperage from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.1.
- (b) The fan amperage shall be observed at least once per day when the regenerative thermal oxidizer is in operation. On and after the date the stack test results are available, the fan amperage shall be maintained within the normal range as established in the most recent complaint stack test.

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

D.1.8 Record Keeping Requirement

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.1.1. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) The VOC content of each coating material and solvent used less water.
 - (2) The amount of coating material and solvent less water used on a monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3) The cleanup solvent usage for each month.
 - (4) The total VOC usage for each month.
 - (5) The dates and time when non-compliant coatings are used for the first time for lines A-Line, B-Line, D-Line, and E-Line.
 - (6) After the first use of a non-compliant coating is used in A-Line, B-Line, D-Line, or E-Line:
 - (a) The continuous temperature records (on a 3-hour rolling average basis) for the regenerative thermal oxidizer and the 3-hour rolling average temperature used to demonstrate compliance during the most recent compliant stack test.
 - (b) Daily records of the fan amperage.
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

DRAFT

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Plating operations

- (r) Plating operations, with a maximum line speed of 30 barrels per hour and a maximum loading of 110 pounds of steel fasteners per barrel, and consisting of the following:
- (1) Cleaning and alkaline non-cyanide zinc plating processes, voluntarily controlled by one (1) packed bed scrubber, constructed in 1998, with air flow rate of 24,000 cubic feet per minute (CFM), venting to Stack 32, consisting of:
 - (A) Two (2) alkaline degreasing tanks, identified as #1 and #2 Degreasers, constructed in 1998, with capacities of 370 and 690 gallons, respectively.

These degreasers do not use and VOC or HAP-containing solvents.
 - (B) One (1) alkaline electrocleaning tank, constructed in 1998, with a maximum capacity of 317 gallons.
 - (C) One (1) alkaline non-cyanide zinc electroplating tank, constructed in 1998, with a maximum capacity of 4,100 gallons.
 - (2) Hydrochloric acid pickling and related processes, voluntarily controlled by one (1) packed bed scrubber, constructed in 1998, with air flow rate of 15,500 cubic feet per minute (CFM), venting to Stack 33, consisting of:
 - (A) One (1) pickling tank, designated as #1, constructed in 1998, each with a working capacity of 285 gallons.
 - (B) Two (2) acid electrocleaning tanks, designated as #1 Acid Electrocleaning, constructed in 1998, and #2 Acid Electrocleaning, converted to acid electrocleaning in 2000, with working capacities of 330 and 317 gallons, respectively.
 - (C) One (1) acid storage tank, constructed in 1998, with a capacity of 6,500 gallons.
 - (3) One (1) automated chromate coating system, constructed in 1998, consisting of:
 - (A) Four (4) air-agitated coating tanks;
 - (B) Four (4) sets of two (2) counterflow rinse tanks;
 - (C) One (1) static sealer tank (not in service); and
 - (D) One (1) air-agitated sealer tank.

Each of the above tanks has a capacity of 120 gallons. The chromate coating system is a conversion coating process, in which no electrical current is applied. The chromium-containing mists from the coating processes are voluntarily controlled by one (1) composite mesh pad mist eliminator with an air flow rate of 6,000 cubic feet per minute (CFM), venting to Stack 31.

DRAFT

- (4) One (1) natural gas-fired boiler, constructed in 1998, with a heat input of 1.5 MMBtu/hr, venting to stack 34.

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

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

D.2.1 Particulate Matter [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(3), the allowable particulate emission rate from the plating operation shall not exceed 5.73 pounds per hour when operating at a process weight rate of 1.65 tons per hour.

The pounds per hour limitations were calculated by the following:

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

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

Where:

E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour = 1.65 tons per hour

D.2.2 Particulate [326 IAC 6-2-4]

Pursuant 326 IAC 6-2-4(a), particulate emissions from the natural gas-fired boiler shall not exceed 0.6 pound per million Btu heat input.

DRAFT

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

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

Company Name:	Rightway Fasteners, Inc.
Address:	7945 S International Drive
City:	Columbus, Indiana 47201
Phone #:	(812) 342-2700
MSOP #:	M005-34077-00048

I hereby certify that Rightway Fasteners, Inc. is:

still in operation.

no longer in operation.

I hereby certify that Rightway Fasteners, Inc. is:

in compliance with the requirements of MSOP M005-34077-00048.

not in compliance with the requirements of MSOP M005-34077-00048.

Authorized Individual (typed):
Title:
Signature:
Date:

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

Noncompliance:

DRAFT

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FAX NUMBER: (317) 233-6865**

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

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

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

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

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

COMPANY: _____ PHONE NO. () _____

LOCATION: (CITY AND COUNTY) _____

PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ ____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

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

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

DRAFT

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

326 IAC 1-6-1 Applicability of rule

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

326 IAC 1-2-39 "Malfunction" definition

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

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

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

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

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

Source Description and Location
--

Source Name:	Rightway Fasteners, Inc.
Source Location:	7945 S. International Drive, Columbus, IN 47201
County:	Bartholomew
SIC Code:	3452 (Bolts, Nuts, Screws, Rivets, and Washers) 3479 (Coating, Engraving, and Allied Services, Not Elsewhere Classified)
Operation Permit No.:	M005-34077-00048
Operation Permit Issuance Date:	August 29, 2014
Significant Permit Revision No.:	005-36921-00048
Permit Reviewer:	Brandon Miller

On March 8, 2016, the Office of Air Quality (OAQ) received an application from Rightway Fasteners, Inc. related to a modification to an existing stationary metal products and fasteners manufacturing plant.

Existing Approvals

The source was issued MSOP Renewal No. M005-34077-00048 on August 29, 2014. The source has since received the following approvals:

Permit Number	Issuance Date
Administrative Amendment No. 005-35034-00048	November 6, 2014
Administrative Amendment No. 005-35902-00048	June 25, 2015

County Attainment Status

The source is located in Bartholomew 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.

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

- (a) **Ozone Standards**
Volatile organic compounds (VOC) and Nitrogen Oxides (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. Bartholomew 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}**
Bartholomew 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**
Bartholomew 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

- (a) The fugitive emissions of regulated pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.
- (b) 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.

Status of the Existing Source

The table below summarizes the uncontrolled/unlimited potential to emit of the entire source, prior to the proposed revision:

This PTE table is from the TSD of Administrative Amendment No. 005-35902-00048, issued on June 25, 2015.

Process/ Emission Unit	Uncontrolled/Unlimited Potential To Emit of the Entire Source Prior to Revision (tons/year)								
	PM	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Surface Coating	-	-	-	-	-	21.63	-	7.52	7.52 - Methanol
Coating ovens	0.05	0.19	0.19	0.01	2.49	0.14	2.09	0.05	0.04 - Hexane
Heat treatment lines	2.475	3.076	3.076	0.06	10.55	0.58	8.86	0.17	0.16 - Hexane
Plating operations	7.99	7.99	7.99	-	-	-	-	2.69	2.69 - HCl
Plating Boiler	0.01	0.05	0.05	0.004	0.64	0.04	0.54	0.01	0.01 - Hexane
Abrasive blasters	0.16	0.14	0.14	-	-	-	-	-	-
Total PTE of Entire Source	10.68	11.44	11.44	0.08	13.69	22.39	10.50	10.44	7.52 - Methanol
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

*Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM_{2.5}, not particulate matter (PM), are each considered as a regulated air pollutant.
 **PM_{2.5} listed is direct PM_{2.5}.

- (a) The VOC and HAP calculations for surface coating was incorrectly calculated by IDEM, OAQ in previous permit revisions and renewals. The error occurred in the Coating Usage Rate (gal/hr) formula. The methodology stated that the dry coating usage rate should be divided by (1 – Volume percent Volatile). However, the spreadsheet was dividing by (1 – Weight percent Volatile). The methodology was the correct method. The calculation error has been corrected and the rest of this document references the corrected calculations in permit determination calculations. It would not have made any difference to any permit renewals or revisions that have previously been approved.

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by Rightway Fasteners, Inc. on March 8, 2016, relating to the following:

- (a) Modify the existing dip spin coating process to use a new coating. The lines that will use the new coating are lines identified as A-Line, B-Line, D-Line, and E-Line. The use of this new coating will increase the PTE of the coating lines. The new coating will be the only coating used on these lines. The existing coating will not be used when the modifications are completed for these lines.
- (b) Install a new regenerative thermal oxidizer (RTO) to control lines identified as A, B, D, and E because the new coating is not compliant with the maximum volatile organic compound (VOC) limitations as indicated in 326 IAC 8-2-9. The Permittee will not be able to comply with a daily volume weighted average methodology because the lines will not use a compliant coating after the switch to a non-compliant coating when the modification is completed.
- (c) Request an exemption to not have to operate the RTO during the months of November through March as allowed by 326 IAC 8-1-2(a)(2). The source will switch over to the non-compliant coating and will not use a compliant coating after the switch. The source cannot use a daily volume weighted average to comply since it will not use a compliant coating after switching to a non-compliant coating.

The owner or operator of a source using a natural gas afterburner incineration method may petition the commissioner for permission to not operate the natural gas afterburner during the months of November, December, January, February, and March. The commissioner may allow such exemption if the owner or operator adequately demonstrates that the operation of the natural gas afterburner is not required for control of toxic substances or odor. No justification has been provided by the Permittee on how the source will comply with meeting the VOC emission limitations of a non-compliant coating without using the RTO. The exemption is not granted.

- (d) Correct the description of the natural gas-fired annealing oven, identified as HTA-01. The annealing oven was previously listed as 0.359 MMBtu/hr with a capacity of 730 lbs/hr of metal parts. The annealing oven consists of two (2) burners that each have an input heat capacity of 0.01587 MMBtu/hr and a production rate of 660 lbs/hr of metal parts.
- (e) Construct and operate a second natural gas-fired annealing oven identified as HTA-02, which consists of two (2) burners that each have an input heat capacity of 0.01587 MMBtu/hr and a production rate of 660 lbs/hr of metal parts.

On April 18, 2016, during an applicant review of this document, the source submitted additional information in regards to twenty (20) cold forming machines to be added to the permit. These units have already been constructed and are in operation.

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

- (a) One (1) natural gas-fired regenerative thermal oxidizer, identified as RTO, with a heat input capacity of 5.13 MMBtu/hr, providing control to Dip/spin coating lines A, B, D, and E, no control, and exhausting to stack 54. Stacks 1, 3, 4, 6, 7, 8, 10, 11, and 12 exhaust to the RTO.

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

- (a) One (1) dip/spin coater, identified as A-Line, constructed in 1991 (coater replaced in 2007), approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.794 million Btu per hour, exhausting to Stack 1
- (b) One (1) dip/spin coater, identified as B-Line, constructed in 1991, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.794 million Btu per hour, exhausting to Stacks 3 and 4.
- (c) One (1) dip/spin coater, identified as D-Line, constructed in 2001, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 1.389 million Btu per hour, exhausting to Stacks 10, 11, and 12.
- (d) One (1) dip/spin coater, identified as E-Line, constructed in 2006, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer, with a maximum capacity of 4,000 pounds of steel fasteners per hour, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 1.389 million Btu per hour, exhausting to Stacks 6, 7, and 8.

The following is a list of the unpermitted emission units:

- (a) One (1) natural gas-fired annealing furnace, identified as HTA-01, constructed in 1996, with a maximum capacity of 660 pounds of steel fasteners per hour, consisting of two (2) burners with a combined maximum heat input capacity of 0.032 MMBtu per hour (0.016 MMBtu per hour each), using no control, and exhausting to Stacks 17 and 18.
- (b) One (1) natural gas-fired annealing furnace, identified as HTA-02, constructed in 2015, with a maximum capacity of 660 pounds of steel fasteners per hour, consisting of two (2) burners with a combined maximum heat input capacity of 0.032 MMBtu per hour (0.016 MMBtu per hour each), using no control, and exhausting to Stacks 52 and 53.
- (c) Twenty (20) cold forming machines, as described in the following table:

Unit ID	Year of Construction	Material Used	Material Usage Rate (gal/hr)	Control Device
CTA01	1996	Yumark FL-30	1	Smog Hog CTA01
CTA02	1996	Yumark FL-30	1	Smog Hog CTA02
CTA03	1996	Yumark FL-30	1	Smog Hog CTA03
CTA04	1996	Yumark FL-30	1	Smog Hog CTA04
CTA05	1996	Yumark FL-30	1	Smog Hog CTA05
CTA06	1996	Yumark FL-30	1	Smog Hog CTA06
CTA07	1996	Yumark FL-30	1	Smog Hog CTA07
CTA08	1996	Yumark FL-30	1	Smog Hog CTA08
CTA09	1996	Yumark FL-30	1	Smog Hog CTA09
CTA10	1996	Yumark FL-30	1	Smog Hog CTA10
CTA11	1996	Yumark FL-30	1	Smog Hog CTA11
CTA12	1996	Yumark FL-30	1	Absolent Cabinet CTA12
CTA13	1996	EZ Form 9280	1.5	Smog Hog CTA13
CTA14	2013	Yumark FL-30	1	Smog Hog CTA14
CTA15	2013	Yumark FL-30	1	Smog Hog CTA15
CFA01	1996	Suncreaner G-2000B	1.5	Smog Hog CFA01
		Sunformer M-7948	1.5	
CPA02	1996	CKK Center Oil SFCU	1.5	Smog Hog CPA02
CPA03	1996	Yumark CF-3430	1.5	Smog Hog CPA03
CPA04	1996	Yumark CF-3430	1.5	Smog Hog CPA04
CPA05	2005	EZ Form 9280	1.5	Smog Hog CPA05

Unit CFA01 can use either Suncreaner G-2000B or Sunformer M-7948 but not both at the same time. All of the units exhaust indoors.

Enforcement Issues

IDEM, OAQ is aware that equipment has been constructed and/or operated prior to receipt of the proper permit. IDEM, OAQ is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction and operating permit rules.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – MSOP Revision

The following table is used to determine the appropriate permit level under 326 IAC 2-6.1-6. This table reflects the PTE before controls of the proposed revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Uncontrolled/Unlimited Potential To Emit of Proposed Revision (tons/year)								
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Annealing Oven HTA-01	Negl.	Negl.	Negl.	Negl.	0.014	Negl.	0.011	Negl.	Negl.
Annealing Oven HTA-02	Negl.	Negl.	Negl.	Negl.	0.014	Negl.	0.011	Negl.	Negl.
Regenerative Thermal Oxidizer (RTO)	0.04	0.17	0.17	0.01	2.20	0.12	1.85	0.04	0.04 Hexane
Cold Forming Machines	-	-	-	-	-	24.03	-	-	-
Modified Lines	-	-	-	-	-	-	-	-	-
Modified A-Line	-	-	-	-	-	8.96	-	1.48	1.48 Methanol
Existing A-Line	-	-	-	-	-	2.90	-	1.04	1.04 Methanol
A-Line Difference	-	-	-	-	-	6.07	-	0.44	0.44 Methanol
Modified B-Line	-	-	-	-	-	10.55	-	1.74	1.74 Methanol
Existing B-Line	-	-	-	-	-	3.41	-	1.22	1.22 Methanol
B-Line Difference	-	-	-	-	-	7.14	-	0.51	0.51 Methanol
Modified D-Line	-	-	-	-	-	10.55	-	1.74	1.74 Methanol
Existing D-Line	-	-	-	-	-	3.41	-	1.22	1.22 Methanol
D-Line Difference	-	-	-	-	-	7.14	-	0.51	0.51 Methanol
Modified E-Line	-	-	-	-	-	10.55	-	1.74	1.74 Methanol
Existing E-Line	-	-	-	-	-	3.41	-	1.22	1.22 Methanol
E-Line Difference	-	-	-	-	-	7.14	-	0.51	0.51 Methanol
Total PTE of Proposed Revision	0.04	0.17	0.17	0.01	2.23	51.65	1.87	2.02	1.98 Methanol
negl. = negligible (less than 0.01 tons/year)									

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

PTE of the Entire Source After Issuance of the MSOP Revision

The table below summarizes the uncontrolled/unlimited potential to emit of the entire source, with updated emissions shown as **bold** values and previous emissions shown as ~~strikethrough~~ values.

Process/ Emission Unit	Uncontrolled/Unlimited Potential To Emit of the Entire Source After Revision (tons/year)								
	PM	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Surface Coating	-	-	-	-	-	21.63 40.75	-	7.52 6.69	7.52 6.69 Methanol
Cold Forming Machines	-	-	-	-	-	24.03	-	-	-
Coating ovens	0.05	0.19	0.19	0.01	2.49	0.14	2.09	0.05	0.04 Hexane
Heat treatment lines	2.475	3.076	3.076	0.06	40.55 10.43	0.58 0.57	8.86 8.76	0.17 0.20	0.16 0.19 Hexane
Plating operations	7.99	7.99	7.99	-	-	-	-	2.69	2.69 HCl
Plating Boiler	0.01	0.05	0.05	0.004	0.64	0.04	0.54	0.01	0.01 Hexane
Abrasive blasters	0.16	0.14	0.14	-	-	-	-	-	-
Regenerative Thermal Oxidizer (RTO)	0.04	0.17	0.17	0.01	2.20	0.12	1.85	0.04	0.04 Hexane
Total PTE of Entire Source	40.68 10.72	41.44 11.60	41.44 11.60	0.08 0.09	43.69 15.77	22.39 65.65	40.50 13.24	40.44 9.68	7.52 6.69 Methanol
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

*Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM_{2.5}, not particulate matter (PM), are each considered as a regulated air pollutant.
 **PM_{2.5} listed is direct PM_{2.5}.

The table below summarizes the uncontrolled/unlimited 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	Uncontrolled/Unlimited Potential To Emit of the Entire Source After Revision (tons/year)								
	PM	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Surface Coating	-	-	-	-	-	40.75	-	6.69	6.69 Methanol
Cold Forming Machines	-	-	-	-	-	24.03	-	-	-
Coating ovens	0.05	0.19	0.19	0.01	2.49	0.14	2.09	0.05	0.04 Hexane
Heat treatment lines	2.475	3.076	3.076	0.06	10.43	0.57	8.76	0.20	0.19 Hexane
Plating operations	7.99	7.99	7.99	-	-	-	-	2.69	2.69 HCl
Plating Boiler	0.01	0.05	0.05	0.004	0.64	0.04	0.54	0.01	0.01 Hexane
Abrasive blasters	0.16	0.14	0.14	-	-	-	-	-	-
Regenerative Thermal Oxidizer (RTO)	0.04	0.17	0.17	0.01	2.20	0.12	1.85	0.04	0.04 Hexane
Total PTE of Entire Source	10.72	11.60	11.60	0.09	15.77	65.65	13.24	9.68	6.69 Methanol
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
*Under the Part 70 Permit program (40 CFR 70), PM ₁₀ and PM _{2.5} , not particulate matter (PM), are each considered as a regulated air pollutant. **PM _{2.5} listed is direct PM _{2.5} .									

MSOP Status

(1) Criteria Pollutants

This revision to an existing Title V minor stationary source will not change the minor status, because the uncontrolled/unlimited potential to emit criteria pollutants from the entire source will still be less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-6.1 (MSOP).

(2) HAPs

This revision will not change the minor status of the source, because the uncontrolled/unlimited potential to emit of any single HAP will still be less than ten (10) tons per year and the PTE of a combination of HAPs will still be less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Permit Level Determination – PSD

(a) PSD Minor Source – PM

This modification to an existing PSD minor stationary source will not change the PSD minor status, because the uncontrolled/unlimited potential to emit PM 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.

- (b) PSD Minor Source – Other Regulated Pollutants
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the uncontrolled/unlimited potential to emit of all other PSD 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. See PTE of the Entire Source After Issuance of the MSOP Revision Section above or Appendix A.

Federal Rule Applicability Determination

- (a) New Source Performance Standards (NSPS)
- (1) The requirements of the New Source Performance Standard for Surface Coating of Metal Furniture, 40 CFR 60, Subpart EE and 326 IAC 12, are not included for this proposed revision, since this source does not coat metal furniture as described in 40 CFR 60.310.
 - (2) The requirements of the New Source Performance Standard for Automobile and Light Duty Truck Surface Coating Operations, 40 CFR 60, Subpart MM and 326 IAC 12, are not included for this proposed revision, since this source does not coat automobile or light-duty trucks in an automobile or light-duty truck assembly plant as described in 40 CFR 60.390.
 - (3) The requirements of the New Source Performance Standard for Industrial Surface Coating: Large Appliances, 40 CFR 60, Subpart SS and 326 IAC 12, are not included for this proposed revision, since this source does not coat large appliances in a large appliance surface coating line as described in 40 CFR 60.450.
 - (4) The requirements of the New Source Performance Standard for Metal Coil Surface Coating, 40 CFR 60, Subpart TT and 326 IAC 12, are not included for this proposed revision, since this source does not coat metal coils as described in 40 CFR 60.460.
 - (5) The requirements of the New Source Performance Standard for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines, 40 CFR 60, Subpart TTT and 326 IAC 12, are not included for this proposed revision, since this source does not coat plastic parts for use in the manufacture of business machines as described in 40 CFR 60.720.
 - (6) There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included for this proposed revision.
- (b) National Emission Standards for Hazardous Air Pollutants (NESHAP)
- (1) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Automobiles and Light-Duty Trucks, 40 CFR 63.3080, Subpart IIII and 326 IAC 20-85, are not included for this proposed revision, since this source is not a major source of HAPs.
 - (2) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Metal Cans, 40 CFR 63.3480, Subpart KKKK and 326 IAC 20-86, are not included for this proposed revision, since this source is not a major source of HAPs and does not surface coat metal cans and ends and metal crowns and closures.
 - (3) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63.3880, Subpart MMMM and 326 IAC 20-80, are not included for this proposed revision, since this source is not a major source of HAPs.

- (4) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Large Appliances, 40 CFR 63.4080, Subpart NNNN and 326 IAC 20-63, are not included for this proposed revision, since this source is not a major source of HAPs and does not coat large appliance parts or products.
- (5) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products, 40 CFR 63.4480, Subpart PPPP and 326 IAC 20-81, are not included for this proposed revision, since this source is not a major source of HAPs.
- (6) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Wood Building Products, 40 CFR 63.4680, Subpart QQQQ and 326 IAC 20-79, are not included for this proposed revision, since this source is not a major source of HAPs and does not coat wood building products.
- (7) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Metal Furniture, 40 CFR 63.4880, Subpart RRRR and 326 IAC 20-78, are not included for this proposed revision, since this source is not a major source of HAPs and does not coat metal furniture.
- (8) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Metal Coil, 40 CFR 63.5080, Subpart SSSS and 326 IAC 20-64, are not included for this proposed revision, since this source is not a major source of HAPs and does not coat metal coils.
- (9) The requirements of the National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63.11169, Subpart HHHHHH, are not included for this proposed revision, since this source does not paint strip with chemical strippers that contain methylene chloride (MeCl); does not operate an autobody refinish operation that encompass motor vehicles and mobile equipment spray coating; or does not spray application of coatings that contain compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd) to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.
- (10) There are no new National Emission Standards for Hazardous Air Pollutants (40 CFR Part 63), 326 IAC 14 and 326 IAC 20 included for this proposed revision.

(c) Compliance Assurance Monitoring (CAM)

Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

- (a) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
See PTE of the Entire Source After Issuance of the MSOP Revision Section above.

- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new and modified units 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.

See PTE of the Entire Source After Issuance of the MSOP Revision Section above.
- (d) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (e) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (f) 326 IAC 6.8-10 (Lake County: Fugitive Particulate Matter)
The source is not subject to the requirements of 326 IAC 6.8-10, because the source is not located in Lake County. Therefore, 326 IAC 6.8-10 does not apply.
- (g) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.
- (h) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Spin/Dip A-Line, B-Line, D-Line, and E-Line

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The spin/dip lines, identified as A-Line, B-Line, D-Line, and E-Line, apply surface coating using dip coating. Pursuant to 326 IAC 6-3-1(b)(5), surface coating using dip coating is exempt from 326 IAC 6-3. Therefore, A-Line, B-Line, D-Line, and E-Line are exempt from the requirements of 326 IAC 6-3-2.
- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The proposed revision is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each spin/dip line, identified as A-Line, B-Line, D-Line, and E-Line, is less than twenty-five (25) tons per year.
- (c) 326 IAC 8-2-9 (Surface Coating Emission Limitations; Miscellaneous Metal and Plastic Parts Coating Operations)
Construction of the spin/dip lines, identified as A-Line, B-Line, D-Line, and E-Line, commenced after July 1, 1990, and there are no enforceable limits in the permit to limit the actual emissions to less than fifteen (15) pounds of VOC per day before add-on controls.

In addition, the source is located in Bartholemew County and coats metal parts or products under the Standard Industrial Classification Code of major group #34. Pursuant to 326 IAC 8-2-9(a)(1)(e), the requirements of 326 IAC 8-2-9(b), (c), (e), and (f) is applicable to A-Line, B-Line, D-Line, and E-Line.

- (1) Pursuant to 326 IAC 8-2-9(c)(2), the owner or operator shall not cause, allow, or permit the discharge into the atmosphere of any VOC in excess of forty-two hundredths (0.42) kilograms per liter (three and five-tenths (3.5) pounds per gallon) of coating excluding water, delivered to a coating applicator in a coating application system that is air dried or

forced warm air dried at temperatures up to ninety (90) degrees Celsius (one hundred ninety-four (194) degrees Fahrenheit).

This source was already subject to this requirement prior to this revision. The source complied with this limit by using compliant coatings.

- (2) Due to revision, the dip/spin lines A-Line, B-Line, D-Line, and E-Line will contain a VOC content greater than 3.5 pounds per gallon, the source has chosen to use a control device to comply with the limit when using the non-compliant coating. The source will not use a non-compliant coating on these lines after the modification is completed. It will not be able to use a daily volume weighted average to comply with the VOC limit listed in 326 IAC 8-2-9(c)(2).

When using a non-compliant coating for lines A-Line, B-Line, D-Line, or E-Line, the Permittee shall comply with the following:

- (A) Pursuant to 326 IAC 8-1-2(b), the VOC emissions from A-Line, B-Line, D-Line, or E-Line shall be limited to no greater than the equivalent emissions, expressed as pounds of VOC per gallon of coating solids, allowed in (1).

This equivalency was determined by the following equation:

$$E = L / (1 - (L/D))$$

Where:

- L= Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating;
D= Density of VOC in coating in pounds per gallon of VOC;
E= Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

A solvent density of 7.36 pounds of VOC per gallon of coating shall be used to determine equivalent pounds of VOC per gallon of solids for the applicable emission limit contained in this article.

Actual solvent density shall be used to determine compliance of the surface coating operation using the compliance methods in 326 IAC 8-1-2(a).

- (B) The pounds of VOC per gallon of coating solids shall be limited to less than 6.67.
(C) Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the regenerative thermal oxidizer shall be no less than the equivalent overall efficiency calculated by the following equation:

$$O = \frac{V - E}{V} \times 100$$

Where:

- V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.
E = Equivalent emission limit in pounds of VOC per gallon of coating solids

- as applied.
- O = Equivalent overall efficiency of the capture system and control device as a percentage.

The overall efficiency of the regenerative thermal oxidizer shall be greater than 63.69%.

The source requested permission to not operate the natural gas afterburner during the months of November, December, January, February, and March as allowed in 326 IAC 8-1-2(a)(2). The source did not provide a method to how they would demonstrate that the operation of the natural gas afterburner is not required for control of toxic substances or odors. As a result, the exemption is not granted.

- (3) Pursuant to 326 IAC 8-2-9(f), work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
- (A) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
 - (B) 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.
 - (C) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
 - (D) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
 - (E) 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) There are no other 326 IAC 8 rules that are applicable to these units.

Cold Forming Machines (CTA01 through CTA15, CFA01, CPA02 through CPA05)

- (a) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the cold forming machines, identified as CTA01 through CTA15, CFA01, and CPA02 through CPA05, are exempt from the requirements of 326 IAC 6-3-2, because the potential to emit particulate for each cold forming machine is less than 0.551 pounds per hour.
- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The proposed revision is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each cold forming machine, identified as CTA01 through CTA15, CFA01, and CPA02 through CPA05, is less than twenty-five (25) tons per year.
- (c) There are no 326 IAC 8 rules that are applicable to these units.

Annealing Ovens HTA-01 and HTA-02

- (a) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
 The natural gas-fired annealing ovens, identified as HTA-01 and HTA-02, are not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) because, pursuant to 326 IAC 1-2-19, these emission units do not meet the definition of an indirect heating unit.
- (b) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
 Pursuant to 326 IAC 6-3-1(b)(14), the natural gas-fired annealing ovens, identified as HTA-01 and HTA-02, are exempt from the requirements of 326 IAC 6-3-2 because they each have potential particulate emissions less than five hundred fifty-one thousandths (0.551) pound per hour.
- (c) 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)
 This source is not subject to 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations) because the potential to emit sulfur dioxide from the natural gas-fired annealing ovens, identified as HTA-01 and HTA-02, are less than twenty-five (25) tons per year and ten (10) pounds per hour.

Regenerative Thermal Oxidizer (RTO)

- (a) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
 The natural gas-fired regenerative thermal oxidizer is not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) because, pursuant to 326 IAC 1-2-19, this emission unit do not meet the definition of an indirect heating unit.
- (b) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
 The regenerative thermal oxidizer is exempt from the requirements of 326 IAC 6-3, because pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight.
- (c) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
 This source is not subject to 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations) because the potential to emit sulfur dioxide from the natural gas-fired regenerative thermal oxidizer is less than twenty-five (25) tons per year and ten (10) pounds per hour.
- (d) 326 IAC 9-1-2 (Carbon Monoxide Emission Limits)
 Pursuant to 326 IAC 9-1-1, the natural gas-fired regenerative thermal oxidizer is not subject to the requirements of 326 IAC 9-1-2(a)(3) because the regenerative thermal oxidizer is not a refuse incineration or refuse burning equipment.
- (e) There are no 326 IAC 8 rules that are applicable to this unit.

Compliance Determination, Monitoring and Testing Requirements
--

- (a) The compliance determination and monitoring requirements applicable to this proposed revision are as follows:

Emission Unit/Control	Operating Parameters	Frequency	Range	Excursions and Exceedances
A-Line, B-Line, D-Line, E-Line/RTO	RTO fan motor frequency	Once per day	As Determined in the most recent compliant stack test	Response Steps
	Three Hour Rolling Average Temperature	Continuous	1,500 °F or as determined in the most recent compliant stack test	Response Steps

These monitoring conditions are necessary because the regenerative thermal oxidizer, identified as RTO, for the dip/spin lines A-Line, B-Line, D-Line, and E-Line must operate properly to ensure compliance with 326 IAC 8-2-9 (Surface Coating Emission Limitations; Miscellaneous Metal and Plastic Parts Coating Operations).

(b) The testing requirements applicable to this proposed revision are as follows:

Testing Requirements				
Emission Unit	Control Device	Pollutant	Timeframe for Testing	Frequency of Testing
A-Line, B-Line, D-Line, and E-Line	RTO	VOC	Within 180 days upon initial startup of using non-compliant coatings	Once every five (5) years

This testing requirement is necessary because the RTO must operate at 63.69% overall efficiency to ensure compliance with 326 IAC 8-2-9 when the A-Line, B-Line, D-Line, or E-Line are in operation and using a non-compliant coating. The timeframe for testing the RTO is within 180 days of switching to a non-compliant coating in at least one (1) of the following dip/spin lines: A-Line, B-Line, D-Line, or E-Line.

Proposed Changes

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

- (1) Section A.2 has been updated to include the modifications to the dip/spin lines, add in the cold forming machines, amend the annealing furnace HTA-01, add in annealing furnace HTA-02, and to add in the RTO. The descriptive unit information in Sections D.1 and D.2 has been updated to match Section A.2.
- (2) Condition D.1.1 has been updated to include requirements for surface coating miscellaneous parts and products using non-compliant coatings.
- (3) Condition D.1.2 has been updated to include the applicable control devices for the units listed for the preventive maintenance plan.
- (4) Condition D.1.3 has been updated to more closely match the applicable requirements and to add citations.
- (5) Condition D.1.4 has been added to ensure the RTO is operational when a non-compliant coating is in use in one of the affected dip/spin lines.
- (6) Condition D.1.5 has been added to include testing requirements for the RTO to ensure the unit operates in compliance with 326 IAC 8-2-9.
- (7) Compliance monitoring requirements have been added as Conditions D.1.6 and D.1.7. These requirements are necessary to ensure that the RTO is operating properly when the Permittee is using non-compliant coatings.
- (8) Condition D.1.8 has been updated to include records for when the source uses non-compliant coatings and the operating parameters of the RTO during the use of non-compliant coatings.

...

A.2 Emission Units and Pollution Control Equipment Summary

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

Metal Surface Coating:

- (a) One (1) dip/spin coater, identified as A-Line, constructed in 1991 (coater replaced in 2007), **approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer**, with a maximum capacity of 4,000 pounds of steel fasteners per hour, ~~using no control~~, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.794 million Btu per hour, exhausting to Stack 1.
 - (b) One (1) dip/spin coater, identified as B-Line, constructed in 1991, **approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer**, with a maximum capacity of 4,000 pounds of steel fasteners per hour, ~~using no control~~, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.794 million Btu per hour, exhausting to Stacks 3 and 4.
 - (c) One (1) dip/spin coater, identified as C-Line, constructed in 1993, with a maximum capacity 2,200 pounds of steel fasteners per hour, using no control device, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.780 million Btu per hour, exhausting to Stack 5.
 - (d) One (1) dip/spin coater, identified as D-Line, constructed in 2001, **approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer**, with a maximum capacity of 4,000 pounds of steel fasteners per hour, ~~using no control device~~, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 1.389 million Btu per hour, exhausting to Stacks 10, 11, and 12.
- ...
- (f) One (1) dip/spin coater, identified as E-Line, constructed in 2006, **approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer**, with a maximum capacity of 4,000 pounds of steel fasteners per hour, ~~using no control device~~, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 1.389 million Btu per hour, exhausting to Stacks 6, 7, and 8.

...

Cold Forming Operations:

- (h) Twenty (20) cold forming machines, as described in the following table:

Unit ID	Year of Construction	Material Used	Material Usage Rate (gal/hr)	Control Device
CTA01	1996	Yumark FL-30	1	Smog Hog CTA01
CTA02	1996	Yumark FL-30	1	Smog Hog CTA02
CTA03	1996	Yumark FL-30	1	Smog Hog CTA03
CTA04	1996	Yumark FL-30	1	Smog Hog CTA04
CTA05	1996	Yumark FL-30	1	Smog Hog CTA05
CTA06	1996	Yumark FL-30	1	Smog Hog CTA06
CTA07	1996	Yumark FL-30	1	Smog Hog CTA07
CTA08	1996	Yumark FL-30	1	Smog Hog CTA08
CTA09	1996	Yumark FL-30	1	Smog Hog CTA09
CTA10	1996	Yumark FL-30	1	Smog Hog CTA10

Unit ID	Year of Construction	Material Used	Material Usage Rate (gal/hr)	Control Device
CTA11	1996	Yumark FL-30	1	Smog Hog CTA11
CTA12	1996	Yumark FL-30	1	Absolent Cabinet CTA12
CTA13	1996	EZ Form 9280	1.5	Smog Hog CTA13
CTA14	2013	Yumark FL-30	1	Smog Hog CTA14
CTA15	2013	Yumark FL-30	1	Smog Hog CTA15
CFA01	1996	Suncreaner G-2000B	1.5	Smog Hog CFA01
		Sunformer M-7948	1.5	
CPA02	1996	CKK Center Oil SFCU	1.5	Smog Hog CPA02
CPA03	1996	Yumark CF-3430	1.5	Smog Hog CPA03
CPA04	1996	Yumark CF-3430	1.5	Smog Hog CPA04
CPA05	2005	EZ Form 9280	1.5	Smog Hog CPA05

Unit CFA01 can use either Suncreaner G-2000B or Sunformer M-7948 but not both at the same time. All of the units exhaust indoors.

Heat Treating Operations:

- (i) One (1) heat treating furnace line, identified as HA-01, constructed in 1996, with a maximum capacity of 2,200 pounds of steel fasteners per hour, using no control, and consisting of the following:
 - (1) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.765 million Btu per hour and exhausting to Stack 19.
 - (2) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.648 million Btu per hour and exhausting to Stack 22.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.
 - (3) One (1) oil quench tank.
 - (4) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.308 million Btu per hour and exhausting to Stack 20.
 - (5) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.205 million Btu per hour and exhausting to Stack 21.
- (j) One (1) heat treating furnace line, identified as HA-02, constructed in 1997, with a maximum capacity of 2,200 pounds of steel fasteners per hour, using no control, and consisting of the following:
 - (1) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.765 million Btu per hour and exhausting to Stack 14.
 - (2) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.648 million Btu per hour and exhausting to Stack 13.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the

furnace.

- (3) One (1) oil quench tank.
 - (4) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.308 million Btu per hour and exhausting to Stack 15.
 - (5) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.205 million Btu per hour and exhausting to Stack 16.
- (k) One (1) heat treating furnace line, identified as HA-03, constructed in 2004, with a maximum capacity of 550 pounds of steel fasteners per hour, using no control, and consisting of the following:
- (1) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.032 million Btu per hour and exhausting to Stack 26.
 - (2) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.119 million Btu per hour and exhausting to Stack 23.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.
 - (3) One (1) oil quench tank.
 - (4) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.488 million Btu per hour and exhausting to Stack 24.
 - (5) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.119 million Btu per hour and exhausting to Stack 25.
- (l) One (1) heat treating furnace line, identified as HA-04, constructed in 2005, with a maximum capacity of 2,200 pounds of steel fasteners per hour, using no control, and consisting of the following:
- (1) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.765 million Btu per hour and exhausting to Stack 27.
 - (2) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.648 million Btu per hour and exhausting to Stack 30.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.
 - (3) One (1) oil quench tank.
 - (4) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.308 million Btu per hour and exhausting to Stack 28.
 - (5) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.205 million Btu per hour and exhausting to Stack 29.

- (m) One (1) heat treating furnace line, identified as HA-05, construction in 2010, with a maximum capacity of 2,200 pounds of steel fasteners per hour, using no control, and consisting of the following:
- (1) One (1) natural gas-fired prewash heater with a maximum input capacity of 0.198 million Btu per hour and exhausting to Stack 35.
 - (2) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.119 million Btu per hour and exhausting to Stack 39.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.
 - (3) One (1) oil quench tank.
 - (4) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.714 million Btu per hour and exhausting to Stack 36.
 - (5) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.270 million Btu per hour and exhausting to Stack 38.
 - (6) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.198 million Btu per hour and exhausting to Stack 37.
- (n) One (1) heat treating furnace line, identified as HA-06, construction in 2014, with a maximum capacity of 1,100 pounds of steel fasteners per hour, using no control, and consisting of the following:
- (1) One (1) natural gas-fired prewash heater with a maximum input capacity of 0.02 million Btu per hour and exhausting to Stack 40.
 - (2) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 0.91 million Btu per hour and exhausting to Stack 41.
 - (3) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.24 million Btu per hour and exhausting to Stack 42.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.
 - (4) One (1) oil quench tank.
 - (5) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.11 million Btu per hour and exhausting to Stack 43.
 - (6) One (1) natural gas-fired smoke killer with a maximum heat input capacity of 0.10 million Btu per hour and exhausting to Stack 44.

- (o) One (1) heat treating furnace line, identified as HA-07, approved in 2015 for construction, with a maximum capacity of 2,200 pounds of steel fasteners per hour, using no control, and consisting of the following:
- (1) One (1) natural gas-fired prewash heater with a maximum input capacity of 0.198 million Btu per hour and exhausting to Stack 45.
 - (2) One (1) natural gas-fired hardening furnace with a maximum heat input capacity of 1.714 million Btu per hour and exhausting to Stacks 46 and 47.
 - (3) One (1) gas generator equipped with a natural gas-fired emergency flare with a maximum heat input capacity of 0.24 million Btu per hour and exhausting to Stack 48.

This generator is not a reciprocating internal combustion engine (RICE) but is a device used for generating a favorable atmosphere within the furnace.
 - (4) One (1) natural gas-fired tempering furnace with a maximum heat input capacity of 1.667 million Btu per hour and exhausting to Stacks 50 and 51.
 - (5) One (1) natural gas-fired smoke eater with a maximum heat input capacity of 0.198 million Btu per hour and exhausting to Stack 49.
 - (6) One (1) oil quench tank.
- (p) One (1) natural gas-fired annealing furnace, identified as HTA-01, constructed in 1996, with a maximum capacity of ~~730~~**660** pounds of steel fasteners per hour, **consisting of two (2) burners** with a **combined** maximum heat input capacity of ~~0.3590~~**0.032 MMBtu per hour (0.016 MMBtu per hour each)**, using no control, and exhausting to Stacks 17 and 18.
- (q) **One (1) natural gas-fired annealing furnace, identified as HTA-02, constructed in 2015, with a maximum capacity of 660 pounds of steel fasteners per hour, consisting of two (2) burners with a combined maximum heat input capacity of 0.032 MMBtu per hour (0.016 MMBtu per hour each), using no control, and exhausting to Stacks 52 and 53.**

Plating operations

- ~~(p)~~(r) Plating operations, with a maximum line speed of 30 barrels per hour and a maximum loading of 110 pounds of steel fasteners per barrel, and consisting of the following:

...

Abrasive blasting

- ~~(q)~~(s) One (1) steel shotblasting machine, identified as SBA-01, constructed in 1991, with a maximum throughput of 1,920 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack H;
- ~~(r)~~(t) One (1) steel shotblasting machine, identified as SBA-02, constructed in 1993, with a maximum throughput of 1,920 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary

particulate control, and exhausting to Stack G;

- ~~(s)~~(u) One (1) steel shotblasting machine, identified as SBA-03, constructed in 1997, with a maximum throughput of 960 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack F;
- ~~(t)~~(v) One (1) ceramic bead shotblasting machine, identified as SBA-04, constructed in 2003, with a maximum throughput of 480 pounds of fasteners per hour and an estimated maximum usage rate of 0.5 pound of ceramic beads per hour, using a dust collector for voluntary particulate control, and exhausting to Stack B;
- ~~(u)~~(w) One (1) steel shotblasting machine, identified as SBA-05, constructed in 2001, with a maximum throughput of 1,920 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack D;
- ~~(v)~~(x) One (1) steel shotblasting machine, identified as SBA-06, constructed in 2005, with a maximum throughput of 360 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack I;
- ~~(w)~~(y) One (1) steel shotblasting machine, identified as SBA-07, constructed in 2006, with a maximum throughput of 960 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack E;
- ~~(x)~~(z) One (1) steel shotblasting machine, identified as SBA-08, constructed in 2008, with a maximum throughput of 1,920 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack C; and
- ~~(y)~~(aa) One (1) steel shotblasting machine, identified as SBA-09, constructed in 1993, with a maximum throughput of 300 pounds of fasteners per hour and an estimated maximum usage rate of 1.0 pound of steel shot per hour, using a dust collector for voluntary particulate control, and exhausting to Stack A.
- (bb) One (1) natural gas-fired regenerative thermal oxidizer, identified as RTO, approved in 2016 for construction, with a maximum heat input capacity of 5.13 MMBtu/hr, no control device, and exhausting to Stack 54. Stacks 1, 3, 4, 6, 7, 8, 10, 11, and 12 exhaust to the RTO.**

...

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Metal Surface Coating:

- (a) One (1) dip/spin coater, identified as A-Line, constructed in 1991 (coater replaced in 2007), **approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer**, with a maximum capacity of 4,000 pounds of steel fasteners per hour, ~~using no control device~~, and including one (1)

	natural gas-fired cure oven with a maximum heat input capacity of 0.794 million Btu per hour, exhausting to Stack 1.
(b)	One (1) dip/spin coater, identified as B-Line, constructed in 1991, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer , with a maximum capacity of 4,000 pounds of steel fasteners per hour, using no control , and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.794 million Btu per hour, exhausting to Stacks 3 and 4.
(c)	One (1) dip/spin coater, identified as C-Line, constructed in 1993, with a maximum capacity 2,200 pounds of steel fasteners per hour, using no control device, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.780 million Btu per hour, exhausting to Stack 5.
(d)	One (1) dip/spin coater, identified as D-Line, constructed in 2001, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer , with a maximum capacity of 4,000 pounds of steel fasteners per hour, using no control device , and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 1.389 million Btu per hour, exhausting to Stacks 10, 11, and 12.
(e)	One (1) D-Line aqueous degreaser, constructed in 2003, with a capacity of 5,200 lbs of steel fasteners per hour, using no control device, and including one (1) natural gas-fired dryer with a maximum heat input capacity of 0.397 million Btu per hour, exhausting to Stack 9. This degreaser does not use and VOC or HAP-containing solvents.
(f)	One (1) dip/spin coater, identified as E-Line, constructed in 2006, approved in 2016 for modification to use a new coating and to be controlled by a regenerative thermal oxidizer , with a maximum capacity of 4,000 pounds of steel fasteners per hour, using no control device , and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 1.389 million Btu per hour, exhausting to Stacks 6, 7, and 8.
(g)	One (1) dip/spin coater, identified as Topcoater, constructed in 1993, with a maximum capacity 2,200 pounds of steel fasteners per hour, using no control device, and including one (1) natural gas-fired cure oven with a maximum heat input capacity of 0.265 million Btu per hour, exhausting to Stack 2.
(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)	

...

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

Compliance Determination Requirements

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

Compliance with the VOC content and usage limitations contained in Condition D.1.1(a) shall be

determined pursuant to 326 IAC 8-1-4(a)(3)(A) 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 using formulation data supplied by the coating manufacturer. However, 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.1.4 Volatile Organic Compounds [326 IAC 8-1-2]

(a) Pursuant to 326 IAC 8-1-2(a) and to comply with Condition D.1.1(a), the Permittee shall operate the regenerative thermal oxidizer at all times that a non-compliant coating is used in dip/spin lines A-Line, B-Line, D-Line, or E-Line.

(b) When using a non-compliant coating for A-Line, B-Line, D-Line, or E-Line, the Permittee shall comply with the following:

- (1) Pursuant to 326 IAC 8-1-2(b), the A-Line, B-Line, D-Line, or E-Line VOC emissions shall be limited to no greater than the equivalent emissions, expressed as pounds of VOC per gallon of coating solids, allowed in D.1.1(a).

This equivalency was determined by the following equation:

$$E = L / (1 - (L/D))$$

Where:

- L= Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating;
D= Density of VOC in coating in pounds per gallon of VOC;
E= Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

A solvent density of 7.36 pounds of VOC per gallon of coating shall be used to determine equivalent pounds of VOC per gallon of solids for the applicable emission limit contained in this article.

Actual solvent density shall be used to determine compliance of the surface coating operation using the compliance methods in 326 IAC 8-1-2(a).

- (2) The pounds of VOC per gallon of coating solids shall be limited to less than 6.67.
- (3) Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the regenerative thermal oxidizer shall be no less than the equivalent overall efficiency by the following equation:

$$O = \frac{V - E}{V} \times 100$$

Where:

- V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.

- E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.**
- O = Equivalent overall efficiency of the capture system and control device as a percentage.**

The overall efficiency of the regenerative thermal oxidizer shall be greater than 63.69%.

D.1.5 Volatile Organic Compounds [326 IAC 8-1-2][326 IAC 8-1-4]

Within one hundred and eighty (180) days after initial startup of using a non-compliant coating in dip/spin line A-Line, B-Line, D-Line, or E-Line, and to verify compliance with Condition D.1.1(a), the Permittee shall conduct a performance test to verify VOC control efficiency (capture and destruction) of the regenerative thermal oxidizer utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

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

D.1.6 Regenerative Thermal Oxidizer

- (a) **A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as 3-hour average. From the date of startup until the stack test results are available, the Permittee shall operate the regenerative thermal oxidizer at or above the 3-hour rolling average temperature of 1,500 °F.**
- (b) **The Permittee shall determine the 3-hour rolling average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.1.**
- (c) **On and after the date the stack test results are available, the Permittee shall operate the regenerative thermal oxidizer at or above the 3-hour rolling average temperature as observed during the complaint stack test.**

D.1.7 Parametric Monitoring

- (a) **The Permittee shall determine the appropriate fan amperage from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.1.**
- (b) **The fan amperage shall be observed at least once per day when the regenerative thermal oxidizer is in operation. On and after the date the stack test results are available, the fan amperage shall be maintained within the normal range as established in the most recent complaint stack test.**

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

D.1.4D.1.8 Record Keeping Requirement

- (a) **To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through ~~(4)~~(6) below. Records maintained for (1) through ~~(4)~~(6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.1.1. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.**

- (1) **The VOC content of each coating material and solvent used less water.**

- (2) The amount of coating material and solvent less water used on a monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3) The cleanup solvent usage for each month. ~~and~~
 - (4) The total VOC usage for each month.
 - (5) **The dates and time when non-compliant coatings are used for the first time for lines A-Line, B-Line, D-Line, or E-Line.**
 - (6) **After the first use of a non-compliant coating is used in A-Line, B-Line, D-Line, or E-Line:**
 - (a) **The continuous temperature records (on a 3-hour rolling average basis) for the regenerative thermal oxidizer and the 3-hour rolling average temperature used to demonstrate compliance during the most recent compliant stack test.**
 - (b) **Daily records of the fan amperage.**
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: <u>Plating operations</u> (e)(r) Plating operations, with a maximum line speed of 30 barrels per hour and a maximum loading of 110 pounds of steel fasteners per barrel, and consisting of the following: ...
--

...

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on March 8, 2016. Additional information was received during the applicant review period on April 18, 2016 concerning the cold forming machines.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed MSOP Significant Permit Revision No. 005-36921-00048. The staff recommends to the Commissioner that this MSOP Significant Permit Revision be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Brandon Miller 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) 234-5374 or toll free at 1-800-451-6027 extension 4-5374.
- (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: Emissions Calculations
Source Summary**

Company Name: Rightway Fasteners, Inc.
Address City IN Zip: 7945 S International Dr., Columbus, IN 47201
Permit No.: M005-34077-00048
Revision No.: 005-36921-00048
Reviewer: Brandon Miller

Process	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	Total HAPs	Worst single HAP
Metal Surface Coating	-	-	-	-	-	40.75	-	6.69	6.69 Methanol
Cold Forming Machines	-	-	-	-	-	24.03	-	-	-
Coating ovens	0.05	0.19	0.19	0.01	2.49	0.14	2.09	0.05	0.04 Hexane
Heat treatment lines	2.47	3.07	3.07	0.06	10.43	0.57	8.76	0.20	0.19 Hexane
Plating operations	7.99	7.99	7.99	-	-	-	-	2.69	2.69 HCl
Boiler	0.01	0.05	0.05	0.004	0.64	0.04	0.54	0.01	0.01 Hexane
Abrasive blasters	0.16	0.14	0.14	-	-	-	-	-	-
Regenerative Thermal Oxidizer (RTO)	0.04	0.17	0.17	0.01	2.20	0.12	1.85	0.04	0.04 Hexane
Total:	10.72	11.60	11.60	0.09	15.77	65.65	13.24	9.68	6.69 Methanol

**Appendix A: Emissions Calculations
Revision Summary**

Company Name: Rightway Fasteners, Inc.
Address City IN Zip: 7945 S International Dr., Columbus, IN 47201
Permit No.: M005-34077-00048
Revision No.: 005-36921-00048
Reviewer: Brandon Miller

Process	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	Total HAPs	Worst single HAP
Annealing Oven HTA-01	0.00026	0.0010	0.0010	0.00008	0.014	0.00075	0.011	0.00026	0.00025 Hexane
Annealing Oven HTA-02	0.00026	0.0010	0.0010	0.00008	0.014	0.00075	0.011	0.00026	0.00025 Hexane
RTO	0.04	0.17	0.17	0.01	2.20	0.12	1.85	0.042	0.040 Hexane
Cold Forming Machines	-	-	-	-	-	24.03	-	-	-

Modified Dip/Spin Lines

Proposed Line A	-	-	-	-	-	8.96	-	1.48	1.48 Methanol
Existing Line A	-	-	-	-	-	2.90	-	1.04	1.04 Methanol
Line A Difference	-	-	-	-	-	6.07	-	0.44	0.44 Methanol
Proposed Line B	-	-	-	-	-	10.55	-	1.74	1.74 Methanol
Existing Line B	-	-	-	-	-	3.41	-	1.22	1.22 Methanol
Line B Difference	-	-	-	-	-	7.14	-	0.51	0.51 Methanol
Proposed Line D	-	-	-	-	-	10.55	-	1.74	1.74 Methanol
Existing Line D	-	-	-	-	-	3.41	-	1.22	1.22 Methanol
Line D Difference	-	-	-	-	-	7.14	-	0.51	0.51 Methanol
Proposed Line E	-	-	-	-	-	10.55	-	1.74	1.74 Methanol
Existing Line E	-	-	-	-	-	3.41	-	1.22	1.22 Methanol
Line E Difference	-	-	-	-	-	7.14	-	0.51	0.51 Methanol

Net Increase	0.04	0.17	0.17	0.01	2.23	51.65	1.87	2.02	1.98 Methanol
---------------------	-------------	-------------	-------------	-------------	-------------	--------------	-------------	-------------	----------------------

**Appendix A: Emissions Calculations
Surface Coating Lines**

Company Name: Rightway Fasteners, Inc.
Address City IN Zip: 7945 S International Dr., Columbus, IN 47201
Permit No.: M005-34077-00048
Revision No.: 005-36921-00048
Reviewer: Brandon Miller

Coating details				Weight %			Volume %			HAPs			
Material	Specific gravity	Density (lb/gal)	VOC density (lb/gal)	Volatile (water & organics)	Water	VOC	Volatile (water & organics)	Water	VOC	VOC content (lb/gal coating)	VOC content (lb/gal coating less water)	VOC content (lb/gal coating solids)	Weight % Methanol
Geomet 720 LV	1.365	11.38	6.69	55.1%	44.0%	11.1%	79.0%	60.1%	18.9%	1.27	3.17	6.03	4.0%
Geomet 720	NL	11.40	NL	59.5%	33.4%	26.1%	83.8%	45.2%	38.6%	2.98	5.43	18.37	4.3%
Neotorquer B-2	1.03	8.59	6.69	80.1%	78.0%	2.1%	83.0%	80.3%	2.7%	0.18	0.91	1.05	0.0%

Note:
These coatings are the worst-case coatings used in the coating lines and are used for calculating PTE.
These coatings comply with 326 IAC 8-2-9
NL = not listed

Methodology:

Density (lb/gal) = Specific gravity * Density of water (8.34 lb/gal)
Weight % volatile (water & organics) = Weight % VOC + Weight % water
Volume % water = Weight % water * Coating density (lb/gal) / Density of water (8.34 lb/gal)
Volume % VOC = Volume % volatile - Volume % water
Weight % VOC = Volume % VOC * VOC density (lb/gal) / Coating density (lb/gal)
VOC content (lb/gal coating) = Density (lb/gal) * Weight % VOC
VOC content (lb/gal coating less coating) = Density (lb/gal) * Weight % VOC / (1 - Volume % water)
VOC content (lb/gal coating solids) = Density (lb/gal) * Weight % VOC / (1 - Volume % volatile)

Updated PTE from coating lines

Emission Unit	Material	Part weight (g)	Weight of parts/basket (lb)	Parts/basket	Max throughput (basket/hr)	Max throughput (parts/hr)	Target dry coating weight (mg/dm ²)	Part surface area (dm ²)	Dry coating usage (mg/part)	Dry coating usage rate (lb/hr)	Coating usage rate (gal/hr)	PTE of VOC (lb/hr)	PTE of VOC (lb/day)	PTE of VOC (ton/yr)	PTE of Methanol (ton/yr)
A-Line	Geomet 720	62	160	1171	17	19,900	250	0.439	109.8	4.81	0.688	2.05	49.12	8.96	1.48
B-Line	Geomet 720	62	160	1171	20	23,411	250	0.439	109.8	5.66	0.809	2.41	57.79	10.55	1.74
C-Line	Neotorquer B-2	62	110	805	20	16,095	50	0.439	22.0	0.78	0.093	0.02	0.40	0.07	0.00
D-Line	Geomet 720	62	160	1171	20	23,411	250	0.439	109.8	5.66	0.809	2.41	57.79	10.55	1.74
E-Line	Geomet 720	62	160	1171	20	23,411	250	0.439	109.8	5.66	0.809	2.41	57.79	10.55	1.74
Topcoater	Neotorquer B-2	62	110	805	20	16,095	50	0.439	22.0	0.78	0.093	0.02	0.40	0.07	0.00
Totals:												9.30	223.28	40.75	6.69

PTE prior to 2016 Modification of coating lines A, B, D, and E

A-Line	Geomet 720 LV	62	160	1171	17	19,900	250	0.4	109.75	4.8148	0.52	0.66	15.87	2.90	1.04
B-Line	Geomet 720 LV	62	160	1171	20	23,411	250	0.4	109.75	5.6645	0.61	0.78	18.67	3.41	1.22
D-Line	Geomet 720 LV	62	160	1171	20	23,411	250	0.4	109.75	5.6645	0.61	0.78	18.67	3.41	1.22
E-Line	Geomet 720 LV	62	160	1171	20	23,411	250	0.4	109.75	5.6645	0.61	0.78	18.67	3.41	1.22

Notes:
These calculations are referencing part M10 x 1.35, 88 mm L
These coatings are applied by dip and spin, which has a transfer efficiency of 100%. Therefore, there are no potential particulate emissions

Methodology:

Parts/basket = Weight of parts per basket (lb) / (Part weight (g) * 0.0022046 lb/gr)
Max throughput (parts/hr) = Parts/basket * Max throughput (basket/hr)
Dry coating usage (mg/part) = Target dry coating weight (mg/dm²) * Part surface area (dm²)
Dry coating usage rate (lb/hr) = Max throughput (parts/hr) * Dry coating usage (mg/part) * 1 g/1000 mg * 0.0022046 lb/gr
Coating usage rate (gal/hr) = Dry coating usage rate (lb/hr) / (1 - Volume % volatile) / Density (lb/hr)
PTE of VOC (lb/hr) = VOC content (lb/gal coating) * Coating usage rate (gal/hr)
PTE of VOC (lb/day) = VOC content (lb/gal coating) * Coating usage rate (gal/hr) * 24 hrs/day
PTE of VOC (ton/yr) = VOC content (lb/gal coating) * Coating usage rate (gal/hr) * 8760 hrs/yr * 1 ton/2000 lbs
PTE of HAP (ton/yr) = Weight % HAP * Coating usage rate (gal/hr) * Density (lb/gal) * 8760 hrs/yr * 1 ton/2000 lbs

**Appendix A: Emissions Calculations
Cold Forming Machines
CTA01 through CTA15, CFA01, CPA02 through CPA05**

Company Name: Rightway Fasteners, Inc.
Address City IN Zip: 7945 S International Dr., Columbus, IN 47201
Permit No.: M005-34077-00048
Revision No.: 005-36921-00048
Reviewer: Brandon Miller

Unit ID	Material	Maximum Material Usage Rate (gal/hr)	Material Usage Rate (gal/yr)	Density (lb/gal)	VOC percentage by weight	Uncontrolled PTE of VOC (tons/yr)
CTA01	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA02	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA03	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA04	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA05	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA06	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA07	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA08	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA09	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA10	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA11	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA12	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA13	EZ Form 9280	1.5	13,140	7.67	0%	0
CTA14	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CTA15	Yumark FL-30	1	8,760	7.40	4.0%	1.30
CFA01	Suncreaner G-2000B	1.5	13,140	7.84	0%	0
	Sunformer M-7948	1.5	13,140	8.60	0%	0
CPA02	CKK Center Oil SFCU	1.5	13,140	8.10	0%	0
CPA03	Yumark CF-3430	1.5	13,140	7.59	5.9%	2.94
CPA04	Yumark CF-3430	1.5	13,140	7.59	5.9%	2.94
CPA05	EZ Form 9280	1.5	13,140	7.67	0%	0
Total						24.03

Methodology

Material Usage provided by Rightway Fasteners, Inc.

The cold forming machines are constantly flooded with cutting oil. Therefore, the particulates are negligible.

Material Usage Rate (gal/yr) = Maximum Material Usage Rate (gal/hr) * 8,760 hrs/yr

Uncontrolled PTE of VOC (tons/yr) = Material Usage Rate (gal/yr) * Density (lbs/gal) * VOC percentage by Weight * (1 ton/2,000 lbs)

CFA01 can use either material listed but not both simultaneously. The worst case was added to the VOC total.

There are no HAPs in the liquids listed above.

**Appendix A: Emissions Calculations
Coating ovens**

Company Name: Rightway Fasteners, Inc.
Address City IN Zip: 7945 S International Dr., Columbus, IN 47201
Permit No.: M005-34077-00048
Revision No.: 005-36921-00048
Reviewer: Brandon Miller

Emission unit	Heat Input Capacity (MMBtu/hr)	Total Potential Throughput (MMCF/yr)
A-Line curing oven	0.794	6.8
B-Line curing oven	0.794	6.8
C-Line curing oven	0.780	6.7
D-Line curing oven	1.389	11.9
D-Line degreaser dryer	0.397	3.4
E-Line curing oven	1.389	11.9
Topcoater curing oven	0.265	2.3
Totals:	5.807	49.9

	Pollutant						
	PM*	PM ₁₀ *	Direct PM _{2.5} *	SO ₂	NO _x	VOC	CO
Emission Factor (lb/MMCF)	1.9	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission (tons/yr)	0.05	0.19	0.19	0.01	2.49	0.14	2.09

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

PM_{2.5} emission factor is filterable and condensable PM_{2.5} combined.

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor (lb/MMCF)	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission (tons/yr)	5.237E-05	2.993E-05	1.870E-03	4.489E-02	8.479E-05

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	
Emission Factor (lb/MMCF)	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission (tons/yr)	1.247E-05	2.743E-05	3.491E-05	9.476E-06	5.237E-05	
	Total HAPs:					4.706E-02

Notes:

There are no process emissions from these coating ovens.

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

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

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

Methodology:

Potential Throughput (MMCF/yr) = Heat Input Capacity Each (MMBtu/hr) * 8,760 hrs/yr * High Heat Value (1 MMCF/1,020 MMBtu)

Potential Emission (tons/yr) = Total Potential Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Heat treatment furnace lines (HA-01 to HA-06) and Annealing furnaces (HTA-01 and HTA-02)

Company Name: Rightway Fasteners, Inc.
Address City IN Zip: 7945 S International Dr., Columbus, IN 47201
Permit No.: M005-34077-00048
Revision No.: 005-36921-00048
Reviewer: Brandon Miller

Furnace	HA-01		HA-02		HA-03		HA-04		HA-05		HA-06		HA-07		HTA-01 - Annealing		HTA-02 - Annealing	
	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)
Prewash heater	-	-	-	-	-	-	-	-	0.198	1.7	0.020	0.2	0.198	1.7	0.032	0.27	0.032	0.27
Hardening	1.765	15.2	1.765	15.2	1.032	8.9	1.765	15.2	1.714	14.7	0.910	7.8	1.714	14.7				
Generator flare	0.648	5.6	0.648	5.6	0.119	1.0	0.648	5.6	0.119	1.0	0.240	2.1	0.240	2.1				
Tempering	1.308	11.2	1.308	11.2	1.488	12.8	1.308	11.2	1.270	10.9	1.110	9.5	1.667	14.3				
Smoke killer/ eater	0.205	1.8	0.205	1.8	0.119	1.0	0.205	1.8	0.198	1.7	0.100	0.9	0.198	1.7				
Totals:	3.926	33.7	3.926	33.7	2.758	23.7	3.926	33.7	3.499	28.3	2.380	20.3	4.017	34.5				

Emission Factor (lb/MMCF)	Criteria Pollutants						
	PM*	PM ₁₀ *	Direct PM _{2.5} *	SO ₂	NO _x	VOC	CO
PM*	1.9	7.6	7.6	0.6	100.0	5.5	84.0
PTE of HA-01 (tons/yr)	0.032	0.128	0.128	0.010	1.686	0.093	1.416
PTE of HA-02 (tons/yr)	0.032	0.128	0.128	0.010	1.686	0.093	1.416
PTE of HA-03 (tons/yr)	0.023	0.090	0.090	0.007	1.184	0.065	0.995
PTE of HA-04 (tons/yr)	0.032	0.128	0.128	0.010	1.686	0.093	1.416
PTE of HA-05 (tons/yr)	0.027	0.108	0.108	0.009	1.417	0.078	1.191
PTE of HA-06 (tons/yr)	0.019	0.077	0.077	0.006	1.013	0.056	0.851
PTE of HA-07 (tons/yr)	0.033	0.131	0.131	0.010	1.725	0.095	1.449
PTE of HTA-01 (tons/yr)	0.0003	0.001	0.001	0.0001	0.014	0.001	0.011
PTE of HTA-02 (tons/yr)	0.0003	0.001	0.001	0.0001	0.014	0.001	0.011
PTE of Air agitation**	2.27	2.27	2.27	-	-	-	-
Totals:	2.472	3.066	3.066	0.063	10.425	0.573	8.757

*PM emission factor is filterable PM only. PM₁₀ emission factor is filterable and condensable PM₁₀ combined. PM_{2.5} emission factor is filterable and condensable PM_{2.5} combined.
**Calculations in Appendix A to MSOP M005-18698-00048 included PTE for particulate emissions from "air agitation" for the furnace lines

Emission Factor (lb/MMCF)	HAPs - Organics					HAPs - Metals					Total HAPs
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Lead	Cadmium	Chromium	Manganese	Nickel	
2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03		
PTE of HA-01 (tons/yr)	3.540E-05	2.023E-05	1.264E-03	3.035E-02	5.732E-05	8.429E-06	1.854E-05	2.360E-05	6.406E-06	3.540E-05	
PTE of HA-02 (tons/yr)	3.540E-05	2.023E-05	1.264E-03	3.035E-02	5.732E-05	8.429E-06	1.854E-05	2.360E-05	6.406E-06	3.540E-05	
PTE of HA-03 (tons/yr)	2.487E-05	1.421E-05	8.882E-04	2.132E-02	4.027E-05	5.922E-06	1.303E-05	1.658E-05	4.500E-06	2.487E-05	
PTE of HA-04 (tons/yr)	3.540E-05	2.023E-05	1.264E-03	3.035E-02	5.732E-05	8.429E-06	1.854E-05	2.360E-05	6.406E-06	3.540E-05	
PTE of HA-05 (tons/yr)	2.977E-05	1.701E-05	1.063E-03	2.551E-02	4.819E-05	7.087E-06	1.559E-05	1.984E-05	5.386E-06	2.977E-05	
PTE of HA-06 (tons/yr)	2.128E-05	1.216E-05	7.601E-04	1.824E-02	3.446E-05	5.067E-06	1.115E-05	1.419E-05	3.851E-06	2.128E-05	
PTE of HA-07 (tons/yr)	3.622E-05	2.070E-05	1.294E-03	3.105E-02	5.865E-05	8.625E-06	1.897E-05	2.415E-05	6.555E-06	3.622E-05	
PTE of HTA-01 (tons/yr)	2.862E-07	1.636E-07	1.022E-05	2.453E-04	4.634E-07	6.815E-08	1.499E-07	1.908E-07	5.179E-08	2.862E-07	
PTE of HTA-02 (tons/yr)	2.862E-07	1.636E-07	1.022E-05	2.453E-04	4.634E-07	6.815E-08	1.499E-07	1.908E-07	5.179E-08	2.862E-07	
Totals:	0.00022	0.00013	0.00782	0.18765	0.00035	0.00005	0.00011	0.00015	0.00004	0.00022	

Notes:
There are no process emissions from these furnaces.
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Methodology:
Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) * 8,760 hrs/yr * High Heat Value (1 MMCF/1,020 MMBtu)
Potential Emission (tons/yr) = Total Potential Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * 1 ton/2000 lbs

**Appendix A: Emissions Calculations
Plating Operations**

Company Name: Rightway Fasteners, Inc.
Address City IN Zip: 7945 S International Dr., Columbus, IN 47201
Permit No.: M005-34077-00048
Revision No.: 005-36921-00048
Reviewer: Brandon Miller

Process	EE (A-hr/mil-ft ²)	e	C (oz/gal)	D (A/ft ²)	EF (gr/dscf)	Q (cfm)	PTE of PM (lb/hr)	PTE of PM (lb/day)	PTE of PM (ton/yr)	
Alkaline degreasing 1	17.8	45%	2.7	60	0.0020	1333	0.023	0.54	0.10	
Alkaline degreasing 2	17.8	45%	2.7	60	0.0020	2311	0.039	0.94	0.17	
Alkaline electrocleaning	17.8	60%	7.2	60	0.0040	3520	0.120	2.88	0.53	
Zinc electroplating	13.8	60%	17.3	60	0.0074	16500	1.047	25.12	4.58	
Acid electrocleaning 1	17.8	95%	13.44	90	0.0070	3800	0.229	5.49	1.00	
Acid electrocleaning 2	17.8	95%	13.44	90	0.0070	3800	0.229	5.49	1.00	
Calculated using Equation 1 from AP-42, Section 12.20:							Total:	1.686	40.47	7.39

EF = $3.1 \times 10^{-7} \times EE/e \times C \times D$

Where:
EF = emission factor, gr/dscf
EE = electrochemical equivalent, A-hr/mil-ft²
e = cathode efficiency, %
C = bath concentration, oz/gal
D = current density, A/ft²

PTE of PTE (lb/hr) = EF (gr/dscf) * Q (cfm)

Process	F _{evap} (gal/ft ²)	A (ft ²)	c (% weight)	T _{BP} (°C)	sp gr _{liq}	E (lb/hr)	PTE of PM & HCl (lb/hr)	PTE of PM & HCl (lb/day)	PTE of PM & HCl (ton/yr)
Pickling	0.002	67	10.5%	100	1.17	0.137	0.137	3.30	0.60

Calculated using the Vanaire technique based on component vapor pressure (as provided by the source).

$E = F_{evap} \times A \times 8.34 \times c / (T_{BP}/100) \times sp\ gr_{liq}$

Where:
E = emission, lb/hr
F_{evap} = evaporation rate factor, gal/ft²
A = tank surface area, ft²
c = concentration, % by wt
T_{BP} = liquid boiling point, °C
sp gr_{liq} = liquid specific gravity

PTE of PTE (lb/hr) = E (lb/hr)

Process	a	Rb	σ	E (gr/dscf)	Q (cfm)	Mist production (lb/hr)	PTE of PM & chromate (lb/hr)	PTE of PM & chromate (lb/day)	PTE of PM & chromate (ton/yr)
Chromate coating	0.024	0.041	0.0049	0.0367	7.06	0.0022	0.00011	0.0027	0.00049

Calculated using equation 4 from AP-42, Section 12.20

$E = 1.9 \times \sigma / Rb \left(\frac{(1-2a+9a^2)^{0.5} + (a-1)}{(1+3a) - (1-2a+9a^2)^{0.5}} \right)^{0.5}$

Where:
E = emission factor, gr/dscf
 $a = 0.072 \times Rb^2 / \sigma$
R_b = average bubble radius, in. = 1.03 mm * 0.03936996 in/mm
σ = surface tension of bath, lb/ft = 72 dynes/cm * 6.85217659*10⁻⁵ lb/ft / dynes/cm

Mist production (lb/hr) = E (gr/dscf) * Q (cfm)

PTE of PM & chromate (lb/hr) = Mist production * 5% of mist as chromate

Process	PTE of PM & HCl (lb/hr)	PTE of PM & HCl (ton/yr)	PTE of PM (ton/yr)	PTE of HCl (ton/yr)	PTE of chromate (ton/yr)
HCl storage tank	0.020	0.088	7.99	2.69	0.00049
Total:			7.99	2.69	0.00049

This PTE was provided in Appendix A to the TSD for MSOP #005-18698-00048.

Notes:

These calculations are based on information contained in the MSOP application received on March 18, 2004 and Appendix A to the TSD for MSOP #005-18698-00048.

Methodology:

PTE (lb/day) = PTE (lb/hr) * 24 hrs/day

PTE (ton/yr) = PTE (lb/hr) * 8760 hrs/yr * 1 ton/2000 lbs

PTE of HCl = PTE of PM from acid electrocleaning tanks + PTE of HCl from pickling and storage tanks

Maximum throughput (barrels/hr)	Weight per barrel (lb)	Process weight rate (ton/hr)	Allowable emissions (lb/hr)
30	110	1.65	5.73

Methodology:

Process weight rate (ton/hr) = Maximum throughput (barrels/hr) * Weight per barrel (lb) / 2000 lb/ton

Allowable emission (lb/hr) = 4.10 * Process weight rate (ton/hr)^{0.67}, pursuant to 326 IAC 6-3-2(e)

**Appendix A: Emissions Calculations
Natural Gas Boiler**

Company Name: Rightway Fasteners, Inc.
Address City IN Zip: 7945 S International Dr., Columbus, IN 47201
Permit No.: M005-34077-00048
Revision No.: 005-36921-00048
Reviewer: Brandon Miller

Emission unit	Heat Input Capacity (MMBtu/hr)	Total Potential Throughput (MMCF/yr)
Boiler	1.500	12.9

	Pollutant						
	PM*	PM ₁₀ *	Direct PM _{2.5} *	SO ₂	NO _x	VOC	CO
Emission Factor (lb/MMCF)	1.9	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission (tons/yr)	0.01	0.05	0.05	0.00	0.64	0.04	0.54

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

PM_{2.5} emission factor is filterable and condensable PM_{2.5} combined.

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor (lb/MMCF)	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission (tons/yr)	1.353E-05	7.729E-06	4.831E-04	1.159E-02	2.190E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor (lb/MMCF)	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission (tons/yr)	3.221E-06	7.085E-06	9.018E-06	2.448E-06	1.353E-05
Total HAPs:					1.216E-02

Notes:

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

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

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

Methodology:

Potential Throughput (MMCF/yr) = Heat Input Capacity Each (MMBtu/hr) * 8,760 hrs/yr * High Heat Value (1 MMCF/1,020 MMBtu)

Potential Emission (tons/yr) = Total Potential Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * 1 ton/2000 lbs

**Appendix A: Emissions Calculations
Abrasive blasting**

Company Name: Rightway Fasteners, Inc.
Address City IN Zip: 7945 S International Dr., Columbus, IN 47201
Permit No.: M005-34077-00048
Revision No.: 005-36921-00048
Reviewer: Brandon Miller

Table 1 - Emission Factors for Abrasives

Abrasive	lb PM/lb abrasive	lb PM ₁₀ /lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	0.70

Uncontrolled PTE			Emission factors		Uncontrolled PTE - PM		Uncontrolled PTE - PM ₁₀	
Emission Unit	Abrasive type	Abrasive usage rate (lb/hr)	PM (lb/lb abrasive)	PM ₁₀ (lb/lb PM)	lb/hr	ton/yr	lb/hr	ton/yr
SBA-01	Steel shot	1.0	0.004	0.86	0.004	0.018	0.003	0.015
SBA-02	Steel shot	1.0	0.004	0.86	0.004	0.018	0.003	0.015
SBA-03	Steel shot	1.0	0.004	0.86	0.004	0.018	0.003	0.015
SBA-04	Ceramic beads	0.5	0.010	0.700	0.005	0.022	0.004	0.015
SBA-05	Steel shot	1.0	0.004	0.86	0.004	0.018	0.003	0.015
SBA-06	Steel shot	1.0	0.004	0.86	0.004	0.018	0.003	0.015
SBA-07	Steel shot	1.0	0.004	0.86	0.004	0.018	0.003	0.015
SBA-08	Steel shot	1.0	0.004	0.86	0.004	0.018	0.003	0.015
SBA-09	Steel shot	1.0	0.004	0.86	0.004	0.018	0.003	0.015
Totals:					0.037	0.162	0.031	0.136

Notes:

Emission factors for ceramic beads is equivalent to emission factors for grit/other abrasives in Table 1.
Abrasive usage rates are based on historical usage data provided by the source, rounded up for worst-case scenario.
Emission factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)
PM₁₀ = PM_{2.5}

Methodology:

Uncontrolled PTE of PM (lb/hr) = Flow rate (lb/hr) * PM emission factor (lb/lb abrasive)
Uncontrolled PTE of PM₁₀ (lb/hr) = Uncontrolled PTE of PM (lb/hr) * PM₁₀ emission factor (lb/lb PM)
Uncontrolled PTE (lb/day) = Uncontrolled PTE (lb/hr) * 24 hrs/day
Uncontrolled PTE (ton/yr) = Uncontrolled PTE (lb/hr) * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Regenerative Thermal Oxidizer****Company Name:** Rightway Fasteners, Inc.**Address City IN Zip:** 7945 S International Dr., Columbus, IN 47201**Permit No.:** M005-34077-00048**Revision No.:** 005-36921-00048**Reviewer:** Brandon Miller

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
5.1	1020	44.1

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.04	0.17	0.17	0.01	2.20	0.12	1.85

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

PM2.5 emission factor is filterable and condensable PM2.5 combined.

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

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

Hazardous Air Pollutants (HAPs)

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	4.6E-05	2.6E-05	1.7E-03	0.04	7.5E-05	0.04

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.1E-05	2.4E-05	3.1E-05	8.4E-06	4.6E-05	1.2E-04
					Total HAPs	0.04
					Worst HAP	0.04

Methodology is the same as above.

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

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



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

May 10, 2016
Rightway Fasteners, Inc.
005-36921-00048

Dear Concerned Citizen(s):

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

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

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

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

Enclosure
PN AAA Cover.dot 2/17/2016



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Carol S. Comer
Commissioner

May 10, 2016

Mr. Patrick McCluskey
Rightway Fasteners, Inc.
7945 International Drive
Columbus, IN 47201

Re: Public Notice
Rightway Fasteners, Inc.
Permit Level: Significant Permit Revision
Permit Number: 005-36921-00048

Dear Mr. McCluskey:

Enclosed is a copy of your draft Significant Permit Revision, 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 Republic in Columbus, Indiana publish the abbreviated version of the public notice no later than May 13, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Bartholomew County Public Library, 536 5th Street in Columbus, 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 Brandon Miller, 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 4-5374 or dial (317) 234-5374.

Sincerely,

Greg Hotopp

Greg Hotopp
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Carol S. Comer
Commissioner

May 10, 2016

To: Bartholomew County Public Library

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

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

Applicant Name: Rightway Fasteners, Inc.
Permit Number: 005-36921-00048

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

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

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

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

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

Enclosures
PN Library.dot 2/16/2016



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Carol S. Comer
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

May 10, 2016

The Republic
333 Second Street
PO Box 3001
Columbus, IN 47201

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Rightway Fasteners, Inc., Bartholomew 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 May 13, 2016.

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

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call 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 Permit Revision
Permit Number: 005-36921-00048

Enclosure

PN Newspaper.dot 2/17/2016

Mail Code 61-53

IDEM Staff	GHOTOPP 5/10/2016 Rightway Fasteners, Inc 005-36921-00048 Draft		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Patrick McCluskey Rightway Fasteners, Inc 7945 S International Dr Columbus IN 47201 (Source CAATS)										
2		Ron Miller Plant Manager Rightway Fasteners, Inc 7945 S International Dr Columbus IN 47201 (RO CAATS)										
3		Columbus City Council and Mayors Office 123 Washington St Columbus IN 47201 (Local Official)										
4		Mr. Elbert Held 734 Hutchins Columbus IN 47201 (Affected Party)										
5		Mr. Lcnfc 1039 Sycamore St Columbus IN 47201 (Affected Party)										
6		Bartholomew Co Public Library 536 Fifth St. Columbus IN 47201-6225 (Library)										
7		Bartholomew County Commissioners 440 Third Street Columbus IN 47202 (Local Official)										
8		Mr. Jean Terpstra 3210 Grove Pkwy Columbus IN 47203 (Affected Party)										
9		Terry Lowe 1079 Spring Meadow Court Franklin IN 46131 (Affected Party)										
10		Mr. Charles Mitch 3210 Grove Parkway Columbus IN 47203 (Affected Party)										
11		Bartholomew County Health Department 440 3rd Street, Suite 303 Columbus IN 47201 (Health Department)										
12		Robert Downey Alpine Environmental, Inc 1715 West Foxcliff Drive South Martinsville IN 46151 (Consultant)										
13												
14												
15												

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
12			