NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

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

for Essex Group, Inc. - Franklin in Johnson County

Significant Source Modification No.: 081-41985-00021
Significant Permit Modification No.: 081-42198-00021

The Indiana Department of Environmental Management (IDEM) has received an application from Essex Group, Inc. - Franklin, located at 3200 Essex Drive, Franklin, IN, 46131, for a significant modification of its Part 70 Operating Permit issued on June 5, 2017. If approved by IDEM’s Office of Air Quality (OAQ), this proposed modification would allow Essex Group, Inc. - Franklin to make certain changes at its existing source. Essex Group, Inc. - Franklin has applied to replace oven 202 with two (2) new electric catalytic ovens designated as Ovens 701-1 and 701-2.

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.

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

Johnson County Public Library
401 State Street
Franklin, IN 46131

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

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

How can you participate in this process?

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

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

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM’s mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SSM 081-41985-00021 and SPM 081-42198-00021 in all correspondence.

Comments should be sent to:

Deena Levering
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for Deena Levering or (317) 234-5400
Or dial directly: (317) 234-5400
Fax: (317) 232-6749 attn: Deena Levering
E-mail: dleverin@idem.IN.gov

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

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

What will happen after IDEM makes a decision?

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

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

Heath Hartley, Section Chief
Permits Branch
Office of Air Quality
Mr. David Miller
Essex Group, Inc. - Franklin
3200 Essex Drive
Franklin, IN 46131

Re: 081-41985-00021
Significant Source Modification

Dear Mr. Miller:

Essex Group, Inc. - Franklin was issued Part 70 Operating Permit Renewal No. T081-37526-00021 on June 5, 2017 for a stationary magnet wire manufacturing plant located at 3200 Essex Drive, Franklin, Indiana 46131. An application to modify the source was received on September 30, 2019. Pursuant to the provisions of 326 IAC 2-7-10.5, a Significant Source Modification is hereby approved as described in the attached Technical Support Document.

Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

Two (2) NTT wire enameling process lines, identified as 701-1 and 701-2, approved for construction in 2019, each with a maximum throughput of 80 pounds of copper wire per hour and 0.017 gallons of enamel per pound of wire and each consisting of the following units:

1. An annealer;
2. Enamel applicators using flow coating;
3. An electric curing oven;
4. A wire cooler; and
5. A topical lube applicator max 0.00036 gallons per pound of wire.

Each using an electric catalytic oxidizer as control, and exhausting through stack S701-1 and S701-2, respectively.

The following construction conditions are applicable to the proposed modification:

General Construction Conditions
1. 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.

Effective Date of the Permit
3. Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
DRAFT

Commenced Construction

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(j), 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.

Approval to Construct

6. Pursuant to 326 IAC 2-7-10.5(h)(2), this Significant Source Modification authorizes the construction of the new emission unit(s), when the Significant Source Modification has been issued.

Pursuant to 326 IAC 2-7-10.5(m), the emission units constructed under this approval shall not be placed into operation prior to revision of the source’s Part 70 Operating Permit to incorporate the required operation conditions.

Pursuant to 326 IAC 2-7-12, operation of the new emission unit(s) is not approved until the Significant Permit Modification has been issued. Operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification in accordance with 326 IAC 2-7-10.5(m)(2) and 326 IAC 2-7-12 (Permit Modification).

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

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

If you have any questions regarding this matter, please contact Deena Levering, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 234-5400 or (800) 451-6027, and ask for Deena Levering or (317) 234-5400.

Sincerely,

Heath Hartley, Section Chief
Permits Branch
Office of Air Quality

Attachments: Significant Source Modification and Technical Support Document

cc: File - Johnson County
    Johnson County Health Department
    U.S. EPA, Region 5
    Compliance and Enforcement Branch
Significant Source Modification to a Part 70 Source

OFFICE OF AIR QUALITY

DRAFT

Essex Group, Inc. - Franklin
3200 Essex Drive
Franklin, Indiana 46131

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for new and/or existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Significant Source Modification: 081-41985-00021
Master Agency Interest ID.: 11835

Issued by:
Heath Hartley, Section Chief
Permits Branch
Office of Air Quality

Issuance Date:
TABLE OF CONTENTS

SECTION A  SOURCE SUMMARY ......................................................................................................... 5
A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]
A.2 Emission Units and Pollution Control Equipment Summary
[326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]
A.3 Specifically Regulated Insignificant Activities
[326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]
A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

SECTION B  GENERAL CONDITIONS ................................................................................................... 7
B.1 Definitions [326 IAC 2-7-1]
B.2 Permit Term
[326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]
B.3 Term of Conditions [326 IAC 2-1.1-9.5]
B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]
B.5 Severability [326 IAC 2-7-5(5)]
B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]
B.11 Emergency Provisions [326 IAC 2-7-16]
B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]
B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]
B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]
B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]
B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]
B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
B.18 Permit Revision Under Economic Incentives and Other Programs
[326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]
B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]
B.20 Source Modification Requirement [326 IAC 2-7-16]
B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]
B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
B.23 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-7-5(7)][326 IAC 2-1.1-7]
B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

SECTION C  SOURCE OPERATION CONDITIONS ............................................................................. 18
Emission Limitations and Standards [326 IAC 2-7-5(1)] ........................................................................ 18
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 Opacity [326 IAC 5-1]
C.3 Open Burning [326 IAC 4-1][IC 13-17-9]
C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]
C.5 Fugitive Dust Emissions [326 IAC 6-4]
C.6 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]
Testing Requirements [326 IAC 2-7-6(1)] .................................................................................. 20
C.7 Performance Testing [326 IAC 3-6]
Compliance Requirements [326 IAC 2-1.1-11] ........................................................................... 20
C.8 Compliance Requirements [326 IAC 2-1.1-11]
Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)].............................. 20
C.9 Compliance Monitoring
[326 IAC 2-7-5(1)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]
C.10 Instrument Specifications [326 IAC 2-1.1-11][326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]................................. 21
C.11 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3]
C.12 Risk Management Plan [326 IAC 2-7-5(11)][40 CFR 68]
C.13 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5]
[326 IAC 2-7-6]
C.14 Actions Related to Noncompliance Demonstrated by a Stack Test
[326 IAC 2-7-5][326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]..................... 24
C.15 Emission Statement
[326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]
C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]
C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11]
[40 CFR 64][326 IAC 3-8]

Stratospheric Ozone Protection ........................................................................................................ 26
C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS ......................................................... 27
Emission Limitations and Standards [326 IAC 2-7-5(1)]............................................................... 27
D.1.1 PSD Minor Limits [326 IAC 2-2]
D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-8]
D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

Compliance Determination Requirements [326 IAC 2-7-5(1)].................................................... 28
D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]
D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-4][326 IAC 8-1-2(a)]
D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2(b),(c)]
D.1.7 Testing Requirements [326 IAC 2-7-5(1),(6)][326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)].............................. 30
D.1.8 Catalytic Oxidizer [40 CFR 64]
D.1.9 Catalytic Oxidizer Duct Pressure or Fan Amperage

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]..................... 31
D.1.10 Record Keeping Requirement
D.1.11 Reporting Requirements

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS ......................................................... 33
Emission Limitations and Standards [326 IAC 2-7-5(1)]............................................................... 33
D.2.1 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]
D.2.2 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]
D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]..................... 34
D.2.4 Record Keeping Requirements

SECTION E.1 NESHAP ..................................................................................................................... 35
National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements
[326 IAC 2-7-5(1)]......................................................................................................................... 35
E.1.2 Surface Coating of Miscellaneous Metal Parts and Products NESHAP [40 CFR Part 63, Subpart MMMM][326 IAC 20-80]

SECTION E.2 NESHAP ........................................................................................................................... 38

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)] ......................................................................................................................... 38


Emission Limitations and Standards [326 IAC 2-7-5(1)] ........................................................................... 39

E.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

CERTIFICATION ........................................................................................................................................ 40

EMERGENCY OCCURRENCE REPORT .................................................................................................. 41

Part 70 Quarterly Report ........................................................................................................................... 43

Part 70 Quarterly Report ........................................................................................................................... 44

Part 70 Quarterly Report ........................................................................................................................... 45

QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT .............................................. 46

Attachment A: 40 CFR 63, Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

Attachment B: 40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary magnet wire manufacturing plant.

Source Address: 3200 Essex Drive, Franklin, Indiana 46131
General Source Phone Number: 317-738-7749
SIC Code: 3357 (Drawing and Insulating of Nonferrous Wire)
County Location: Johnson
Source Location Status: Attainment for all criteria pollutants
Source Status: Part 70 Operating Permit Program
Minor Source, under PSD and Emission Offset Rules
Major Source, Section 112 of the Clean Air Act
Not 1 of 28 Source Categories

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

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

(a) Eight (8) HM wire enameling process lines, all constructed in 1993, identified as emission unit numbers 203, 204, 205, 206, 253, 254, 255, and 256, with a maximum rating of 850 pounds of magnet wire per hour, each. Each process line consists of an annealer, enamel applicators, a curing oven, a wire cooler, and a topical lube applicator. Emissions are controlled by catalytic oxidizers, internal to each curing oven, and exhausting to stacks SO203, SO204, SO205, SO206, SO253, SO254, SO255, and SO256, respectively.

(b) Four (4) MI wire enameling process lines, all constructed in 1993, identified as emission units 201, 202, 251, and 252, with a maximum rating of 850 pounds of magnet wire per hour, each. Each process line consists of an annealer, enamel applicators, a curing oven, a wire cooler, and a topical lube applicator. Emissions are controlled by catalytic oxidizers, internal to each curing oven, and exhausting to stacks SO201, SO202, SO251, and SO252, respectively.

(c) One (1) cleaning area, identified as CLRM1, consisting of tanks 1 through 3, with a capacity of 600 gallons, each, and exhausting through stacks SCT1, SCT2, and SCT3. Tank 3 contains non-HAP thinners.

Under 40 CFR 63, Subpart MMMM, HM curing ovens 203, 204, 205, 206, 253, 254, 255, and 256, MI curing ovens 201, 202, 251, and 252, and cleaning area tanks 1 and 2, are considered part of an existing affected source.

(d) Two (2) NTT wire enameling process lines, identified as 701-1 and 701-2, approved for construction in 2019, each with a maximum throughput of 80 pounds of copper wire per hour and 0.017 gallons of enamel per pound of wire and each consisting of the following
units:

1. An annealer;
2. Enamel applicators using flow coating;
3. An electric curing oven;
4. A wire cooler; and
5. A topical lube applicator max 0.00036 gallons per pound of wire.

Each using an electric catalytic oxidizer as control, and exhausting through stack S701-1 and S701-2, respectively.

Under 40 CFR 63, Subpart MMMM, the NTT wire enameling process lines 701-1 and 701-2, are considered part of a new affected source.

A.3 Specifically Regulated Insignificant Activities

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

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
(b) One (1) emergency diesel generator, identified as EG-1, installed in 1993, rated at 250 horsepower, engine displacement volume less than 30 liters per cylinder and exhausting to the atmosphere.


A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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

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

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

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

(a) This permit, T081-37526-00021, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

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

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

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

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

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

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

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

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A "responsible official" is defined at 326 IAC 2-7-1(35).

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

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

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

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.
The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee’s control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

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

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

1. An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
2. The permitted facility was at the time being properly operated;
3. During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
4. For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

   The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

   A description of the emergency;
   Any steps taken to mitigate the emissions; and
   Corrective actions taken.
The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

1. The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
2. The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
3. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
4. The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

All terms and conditions of permits established prior to T081-37526-00021 and issued pursuant to permitting programs approved into the state implementation plan have been either:

1. incorporated as originally stated,
2. revised under 326 IAC 2-7-10.5, or
3. deleted under 326 IAC 2-7-10.5.

Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit.
The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

1. That this permit contains a material mistake.
2. That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
3. That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:

1. Submitted at least nine (9) months prior to the date of the expiration of this permit; and
2. If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source’s failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the
deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

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

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

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

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

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

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

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1) and (c)(1).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(37)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

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

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

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ or U.S. EPA is required.
(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]
A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]
Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
B.23  Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

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

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

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

C.2 Opacity  [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

C.3 Open Burning  [326 IAC 4-1] [IC 13-17-9]

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

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

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

C.5 Fugitive Dust Emissions  [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Asbestos Abatement Projects  [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

   (A) Asbestos removal or demolition start date;

   (B) Removal or demolition contractor; or

   (C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

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

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

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.
Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6]

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

(a) For new units:

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

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

(c) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(d) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

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

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]
C.12 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

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

C.13 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5]

(I) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, 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.

(II) CAM Response to excursions or exceedances.

(a) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the 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 emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized
distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a Quality Improvement Plan (QIP). The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(c) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) CAM recordkeeping requirements.

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(c) of this condition

(2) ...
and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(33) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251
The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
/DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [40 CFR 64][326 IAC 3-8]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:
(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

(b) The address for report submittal is:

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

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

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

**Stratospheric Ozone Protection**

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.
SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Eight (8) HM wire enameling process lines, all constructed in 1993, identified as emission unit numbers 203, 204, 205, 253, 254, 255, and 256, with a maximum rating of 850 pounds of magnet wire per hour, each. Each process line consists of an annealer, enamel applicators, a curing oven, a wire cooler, and a topical lube applicator. Emissions are controlled by catalytic oxidizers, internal to each curing oven, and exhausting to stacks SO203, SO204, SO205, SO206, SO253, SO254, SO255, and SO256, respectively.

(b) Four (4) MI wire enameling process lines, all constructed in 1993, identified as emission units 201, 202, 251, and 252, with a maximum rating of 850 pounds of magnet wire per hour, each. Each process line consists of an annealer, enamel applicators, a curing oven, a wire cooler, and a topical lube applicator. Emissions are controlled by catalytic oxidizers, internal to each curing oven, and exhausting to stacks SO201, SO202, SO251, and SO252, respectively.

Under 40 CFR 63, Subpart MMMM, HM curing ovens 203, 204, 205, 206, 253, 254, 255, and 256, MI curing ovens 201, 202, 251, and 252, and cleaning area tanks 1 and 2, are considered part of an existing affected source.

(d) Two (2) NTT wire enameling process lines, identified as 701-1 and 701-2, approved for construction in 2019, each with a maximum throughput of 80 pounds of copper wire per hour and 0.017 gallons of enamel per pound of wire and each consisting of the following units:

(1) An annealer;
(2) Enamel applicators using flow coating;
(3) An electric curing oven;
(4) A wire cooler; and
(5) A topical lube applicator max 0.00036 gallons per pound of wire.

Each using an electric catalytic oxidizer as control, and exhausting through stack S701-1 and S701-2, respectively.

Under 40 CFR 63, Subpart MMMM, the NTT wire enameling process lines 701-1 and 701-2, are considered part of a new affected source.

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

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

D.1.1 PSD Minor Limits [326 IAC 2-2]

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

(a) The combined input of VOC to the eight (8) HM wire enameling process lines, 203, 204, 205, 206, 253, 254, 255, and 256, and the four (4) MI wire enameling process lines, 201, 202, 251, and 252, including cleanup solvent shall be limited to 1,904.85 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The minimum overall VOC control efficiency for the catalytic oxidizers for the eight (8) HM wire enameling process lines, 203, 204, 205, 206, 253, 254, 255, and 256 and the four (4) MI wire enameling process lines, 201, 202, 251, and 252 shall be 94.9%
The combined input of VOC to the two (2) NTT wire enameling process lines, 701-1 and 701-2, including cleanup solvent shall be limited to 82.06 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The minimum overall VOC control efficiency for the catalytic oxidizers for Ovens 701-1 and 701-2 shall be 96.8%

Compliance with these limits, combined with the potential to emit VOC from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-8]  
Pursuant to 326 IAC 8-2-8 (Magnet Wire Coating Operations), for the eight (8) HM (203, 204, 205, 206, 253, 254, 255, and 256) and six (6) MI wire enameling process lines (201, 202, 251, 252, 701-1 and 701-2), the Permittee shall not allow the discharge, into the atmosphere, of any volatile organic compounds (VOC) in excess of 1.7 pounds VOC per gallon of coating, excluding water, as delivered to the applicator.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]  
A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]  
Pursuant to 326 IAC 8-1-2(a) and in order to assure compliance with Conditions D.1.1 and D.1.2 the internal catalytic oxidizers shall be in operation whenever the associated wire enameling process lines are in operation.

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]  
Compliance with the VOC content and emission limitations contained in Condition D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2(b),(c)]  
Compliance with the VOC content limitation contained in Condition D.1.2 shall be determined as follows using formulation data supplied by the coating manufacturer.

(a) Pursuant to 326 IAC 8-1-2(b)(1), VOC emissions shall be limited to no greater than the equivalent emissions, expressed as pounds of VOC per gallon of coating solids, as allowed in Condition D.1.2.

(1) The equivalency was determined by the following equation:

\[ E = \frac{L}{(1 - \frac{L}{D})} \]

Where:

- **L** = Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating.
- **D** = Solvent density of VOC in the coating and shall be equal to 7.36 pounds of VOC per gallon of solvent.
E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

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 equivalent pounds of VOC per gallon of coating solids (as applied) shall be limited to less than 2.21.

(b) Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the catalytic oxidizers shall be no less than the equivalent overall efficiency necessary to comply with the equivalent emission limitation in (a).

(1) The overall efficiency was determined 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 catalytic oxidizers controlling the eight (8) HM (203, 204, 205, 206, 253, 254, 255, and 256) and four (4) MI magnet wire ovens (201, 202, 251, 252) shall be 94.9% or greater and shall be 95.9% or greater for the wire enameling process lines, 701-1 and 701-2.

D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall conduct inlet and outlet VOC testing on one (1) representative catalytic oxidizer utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. The catalytic oxidizer tested shall be the oxidizer in which the longest amount of time has elapsed since its previous test. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) At least once every twenty-four (24) months, the permittee shall remove the primary catalyst from each oven and have the catalyst vendor conduct a catalyst activity analysis. Catalysts with percent activity less than the catalyst activity of the oldest catalyst must be replaced or a stack test must be conducted to show that 94.9% overall efficiency is being achieved eight (8) HM (203, 204, 205, 206, 253, 254, 255, and 256) and four (4) MI magnet wire ovens (201, 202, 251, 252) and 95.89% or greater for the wire enameling process lines, 701-1 and 701-2.

(c) Before using a coating that would lead to a higher VOC loading in pounds per hour than what was used during the stack test required in (a) above, the Permittee shall conduct a
performance test to verify VOC control efficiency as per Condition D.1.2 for the catalytic oxidizers using methods as approved by the Commissioner.

(d) For a higher VOC content coating than that used during the stack test in (a) above, the following procedure shall be followed:

1. Calculate the new maximum VOC loading \( L_{\text{new}} \) for the higher VOC content enamel;

2. Calculate the current maximum VOC loading \( L_{\text{current}} \);

If \( L_{\text{new}} \) is lower than \( L_{\text{current}} \), Permittee shall be allowed to use the higher VOC content enamel.

(e) Not later than 180 days after the startup of wire enameling process lines 701-1 and 701-2, the Permittee shall perform VOC testing on one (1) representative catalytic oxidizers utilizing methods approved by the commissioner at least once every 5 years from the date of the most recent valid compliance demonstration, with testing alternating between the two (2) catalytic oxidizers. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

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

D.1.8 Catalytic Oxidizer [40 CFR 64]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the catalytic oxidizers for measuring operating temperature of the catalytic oxidizers. For the purposes of this condition, continuous monitoring shall mean no less often than once per fifteen (15) minutes. The output from this monitoring system and the three hour average temperatures shall be recorded whenever the catalytic oxidizer is in operation.

(b) The Permittee shall determine the 3 hour block average temperature from the latest valid stack test that demonstrates compliance with limit in Conditions D.1.1 and D.1.2.

(c) On and after the date the stack test results are available, the Permittee shall operate the catalytic oxidizer at or above the 3-hour average temperature as observed during the latest compliant stack test.

(d) If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A 3-hour average temperature reading below the above mentioned 3-hour average temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.9 Catalytic Oxidizer Duct Pressure or Fan Amperage

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the catalytic oxidizer for measuring the duct pressure or fan amperage. 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 maintain the 3-hour average duct pressure or fan amperage within the normal range.
(b) The Permittee shall determine the appropriate 3-hour average duct pressure or fan amperage from the latest valid stack test that demonstrates compliance with limits in Conditions D.1.1 and D.1.2.

(c) On and after the date the stack test results are available, the 3-hour average duct pressure or fan amperage shall be maintained within the 3-hour average normal range as established in latest compliant stack test.

(d) When, for any one reading, the 3-hour average duct pressure or fan amperage is outside the above mentioned 3-hour average ranges, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A 3-hour average reading that is outside the above mentioned 3-hour average range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.10 Record Keeping Requirement

(a) To document the compliance status with Conditions D.1.1, D.1.2 and D.1.8, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC limit established in D.1.1 and D.1.2:

(1) VOC content of each coating material, solvent, lubricant and cleanup solvent used.

(2) The amount of each coating material and solvent used on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(3) The total VOC usage for each month for lines 203, 204, 205, 206, 253, 254, 255, and 256, 201, 202, 251, and 252, and 701-1 and 701-2.

(4) The total VOCs emitted for each month and compliance period.

(b) To document the compliance status with Condition D.1.8, the Permittee shall maintain continuous temperature records for the catalytic oxidizers and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(c) To document the compliance status with Condition D.1.9, the Permittee shall maintain continuous duct pressure or fan amperage records for the catalytic oxidizers and the 3-hour average duct pressure or fan amperage used to demonstrate compliance during the most recent compliant stack test.

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

D.1.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with D.1.1 shall be
submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.

The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).
SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c) One (1) cleaning area, identified as CLRM1, consisting of tanks 1 through 3, with a capacity of
600 gallons, each, and exhausting through stacks SCT1, SCT2, and SCT3. Tank 3 contains
non-HAP thinners.

Insignificant Activities

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

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

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

D.2.1 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating
Requirements), the Permittee shall:

(a) Ensure the following control equipment and operating requirements are met:

(1) Equip the degreaser with a cover.

(2) Equip the degreaser with a device for draining cleaned parts.

(3) Close the degreaser cover whenever parts are not being handled in the
degreaser.

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.

(5) Provide a permanent, conspicuous label that lists the operating requirements in
(3), (4), (6), and (7) of this condition.

(6) Store waste solvent only in closed containers.

(7) Prohibit the disposal or transfer of waste solvent in such a manner that could
allow greater than twenty percent (20%) of the waste solvent (by weight) to
evaporate into the atmosphere.

(b) Ensure the following additional control equipment and operating requirements are met:

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

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths
(0.75) or greater.

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

(C) A refrigerated chiller.
(D) Carbon adsorption.

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

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

(3) If used, solvent spray:

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

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

D.2.2 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

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

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

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

D.2.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.2, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

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

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

   (3) The type of solvent purchased.

   (4) The total volume of the solvent purchased.

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

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.
ESSEX GROUP, INC. - FRANKLIN

SIGNIFICANT SOURCE MODIFICATION NO.: 081-41985-00021

FRANKLIN, INDIANA

PERMIT REVIEWER: TAMERA WESSEL

DRAFT

T081-37526-00021

Page 35 of 47

SECTION E.1

NESHAP

Emissions Unit Description:

(a) Eight (8) HM wire enameling process lines, all constructed in 1993, identified as emission unit numbers 203, 204, 205, 206, 253, 254, 255, and 256, with a maximum rating of 850 pounds of magnet wire per hour, each. Each process line consists of an annealer, enamel applicators, a curing oven, a wire cooler, and a topical lube applicator. Emissions are controlled by catalytic oxidizers, internal to each curing oven, and exhausting to stacks SO203, SO204, SO205, SO206, SO253, SO254, SO255, and SO256, respectively.

(b) Four (4) MI wire enameling process lines, all constructed in 1993, identified as emission units 201, 202, 251, and 252, with a maximum rating of 850 pounds of magnet wire per hour, each. Each process line consists of an annealer, enamel applicators, a curing oven, a wire cooler, and a topical lube applicator. Emissions are controlled by catalytic oxidizers, internal to each curing oven, and exhausting to stacks SO201, SO202, SO251, and SO252, respectively.

(c) One (1) cleaning area, identified as CLRM1, consisting of tanks 1 through 3, with a capacity of 600 gallons, each, and exhausting through stacks SCT1, SCT2, and SCT3. Tank 3 contains non-HAP thinners.

Under 40 CFR 63, Subpart MMMM, HM curing ovens 203, 204, 205, 206, 253, 254, 255, and 256, MI curing ovens 201, 202, 251, and 252, and cleaning area tanks 1 and 2, are considered part of an existing affected source.

(d) Two (2) NTT wire enameling process lines, identified as 701-1 and 701-2, approved for construction in 2019, each with a maximum throughput of 80 pounds of copper wire per hour and 0.017 gallons of enamel per pound of wire and each consisting of the following units:

   (1) An annealer;
   (2) Enamel applicators using flow coating;
   (3) An electric curing oven;
   (4) A wire cooler; and
   (5) A topical lube applicator max 0.00036 gallons per pound of wire.

   Each using an electric catalytic oxidizer as control, and exhausting through stack S701-1 and S701-2, respectively.

Under 40 CFR 63, Subpart MMMM, the NTT wire enameling process lines 701-1 and 701-2, are considered part of a new affected source.

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

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


(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission units listed above, except as otherwise specified in 40 CFR Part 63, Subpart MMMM.
(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 Surface Coating of Miscellaneous Metal Parts and Products NESHAP [40 CFR Part 63, Subpart MMMM][326 IAC 20-80]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart MMMM (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 20-80, for the emission units listed above:

(a) Existing Units; Eight (8) HM wire enameling process lines (203, 204, 205, 206, 253, 254, 255, and 256), Four (4) MI wire enameling process lines (201, 202, 251, and 252), and cleaning area (CLRM1):

(1) 40 CFR 63.3880
(2) 40 CFR 63.3881 (a)(1)(4),(b)
(3) 40 CFR 63.3882
(4) 40 CFR 63.3883 (b),(d)
(5) 40 CFR 63.3890 (b)(3)
(6) 40 CFR 63.3891 (c)
(7) 40 CFR 63.3892 (b),(c)
(8) 40 CFR 63.3893 (b),(c)
(9) 40 CFR 63.3900 (a)(2),(b),(c)
(10) 40 CFR 63.3901
(11) 40 CFR 63.3910 excluding sections (c)(8)(i) and (c)(8)(ii)
(12) 40 CFR 63.3920 excluding sections (a)(5) and (6)
(13) 40 CFR 63.3930 excluding sections (c)(2)(3) and (k)(4)(5)
(14) 40 CFR 63.3931
(15) 40 CFR 63.3960 (b),(c)
(16) 40 CFR 63.3961
(17) 40 CFR 63.3963
(18) 40 CFR 63.3964
(19) 40 CFR 63.3965 (a)
(20) 40 CFR 63.3966
(21) 40 CFR 63.3967 (a),(b),(f)
(22) 40 CFR 63.3968 (a),(c),(g)
(23) 40 CFR 63.3980
(24) 40 CFR 63.3981
(25) Table 1 to Subpart MMMM of Part 63
(26) Table 2 to Subpart MMMM of Part 63
(27) Table 3 to Subpart MMMM of Part 63
(28) Table 4 to Subpart MMMM of Part 63
(29) Appendix A to Subpart MMMM of Part 63

(b) New Units; NTT wire enameling process lines (701-1 and 701-2):

(1) 40 CFR 63.3880;
(2) 40 CFR 63.3881(a)(1), (a)(4), and (b);
(3) 40 CFR 63.3882(a), (b), and (c);
(4) 40 CFR 63.3883(a)(2) and (d);
(5) 40 CFR 63.3890(a)(4);
(6) 40 CFR 63.3891(c);
(7) 40 CFR 63.3892(b) and (c);
(8) 40 CFR 63.3893(b) and (c);
(9) 40 CFR 63.3900(a)(2), (b), and (c);
(10) 40 CFR 63.3901;
(11) 40 CFR 63.3910 excluding sections (c)(8)(i) and (c)(8)(ii);
(12) 40 CFR 63.3920 excluding sections (a)(5) and (a)(6);
(13) 40 CFR 63.3930 excluding sections (c)(2), (c)(3), (k)(4), and (k)(5);
(14) 40 CFR 63.3931;
(15) 40 CFR 63.3960(a);
(16) 40 CFR 63.3961;
(17) 40 CFR 63.3963;
(18) 40 CFR 63.3964;
(19) 40 CFR 63.3965(a);
(20) 40 CFR 63.3966;
(21) 40 CFR 63.3967(b);
(22) 40 CFR 63.3968(c)(2) and (c)(3);
(23) 40 CFR 63.3980;
(24) 40 CFR 63.3981;
(25) Table 1 to Subpart MMMM of Part 63 (Item 2);
(26) Table 2 to Subpart MMMM of Part 63;
(27) Table 3 to Subpart MMMM of Part 63;
(28) Table 4 to Subpart MMMM of Part 63.
SECTION E.2  NESHAP

Emissions Unit Description:

Insignificant Activities:

(b) One (1) emergency diesel generator, identified as EG-1, installed in 1993, rated at 250 horsepower, engine displacement volume less than 30 liters per cylinder and exhausting to the atmosphere.


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

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


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

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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


The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment B to the operating permit), which are incorporated by reference as 326 IAC 20-82, for the emission unit listed above:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a) and (b)
(3) 40 CFR 63.6590(a)(1)(ii)
(4) 40 CFR 63.6595(a)(1) & (c)
(5) 40 CFR 63.6602
(6) 40 CFR 63.6605(a) and (b)
(7) 40 CFR 63.6625(e), (f), (h), and (j)
(8) 40 CFR 63.6640(a)-(e), and (f)(1)
(9) 40 CFR 63.6650(f)
(10) 40 CFR 63.6655(d)-(f)
(11) 40 CFR 63.6660
(12) 40 CFR 63.6665(a), (b), (d), (e)(2), and (f)(1)
(13) 40 CFR 63.6670
(14) 40 CFR 63.6675
Emission Limitations and Standards [326 IAC 2-7-5(1)]

E.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for this facility. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name:   Essex Group, Inc. - Franklin
Source Address:  3200 Essex Drive, Franklin, Indiana 46131
Part 70 Permit No.:   T081-37526-00021

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:
This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:
If any of the following are not applicable, mark N/A

<table>
<thead>
<tr>
<th>Date/Time Emergency started:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date/Time Emergency was corrected:</td>
</tr>
<tr>
<td>Was the facility being properly operated at the time of the emergency?</td>
</tr>
<tr>
<td>Type of Pollutants Emitted: TSP, PM-10, SO₂, VOC, NOₓ, CO, Pb, other:</td>
</tr>
<tr>
<td>Estimated amount of pollutant(s) emitted during emergency:</td>
</tr>
<tr>
<td>Describe the steps taken to mitigate the problem:</td>
</tr>
<tr>
<td>Describe the corrective actions/response steps taken:</td>
</tr>
<tr>
<td>Describe the measures taken to minimize emissions:</td>
</tr>
<tr>
<td>If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:</td>
</tr>
</tbody>
</table>

Form Completed by:__________________________
Title / Position: ____________________________
Date:__________________________
Phone:__________________________
INFORMATION DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Essex Group, Inc. - Franklin
Source Address: 3200 Essex Drive, Franklin, Indiana 46131
Part 70 Permit No.: T081-37526-00021
Facility: HM wire enameling process lines 203, 204, 205, 206, 253, 254, 255, and 256
Parameter: VOC input
Limit: The input of VOC to the eight (8) HM wire enameling process lines, 203, 204, 205, 206, 253, 254, 255, and 256, including cleanup solvent shall be limited to 1,274.17 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

<table>
<thead>
<tr>
<th>QUARTER</th>
<th>YEAR</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This Month (tons)</td>
<td>Previous 11 Months (tons)</td>
<td>12 Month Total (tons)</td>
</tr>
</tbody>
</table>

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: 
Title / Position: 
Signature: 
Date: 
Phone: 
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Essex Group, Inc. - Franklin  
Source Address: 3200 Essex Drive, Franklin, Indiana 46131  
Part 70 Permit No.: T081-37526-00021  
Facility: MI wire enameling process lines, 201, 202, 251, and 252  
Parameter: VOC input  
Limit: The input of VOC to the three (3) MI wire enameling process lines, 201, 202, 251, and 252, including cleanup solvent shall be limited to 630.68 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

<table>
<thead>
<tr>
<th>QUARTER</th>
<th>YEAR</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This Month (tons)</td>
<td>Previous 11 Months (tons)</td>
<td>12 Month Total (tons)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.  
Deviation has been reported on:

Submitted by: ________________________________  
Title / Position: ________________________________  
Signature: ________________________________  
Date: ________________________________  
Phone: ________________________________
Indiana Department of Environmental Management
Office of Air Quality
Compliance and Enforcement Branch

Part 70 Quarterly Report

Source Name: Essex Group, Inc. - Franklin
Source Address: 3200 Essex Drive, Franklin, Indiana 46131
Part 70 Permit No.: T081-37526-00021
Facility: Electric catalytic magnet wire ovens, 701-1 and 701-2
Parameter: VOC input
Limit: The input of VOC to the two (2) NTT wire enameling process lines, 701-1 and 701-2, including cleanup solvent shall be limited to 82.06 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

<table>
<thead>
<tr>
<th>QUARTER :</th>
<th>YEAR:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This Month (tons)</td>
<td>Previous 11 Months (tons)</td>
<td>12 Month Total (tons)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviations has been reported on:

Submitted by: ________________________________
Title / Position: ________________________________
Signature: ________________________________
Date: ________________________________
Phone: ________________________________
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Essex Group, Inc. - Franklin
Source Address: 3200 Essex Drive, Franklin, Indiana 46131
Part 70 Permit No.: T081-37526-00021

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C - General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

<table>
<thead>
<tr>
<th>Permit Requirement (specify permit condition #)</th>
<th>Date of Deviation:</th>
<th>Duration of Deviation:</th>
<th>Number of Deviations:</th>
<th>Probable Cause of Deviation:</th>
<th>Response Steps Taken:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Permit Requirement (specify permit condition #)</th>
<th>Date of Deviation:</th>
<th>Duration of Deviation:</th>
<th>Number of Deviations:</th>
<th>Probable Cause of Deviation:</th>
<th>Response Steps Taken:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permit Requirement (specify permit condition #)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date of Deviation:</strong></td>
<td><strong>Duration of Deviation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of Deviations:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Probable Cause of Deviation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Response Steps Taken:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Permit Requirement (specify permit condition #)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date of Deviation:</strong></td>
<td><strong>Duration of Deviation:</strong></td>
</tr>
<tr>
<td><strong>Number of Deviations:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Probable Cause of Deviation:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Response Steps Taken:</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Permit Requirement (specify permit condition #)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date of Deviation:</strong></td>
<td><strong>Duration of Deviation:</strong></td>
</tr>
<tr>
<td><strong>Number of Deviations:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Probable Cause of Deviation:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Response Steps Taken:</strong></td>
<td></td>
</tr>
</tbody>
</table>

Form Completed by: ____________________________
Title / Position: ____________________________
Date: ____________________________
Phone: ____________________________
Source Description and Location

<table>
<thead>
<tr>
<th>Source Name:</th>
<th>Essex Group, Inc. - Franklin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Location:</td>
<td>3200 Essex Drive, Franklin, IN 46131</td>
</tr>
<tr>
<td>County:</td>
<td>Johnson</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>3357 (Drawing and Insulating of Nonferrous Wire)</td>
</tr>
<tr>
<td>Operation Permit No.:</td>
<td>T 081-37526-00021</td>
</tr>
<tr>
<td>Operation Permit Issuance Date:</td>
<td>June 5, 2017</td>
</tr>
<tr>
<td>Significant Source Modification No.:</td>
<td>081-41985-00021</td>
</tr>
<tr>
<td>Significant Permit Modification No.:</td>
<td>081-42198-00021</td>
</tr>
<tr>
<td>Permit Reviewer:</td>
<td>Deena Levering</td>
</tr>
</tbody>
</table>

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. 081-37526-00021 on June 5, 2017. There have been no subsequent approvals issued.

County Attainment Status

The source is located in Johnson County.

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

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

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NOₓ) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOₓ emissions are considered when evaluating the rule applicability relating to ozone. Johnson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOₓ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM₂.₅
Johnson County has been classified as attainment for PM₂.₅. Therefore, direct PM₂.₅, SO₂, and NOₓ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
(c) Other Criteria Pollutants
Johnson County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

**Fugitive Emissions**

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

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability and source status under Section 112 of the Clean Air Act (CAA).

**Greenhouse Gas (GHG) Emissions**

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

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

**Source Status - Existing Source**

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Source-Wide Emissions Prior to Modification (ton/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM(^1)</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Total PTE of Entire Source Excluding Fugitive Emissions*</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
</tr>
</tbody>
</table>

1\(^1\) 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."  
\(^2\)PM\(_{2.5}\) listed is direct PM\(_{2.5}\).  
\(^3\)Single highest source-wide HAP  
*Fugitive HAP emissions are always included in the source-wide emissions.
(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are equal to or greater than ten (10) tons per year for a single HAP and equal to or greater than twenty-five (25) tons per year for a combination of HAPs.

(c) These emissions are based on the TSD of Title V Renewal No. 081-37526-00021, issued on June 5, 2017.

**Description of Proposed Modification**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Essex Group, Inc. on September 30, 2019, relating to the replacement of oven 202 with two (2) new wire enameling process lines.

The following is a list of the new emission units and pollution control device(s):

(a) Two (2) NTT wire enameling process lines, identified as 701-1 and 701-2, approved for construction in 2019, each with a maximum throughput of 80 pounds of copper wire per hour and 0.017 gallons of enamel per pound of wire and each consisting of the following units:

1. An annealer;
2. Enamel applicators using flow coating;
3. An electric curing oven;
4. A wire cooler; and
5. A topical lube applicator max 0.00036 gallons per pound of wire.

Each using an electric catalytic oxidizer as control, and exhausting through stack S701-1 and S701-2, respectively.

**Enforcement Issues**

There are no pending enforcement actions related to this modification.

**Emission Calculations**

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

**Permit Level Determination – Part 70 Modification to an Existing Source**

Pursuant to 326 IAC 2-1.1-1(12), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.
Appendix A of this TSD reflects the detailed potential emissions of the modification.

(a) Approval to Construct
Pursuant to 326 IAC 2-7-10.5(g)(4), a Significant Source Modification is required because this modification has the potential to emit VOC at equal to or greater than twenty-five (25) tons per year.

(b) Approval to Operate
Pursuant to 326 IAC 2-7-12(d)(1), this change to the permit is being made through a Significant Permit Modification because this modification does not qualify as a Minor Permit Modification or as an Administrative Amendment. This modification requires additional limitations to render the modification minor under PSD.

Permit Level Determination – PSD

The table below summarizes the potential to emit of the modification, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 source and/or permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM(_{10})</th>
<th>PM(_{2.5}) (^1)</th>
<th>SO(_{2})</th>
<th>NO(_{X})</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP (^2)</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTT Wire enameling process line 701-1</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1.42</td>
<td>41.03</td>
<td>--</td>
<td>14.39</td>
<td>23.03</td>
<td></td>
</tr>
<tr>
<td>NTT Wire enameling process line 701-2</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1.42</td>
<td>41.03</td>
<td>--</td>
<td>14.39</td>
<td>23.03</td>
<td></td>
</tr>
<tr>
<td>Total for Modification</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2.83</td>
<td>82.06</td>
<td>--</td>
<td>28.78</td>
<td>46.05</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)PM\(_{2.5}\) listed is direct PM\(_{2.5}\).
\(^2\)Single highest HAP.

The source opted to take limit(s) in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to this modification. See Technical Support Document (TSD) State Rule Applicability - Entire Source section, 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) for more information regarding the limit(s).

(a) This modification to an existing minor PSD stationary source is not major because the emissions increase of each PSD regulated pollutant is less than the PSD major source threshold. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
PTE of the Entire Source After Issuance of the Part 70 Modification

The table below summarizes the after issuance source-wide potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 source and/or permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Source-Wide Emissions After Issuance (ton/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM1</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>0.26</td>
</tr>
</tbody>
</table>

1Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant."
2PM2.5 listed is direct PM2.5.
3Single highest source-wide HAP = Phenol
*Fugitive HAP emissions are always included in the source-wide emissions.

The source opted to take limit(s) in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to this source. See Technical Support Document (TSD) State Rule Applicability - Entire Source section, 326 IAC 2-2 (PSD) for more information regarding the limit(s).

(a) This existing minor PSD stationary source will continue to be minor under 326 IAC 2-2 because the emissions of each PSD regulated pollutant will continue to be less than the PSD major source thresholds.

(b) This existing major source of HAP will continue to be a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions will continue to be equal to or greater than ten (10) tons per year for any single HAP and/or equal to or greater than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Federal Rule Applicability Determination

Due to the modification at this source, federal rule applicability has been reviewed as follows:

New Source Performance Standards (NSPS):

(a) 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 in the permit for the NTT wire enameling process lines 701-1 and 701-2, because the NTT wire enameling process lines produce a cylinder piece with a diameter and not a strip with a thickness. Therefore, the NTT wire enameling process lines do not meet the definition of metal coil surface coating operation, as defined in 40 CFR 60.461.

(b) There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit for this proposed modification.
National Emission Standards for Hazardous Air Pollutants (NESHAP):

(a) The wire enameling process lines 701-1 and 701-2 are subject to the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products 40 CFR 63, Subpart MMMM, which is incorporated by reference as 326 IAC 20-80, because the NTT wire enameling process lines coat magnet wire as defined in 40 CFR 63.3881(a)(4) and are located at a major source of HAPs. The units subject to this rule include the following:

Two (2) NTT wire enameling process lines, identified as 701-1 and 701-2, approved for construction in 2019, each with a maximum throughput of 80 pounds of copper wire per hour and 0.017 gallons of enamel per pound of wire and each consisting of the following units:

(1) An annealer;
(2) Enamel applicators using flow coating;
(3) An electric curing oven;
(4) A wire cooler; and
(5) A topical lube applicator max 0.00036 gallons per pound of wire.

Each using an electric catalytic oxidizer as control, and exhausting through stack S701-1 and S701-2, respectively.

These emission units are subject to the following portions of Subpart MMMM:

(1) 40 CFR 63.3880;
(2) 40 CFR 63.3881(a)(1), (a)(4), and (b);
(3) 40 CFR 63.3882(a), (b), and (c);
(4) 40 CFR 63.3883(a)(2) and (d);
(5) 40 CFR 63.3890(a)(4);
(6) 40 CFR 63.3891(c);
(7) 40 CFR 63.3892(b) and (c);
(8) 40 CFR 63.3893(b) and (c);
(9) 40 CFR 63.3900(a)(2), (b), and (c);
(10) 40 CFR 63.3901;
(11) 40 CFR 63.3910 excluding sections (c)(8)(i) and (c)(8)(ii);
(12) 40 CFR 63.3920 excluding sections (a)(5) and (a)(6);
(13) 40 CFR 63.3930 excluding sections (c)(2), (c)(3), (k)(4), and (k)(5);
(14) 40 CFR 63.3931;
(15) 40 CFR 63.3960(a);
(16) 40 CFR 63.3961;
(17) 40 CFR 63.3963;
(18) 40 CFR 63.3964;
(19) 40 CFR 63.3965(a);
(20) 40 CFR 63.3966;
(21) 40 CFR 63.3967(b);
(22) 40 CFR 63.3968(c)(2) and (c)(3);
(23) 40 CFR 63.3980;
(24) 40 CFR 63.3981;
(25) Table 1 to Subpart MMMM of Part 63 (Item 2);
(26) Table 2 to Subpart MMMM of Part 63;
(27) Table 3 to Subpart MMMM of Part 63;
(28) Table 4 to Subpart MMMM of Part 63.

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the units except as otherwise specified in 40 CFR 63, Subpart MMMM.
(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Surface Coating of Metal Coil 40 CFR 63, Subpart SSSS and 326 IAC 20-64 are not included in the permit for the NTT wire enameling process lines 701-1 and 701-2, since the NTT wire enameling process lines produce a cylinder piece with a diameter and not a strip with a thickness. Therefore, the wire enameling process lines do not meet the definition of metal coil as described in 40 CFR 63.5110 Metal Coil.

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

**Compliance Assurance Monitoring (CAM):**

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each pollutant-specific emission unit that meets the following criteria:

1. has a potential to emit before controls equal to or greater than the major source threshold for the regulated pollutant involved;

2. is subject to an emission limitation or standard for that pollutant (or a surrogate thereof); and

3. uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

(b) Pursuant to 40 CFR 64.2(b)(1)(i), emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act are exempt from the requirements of CAM. Therefore, an evaluation was not conducted for any emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act.

The following table is used to identify the applicability of CAM to new and modified emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

<table>
<thead>
<tr>
<th>Emission Unit/Pollutant</th>
<th>Control Device</th>
<th>Applicable Emission Limitation</th>
<th>Uncontrolled PTE (tons/year)</th>
<th>Controlled PTE (tons/year)</th>
<th>CAM Applicable (Y/N)</th>
<th>Large Unit (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTT wire enameling process line 701-1/ VOC</td>
<td>CO</td>
<td>326 IAC 2-2</td>
<td>61.46</td>
<td>1.94</td>
<td>N¹</td>
<td>N</td>
</tr>
<tr>
<td>NTT wire enameling process line 701-1/Xylene</td>
<td>CO</td>
<td>N/A</td>
<td>11.93</td>
<td>0.38</td>
<td>N²</td>
<td>N</td>
</tr>
<tr>
<td>NTT wire enameling process line 701-1/ Phenol</td>
<td>CO</td>
<td>N/A</td>
<td>28.78</td>
<td>0.91</td>
<td>N²</td>
<td>N</td>
</tr>
<tr>
<td>NTT wire enameling process line 701-1/ Mixed Cresols</td>
<td>CO</td>
<td>N/A</td>
<td>6.72</td>
<td>0.21</td>
<td>N¹</td>
<td>N</td>
</tr>
<tr>
<td>NTT wire enameling process line 701-1/ Ethylbenzene</td>
<td>CO</td>
<td>N/A</td>
<td>3.70</td>
<td>0.12</td>
<td>N¹</td>
<td>N</td>
</tr>
<tr>
<td>NTT wire enameling process line 701-1/ Cumene</td>
<td>CO</td>
<td>N/A</td>
<td>4.80</td>
<td>0.15</td>
<td>N¹</td>
<td>N</td>
</tr>
<tr>
<td>NTT wire enameling process line 701-2/ VOC</td>
<td>CO</td>
<td>326 IAC 2-2</td>
<td>61.46</td>
<td>1.94</td>
<td>N¹</td>
<td>N</td>
</tr>
<tr>
<td>NTT wire enameling process line 701-2/Xylene</td>
<td>CO</td>
<td>N/A</td>
<td>11.93</td>
<td>0.38</td>
<td>N²</td>
<td>N</td>
</tr>
<tr>
<td>Emission Unit/Pollutant</td>
<td>Control Device</td>
<td>Applicable Emission Limitation</td>
<td>Uncontrolled PTE (tons/year)</td>
<td>Controlled PTE (tons/year)</td>
<td>CAM Applicable (Y/N)</td>
<td>Large Unit (Y/N)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------</td>
<td>-------------------------------</td>
<td>-------------------------------</td>
<td>----------------------------</td>
<td>----------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>NTT wire enameling process line 701-2/ Phenol</td>
<td>CO</td>
<td>N/A</td>
<td>28.78</td>
<td>0.91</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>NTT wire enameling process line 701-2/ Mixed Cresols</td>
<td>CO</td>
<td>N/A</td>
<td>6.72</td>
<td>0.21</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>NTT wire enameling process line 701-2/ Ethylbenzene</td>
<td>CO</td>
<td>N/A</td>
<td>3.70</td>
<td>0.12</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>NTT wire enameling process line 701-2/ Cumene</td>
<td>CO</td>
<td>N/A</td>
<td>4.80</td>
<td>0.15</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

Under the Part 70 Permit program (40 CFR 70), PM is not a regulated pollutant.

Uncontrolled PTE (tpy) and controlled PTE (tpy) are evaluated against the Major Source Threshold for each pollutant. Major Source Threshold for criteria pollutants (PM10, PM2.5, SO2, NOx, VOC, and CO) is 100 tpy, for a single HAP ten (10) tpy, and for total HAPs twenty-five (25) tpy.

PM* For limitations under 326 IAC 6-3-2, 326 IAC 6.5, and 326 IAC 6.8, IDEM OAQ uses PM as a surrogate for the regulated air pollutant PM10. Therefore, uncontrolled PTE and controlled PTE reflect the emissions of the regulated air pollutant PM10.

N ¹ CAM does not apply for VOC because the uncontrolled PTE of VOC are each less than the major source threshold.

N ² CAM does not apply for Xylene and Phenol because there are no applicable emission limitations for these pollutants.

Controls: BH = Baghouse, C = Cyclone, DC = Dust Collection System, RTO = Regenerative or Recuperative Thermal Oxidizer, WS = Wet Scrubber, ESP = Electrostatic Preciptator, CO = Catalytic Oxidizer

Emission units without air pollution controls are not subject to CAM. Therefore, they are not listed.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are not applicable to any of the new units as part of this modification. The new units each have emissions below the major source threshold.

CAM is not applicable for NOx for NTT wire enameling process lines 701-1 and 701-2, because there are no control devices associated with this pollutant.

---

**State Rule Applicability - Entire Source**

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

**326 IAC 2-2 (PSD)**

PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD section of this document.

**PSD Minor Source Limits**

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

(a) The combined input of VOC to the eight (8) HM wire enameling process lines, 203, 204, 205, 206, 253, 254, 255, and 256, and the four (4) MI wire enameling process lines, 201, 202, 251, and 252, including cleanup solvent shall be limited to 1,904.85 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The minimum overall VOC control efficiency for the catalytic oxidizers for the eight (8) HM wire enameling process lines, 203, 204, 205, 206, 253, 254, 255, and 256 and the four (4) MI wire enameling process lines, 201, 202, 251, and 252 shall be 94.9%
(b) The input of VOC to the two (2) NTT wire enameling process lines, 701-1 and 701-2, including cleanup solvent shall be limited to 82.06 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The minimum overall VOC control efficiency for the catalytic oxidizers for Ovens 701-1 and 701-2 shall be 96.8%.

Compliance with these limits, combined with the potential to emit VOC from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than 250 tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The provisions of 326 IAC 2-4.1 apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, after July 27, 1997, unless the major source has been specifically regulated under or exempted from regulation under a NESHAP that was issued pursuant to Section 112(d), 112(h), or 112(j) of the Clean Air Act (CAA) and incorporated under 40 CFR 63. On and after June 29, 1998, 326 IAC 2-4.1 is intended to implement the requirements of Section 112(g)(2)(B) of the Clean Air Act (CAA).

The operation of the Ovens 701-1 and 701-2 (approved in 2019 for construction) will emit equal to or greater than ten (10) tons per year for a single HAP AND/OR equal to or greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 would apply to Ovens 701-1 and 701-2. However, pursuant to 326 IAC 2-4.1-1(b)(2), because Ovens 701-1 and 701-2 is specifically regulated under NESHAP 40 CFR 63, Subpart MMMM, which was issued pursuant to Section 112(d), 112(h), or 112(j) of the CAA, Ovens 701-1 and 701-2 is exempt from the requirements of 326 IAC 2-4.1.

326 IAC 2-7-6(5) (Annual Compliance Certification)
The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certifications that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

326 IAC 5-1 (Opacity Limitations)
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).

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

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

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

326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Johnson County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.
State Rule Applicability – Individual Facilities

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

326 IAC 6-2-1 (Particulate Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-1, the NTT wire enameling process lines 701-1 and 701-2 are not subject to the requirements of 326 IAC 2-4, since they are sources of direct fired heating.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(7), the NTT wire enameling process lines 701-1 and 701-2 are not subject to the requirements of 326 IAC 6-3, since they utilize a flow coating.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The NTT wire enameling process lines 701-1 and 701-2 are not subject to the requirements of 326 IAC 8-1-6 because is regulated by other rules in 326 IAC 8. The units are subject to the requirements of 326 IAC 8-2-8 (Magnet Wire Coating).

326 IAC 8-2-8 (VOC Rules: Magnet Wire Coating Operations)
The NTT wire enameling process lines 701-1 and 701-2 are subject to the requirements of 326 IAC 8-2-8, since they apply coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

Pursuant to 326 IAC 8-2-8(b), the NTT wire enameling process lines 701-1 and 701-2 shall not allow the discharge, into the atmosphere, of any volatile organic compounds (VOC) in excess of 1.7 pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

326 IAC 8-1-2 (Compliance Methods)
Pursuant to 326 IAC 8-1-2(b)(1), when using non-compliant coatings in NTT wire enameling process lines 701-1 and 701-2, VOC emissions shall be limited to no greater than the equivalent emissions limit (E) of 2.21 pounds of VOC per gallon of coating solids.

In order to comply with the equivalent emissions limit (E), the catalytic oxidizers shall be in operation and control VOC emissions from the NTT wire enameling process lines 701-1 and 701-2 at all times the Ovens 701-1 and 701-2 is in operation. Pursuant to 326 IAC 8-1-2(c), the overall efficiency (O) of the catalytic oxidizer shall be no less than 99.65%. See Compliance Determination and Monitoring Requirements section below.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)
The requirements of 326 IAC 10-3 do not apply to the NTT wire enameling process lines 701-1 and 701-2, since this unit is not a blast furnace gas-fired boiler, a Portland cement kiln, or a facility specifically listed under 326 IAC 10-3-1(a)(2).

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to assure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in
relation to a compliance monitoring condition will arise through a source’s failure to take the appropriate corrective actions within a specific time period.

(a) The Compliance Determination Requirements applicable to this modification are as follows:

(a) Pursuant to 326 IAC 8-1-2(b)(1), VOC emissions shall be limited to no greater than the equivalent emissions, expressed as pounds of VOC per gallon of coating solids, as allowed in 326 IAC 8-2-3.

The equivalency was determined by the following equation:

$$E = \frac{L}{1 - \frac{L}{D}}$$

Where:

$L$ = Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating less water = 1.7 lb/gal;

$D$ = Baseline solvent density of VOC in the coating and shall be equal to seven and thirty-six hundredths (7.36) pounds of VOC per gallon of solvent;

$E$ = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

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).

$$= \frac{1.7}{1 - (1.7 / 7.36)}$$

$$= 2.21 \text{ lbs VOC/gal coating solids}$$

The equivalent pounds of VOC per gallon of coating solids (as applied) shall be limited to less than 2.21.

(b) Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the catalytic oxidizer shall be no less than the equivalent overall efficiency necessary to comply with the equivalent emission limitation in (1).

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

Where:

$V$ = The actual VOC content of the coating, 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 = 53.76 lb VOC/gal solids

$E$ = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied = 2.21 lb VOC per gal coating solids

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

$$O = \frac{V - 2.21 \times 100}{V}$$
The overall efficiency of the CO for NTT wire enameling process lines 701-1 and 701-2 shall be no less than 95.9%.

**Testing Requirements:**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Control Device</th>
<th>Timeframe for Testing or Date of Initial Valid Demonstration)</th>
<th>Pollutant/Parameter</th>
<th>Frequency of Testing</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTT wire enameling process lines 701-1 and 701-2</td>
<td>Catalytic oxidizers</td>
<td>180**</td>
<td>Inlet and Outlet VOC testing</td>
<td>every 5 years</td>
<td>326 IAC 2-2</td>
</tr>
</tbody>
</table>

(1) The VOC testing shall be on one (1) representative catalytic oxidizer, with testing alternating between the two (2) catalytic oxidizers.

** No later than 180 days after startup of the emission unit or completion of the modification.

(b) The Compliance Monitoring Requirements applicable to this proposed modification are as follows:

<table>
<thead>
<tr>
<th>Control Device</th>
<th>Type of Parametric Monitoring</th>
<th>Frequency</th>
<th>Range or Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalytic Oxidizer</td>
<td>3-hour average oxidizer temperature monitoring</td>
<td>Continuous</td>
<td>At or above the value established in the most recent compliant stack test.</td>
</tr>
<tr>
<td></td>
<td>Duct pressure or fan amperage monitoring</td>
<td>Continuous</td>
<td>Within the normal range established in the most recent compliant stack test.</td>
</tr>
</tbody>
</table>

These monitoring conditions are necessary because the catalytic oxidizers for the NTT wire enameling process lines 701-1 and 701-2 must operate properly to assure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 8-2-8 (Magnet Wire Coating Operations).

**Proposed Changes**

As part of this permit approval, the permit may contain new or different permit conditions and some conditions from previously issued permits/approvals may have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes.

The following changes listed below are due to the proposed modification. Deleted language appears as **strike-through** text and new language appears as **bold** text (these changes may include Title I changes):

1. IDEM, OAQ has updated the emission unit descriptions in A.2, D.1.1, and E.1.1, to include the two (2) electric NTT wire enameling process lines 701-1 and 701-2. IDEM, OAQ has not removed the MI Wire enameling process line 202, since it will still be in operation until the other lines are built and brought online.

2. IDEM, OAQ added PSD Minor limits into the permit for all the process lines, in order to assure the source wide VOC PTE is less than 250 tons per year.

3. IDEM, OAQ added the two (2) electric NTT wire enameling process lines 701-1 and 701-2 to the 326 IAC 8-2-8 Magnet Wire Coating Operations limitations.

4. IDEM, OAQ clarified the testing language under D.1.7(b) to specify which lines would need to achieve which overall control efficiency.
Additional Changes

IDEEM, OAQ made additional changes to the permit as described below in order to update the language to match the most current version of the applicable rule, to eliminate redundancy within the permit, and to provide clarification regarding the requirements of these conditions.

(1) For this modification, IDEEM, OAQ has included IDEEM's Master Agency Interest Identification (ID) number of 11835 in the Part 70 cover page signature box.

(2) IDEEM OAQ added the record keeping requirements for the compliance monitoring of the catalytic oxidizers to Condition D.1.10.

(3) IDEEM, OAQ added Preventative Maintenance Plan language to Section D.2 and E.2.

The Preventive Maintenance Plan requirement must be included in every applicable Title V permit pursuant to 326 IAC 2-7-5(12). This rule refers back to the Preventive Maintenance Plan requirement as described in 326 IAC 1-6-3. This Preventive Maintenance Plan rule sets out the requirements for:

(a) Any person responsible for operating any facility specified in 326 IAC 1-6-1 shall prepare and maintain a preventive maintenance plan including the following information:

(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.

(3) Identification and quantification of the replacement parts which will be maintained in inventory for quick replacement.

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. 326 IAC 1-6-3(b) provides that "...as deemed necessary by the commissioner, any person operating a facility shall comply with the requirements of subsection (a) of this section." Therefore, a PMP is applicable to any facility (controlled or uncontrolled) and associated control devices (if any).

IDEEM, OAQ bases PMP applicability on the underlying rule 326 IAC 1-6-1 not the Compliance Monitoring Guidance. The applicability rule (326 IAC 1-6-1) for PMPs was changed December 30, 2016. Below you can see the old version (top) and the new version (bottom) showing the portions removed (struck through in the top) and added (bold in the bottom). As you can see, the word facility was changed to source. Therefore, while the rule was previously evaluated based on each facility it is now based on the entire source. Therefore, if the source meets the
applicability, then the rule applies to every facility that has a requirement in the Title V permit. Since this source is required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1, this rule applies to the source.

326 IAC 1-6-1 Applicability
Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

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. (Air Pollution Control Division; 326 IAC 1-6-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2380; filed May 25, 1994, 11:00 a.m.: 17 IR 2238; filed Nov 25, 1998, 12:13 p.m.: 22 IR 980)

326 IAC 1-6-1 Applicability
Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. This rule applies to the owner or operator of any source required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1. (Air Pollution Control Division; 326 IAC 1-6-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2380; filed May 25, 1994, 11:00 a.m.: 17 IR 2238; filed Nov 25, 1998, 12:13 p.m.: 22 IR 980; filed Dec 30, 2016, 9:45 a.m.: 20170125-IR-326150326FRA)

**Significant Source Modification:** 081-41985-00021

**Master Agency Interest ID.:** 11835

<table>
<thead>
<tr>
<th>Issued by:</th>
<th>Issuance Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heath Hartley, Section Chief</td>
<td></td>
</tr>
<tr>
<td>Permits Branch</td>
<td></td>
</tr>
<tr>
<td>Office of Air Quality</td>
<td></td>
</tr>
</tbody>
</table>

**A.2 Emission Units and Pollution Control Equipment Summary**

[326 IAC 2-7-4(c)(3)[326 IAC 2-7-5(14)]]

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

(a) ***

Under 40 CFR 63, Subpart MMMM, HM curing ovens 203, 204, 205, 206, 253, 254, 255, and 256, MI curing ovens 201, 202, 251, and 252, and cleaning area tanks 1 and 2, are considered part of an existing affected source.

(d) Two (2) NTT wire enameling process lines, identified as 701-1 and 701-2, approved for construction in 2019, each with a maximum throughput of 80 pounds of copper
wire per hour and 0.017 gallons of enamel per pound of wire and each consisting of the following units:

(1) An annealer;
(2) Enamel applicators using flow coating;
(3) An electric curing oven;
(4) A wire cooler; and
(5) A topical lube applicator max 0.00036 gallons per pound of wire.

Each using an electric catalytic oxidizer as control, and exhausting through stack S701-1 and S701-2, respectively.

Under 40 CFR 63, Subpart MMMM, the MI wire enameling process lines 701-1 and 701-2, are considered part of a new affected source.

***

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Eight (8) HM wire enameling process lines, all constructed in 1993, identified as emission unit numbers 203, 204, 205, 206, 253, 254, 255, and 256, with a maximum rating of 850 pounds of magnet wire per hour, each. Each process line consists of an annealer, enamel applicators, a curing oven, a wire cooler, and a topical lube applicator. Emissions are controlled by catalytic oxidizers, internal to each curing oven, and exhausting to stacks S0203, S0204, S0205, S0206, S0253, S0254, S0255, and S0256, respectively.

(b) ***

Under 40 CFR 63, Subpart MMMM, HM curing ovens 203, 204, 205, 206, 253, 254, 255, and 256, MI curing ovens 201, 202, 251, and 252, and cleaning area tanks 1 and 2, are considered part of an existing affected source.

(d) Two (2) NTT wire enameling process lines, identified as 701-1 and 701-2, approved for construction in 2019, each with a maximum throughput of 80 pounds of copper wire per hour and 0.017 gallons of enamel per pound of wire and each consisting of the following units:

(1) An annealer;
(2) Enamel applicators using flow coating;
(3) An electric curing oven;
(4) A wire cooler; and
(5) A topical lube applicator max 0.00036 gallons per pound of wire.

Each using an electric catalytic oxidizer as control, and exhausting through stack S701-1 and S701-2, respectively.

Under 40 CFR 63, Subpart MMMM, the MI wire enameling process lines 701-1 and 701-2, are considered part of a new affected source.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)
Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limits [326 IAC 2-2]

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

(a) The combined input of VOC to the eight (8) HM wire enameling process lines, 203, 204, 205, 206, 253, 254, 255, and 256, and the four (4) MI wire enameling process lines, 201, 202, 251, and 252, including cleanup solvent shall be limited to 1,904.85 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The minimum overall VOC control efficiency for the catalytic oxidizers for the eight (8) HM wire enameling process lines, 203, 204, 205, 206, 253, 254, 255, and 256 and the four (4) MI wire enameling process lines, 201, 202, 251, and 252 shall be 94.9%

(b) The input of VOC to the two (2) NTT wire enameling process lines, 701-1 and 701-2, including cleanup solvent shall be limited to 82.06 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The minimum overall VOC control efficiency for the catalytic oxidizers for Ovens 701-1 and 701-2 shall be 96.8%

Compliance with these limits, combined with the potential to emit VOC from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than two-hundred fifty (250) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-8]

Pursuant to 326 IAC 8-2-8 (Magnet Wire Coating Operations), for the eight (8) HM (203, 204, 205, 206, 253, 254, 255, and 256) and four (4) six (6) MI wire enameling process lines (201, 202, 251, 252, 701-1 and 701-2), the Permittee shall not allow the discharge, into the atmosphere, of any volatile organic compounds (VOC) in excess of 1.7 pounds VOC per gallon of coating, excluding water, as delivered to the applicator.

D.1.23 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

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

D.1.34 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a) and in order to assure compliance with Conditions D.1.1 and D.1.2 the internal catalytic oxidizers shall be in operation whenever the associated wire enameling process lines are in operation.

D.1.45 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

Compliance with the VOC content and emission limitations contained in Condition D.1.42 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and "as applied" VOC data sheets. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.56 Volatile Organic Compounds (VOC) [326 IAC 8-1-2(b),(c)]

Compliance with the VOC content limitation contained in Condition D.1.42 shall be determined as follows using formulation data supplied by the coating manufacturer.
(a) Pursuant to 326 IAC 8-1-2(b)(1), VOC emissions shall be limited to no greater than the equivalent emissions, expressed as pounds of VOC per gallon of coating solids, as allowed in Condition D.1.2.

(1) The equivalency was determined by the following equation:

\[ E = \frac{L}{1 - \left(\frac{L}{D}\right)} \]

Where:

- \( L \) = Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating.
- \( D \) = Solvent density of VOC in the coating and shall be equal to 7.36 pounds of VOC per gallon of solvent.
- \( E \) = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

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 equivalent pounds of VOC per gallon of coating solids (as applied) shall be limited to less than 2.21.

(b) Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the catalytic oxidizers shall be no less than the equivalent overall efficiency necessary to comply with the equivalent emission limitation in (a).

(1) The overall efficiency was determined by the following equation:

\[ O = \frac{V - E \times 100}{V} \]

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 catalytic oxidizers controlling the eight (8) HM (203, 204, 205, 206, 253, 254, 255, and 256) and four (4) MI magnet wire ovens (201, 202, 251, 252) shall be 94.9% or greater and shall be 95.89% or greater for the wire enameling process lines, 701-1 and 701-2.

D.1.67 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall conduct performance testing on one (1) representative catalytic oxidizer to verify VOC control efficiency per Condition D.1.56(b), utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid
compliance demonstration. The catalytic oxidizer tested shall be the oxidizer in which the longest amount of time has elapsed since its previous test. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) At least once every twenty-four (24) months, the permittee shall remove the primary catalyst from each oven and have the catalyst vendor conduct a catalyst activity analysis. Catalysts with percent activity less than the catalyst activity of the oldest catalyst must be replaced or a stack test must be conducted to show that 94.9% overall efficiency is being achieved eight (8) HM (203, 204, 205, 206, 253, 254, 255, and 256) and four (4) MI magnet wire ovens (201, 202, 251, 252) and 95.89% or greater for the wire enameling process lines, 701-1 and 701-2.

(c) Before using a coating that would lead to a higher VOC loading in pounds per hour than what was used during the stack test required in (a) above, the Permittee shall conduct a performance test to verify VOC control efficiency as per Condition D.1.12 for the catalytic oxidizers using methods as approved by the Commissioner.

**

(e) Not later than 180 days after the startup of wire enameling process lines 701-1 and 701-2, the Permittee shall perform VOC testing on one (1) representative catalytic oxidizers utilizing methods approved by the commissioner at least once every 5 years from the date of the most recent valid compliance demonstration, with testing alternating between the two (2) catalytic oxidizers. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.1.78 Catalytic Oxidizer [40 CFR 64]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the catalytic oxidizers for measuring operating temperature of the catalytic oxidizers. For the purposes of this condition, continuous monitoring shall mean no less often than once per fifteen (15) minutes. The output from this monitoring system and the three hour average temperatures shall be recorded whenever the catalytic oxidizer is in operation.

(ab) The Permittee shall determine the 3 hour block average minimum temperature from the most recent latest valid stack test that demonstrates compliance with limit in Conditions D.1.1 and D.1.2, as approved by IDEM.

(bc) On and after the date the stack test results are available, the Permittee shall operate the catalytic oxidizer at or above the 3-hour average temperature as observed during the latest compliant stack test. The internal catalytic oxidizers shall operate at all times that the eight (8) HM and/or four (4) HI ovens are in operation.

(ed) If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A 3-hour average temperature reading below the above mentioned 3-hour average temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. When operating, the internal catalytic oxidizers shall maintain a minimum 3-hour averaging temperature of 500 °C or the 3-hour block average
minimum temperature determined in the latest approved compliance testing to maintain a control efficiency of 94.9% of volatile organic compound (VOC) captured in order to demonstrate compliance with Condition D.1.1.

D.1.8 Parametric Monitoring [40 CFR 64]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the catalytic oxidizers for measuring operating temperature of the catalytic oxidizers. For the purposes of this condition, continuous monitoring shall mean no less often than once per fifteen (15) minutes. The output from this monitoring system and the three hour average temperatures shall be recorded whenever the catalytic oxidizer is in operation.

(b) If the primary continuous monitoring system is not in operation, the oxidizer temperatures will be recorded using some manner of secondary system, such as with back up electro-mechanical hardware or manually if necessary. Nothing in this permit shall excuse the Permittee from complying with the requirement to continuously monitor the temperature of the catalytic oxidizers. Continuous monitoring shall mean no less often than once per fifteen (15) minutes.

(c) The oxidizer shall operate such that if the three-hour average temperature falls below the 3 hour block average minimum required temperature (setpoint) as determined by the latest stack test, corrective actions shall be taken within 15 minutes to return oxidizer temperature to at least the required minimum temperature setpoint. Corrective action must return oxidizer temperature to or above the minimum temperature setpoint within thirty (30) minutes of the corrective action, or the enamel flow to the oven shall be shut off. Failure to take corrective action or failure to shut off enamel flow as stated above shall be considered a deviation from this permit.

(d) If abnormal conditions are observed, all actions described in paragraph (c) above must be taken as reasonable response. Section C — Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.9 Record Keeping Requirement

(a) To document the compliance status with Conditions D.1.1, D.1.2 and D.1.8, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC limit established in D.1.1 and D.1.2:

(1) Records of manufacturer’s data, to verify the VOC content of each coating material, solvent, lubricant and cleanup solvent used.
(2) The amount of each coating material and solvent used on a monthly basis.
   (A) Records shall include purchase orders, invoices, “as supplied” and “as applied” VOC and HAP data sheets from the manufacturer, 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;
(23) The total VOC usage for each month for lines 203, 204, 205, 206, 253, 254, 255, and 256, 201, 251, and 252, and 701-1 and 701-2 Records of the VOC emitted based on: VOC delivered to the applicators X (1 - % overall control efficiency/100).
(34) The weight of VOCs emitted for each compliance period. Continuous
temperature records and 3-hour average temperature records.

(b) To document the compliance status with Condition D.1.8, the Permittee shall
maintain continuous temperature records for the catalytic oxidizers and the 3-hour
average temperature used to demonstrate compliance during the most recent
compliant stack test.

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

D.1.10 Reporting Requirements

A quarterly summary of the information to document the compliance status with D.1.1
shall be submitted not later than thirty (30) days after the end of the quarter being
reported. Section C - General Reporting contains the Permittee's obligation with regard to
the reporting required by this condition.

The report submitted by the Permittee does require a certification that meets the
requirements of 326 IAC 2-7-6(1) by a “responsible official,” as defined by 326 IAC 2-7-
1(35).

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

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

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

D.2.34 Record Keeping Requirements

***

SECTION E.1 NESHAP

Emissions Unit Description:

(a) ***

(d) Two (2) NTT wire enameling process lines, identified as 701-1 and 701-2, approved for
construction in 2019, each with a maximum throughput of 80 pounds of copper wire per
hour and 0.017 gallons of enamel per pound of wire and each consisting of the following
units:

(1) An annealer;
(2) Enamel applicators using flow coating;
(3) An electric curing oven;
(4) A wire cooler; and
(5) A topical lube applicator max 0.00036 gallons per pound of wire.

Each using an electric catalytic oxidizer as control, and exhausting through stack S701-
1 and S701-2, respectively.

Under 40 CFR 63, Subpart MMMM, the NTT wire enameling process lines 701-1 and 701-
2, are considered part of a new affected source.

(The information describing the process contained in this emissions unit description box is descriptive
information and does not constitute enforceable conditions.)
National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements
[326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under

E.1.2 Surface Coating of Miscellaneous Metal Parts and Products NESHAP [40 CFR Part 63, Subpart
MMMM][326 IAC 20-80]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart MMMM
(included as Attachment A to the operating permit), which are incorporated by reference as 326
IAC 20-80, for the emission units listed above:

(a) Existing Units: Eight (8) HM wire enameling process lines (203, 204, 205, 206, 253,
254, 255, and 256), Four (4) MI wire enameling process lines (201, 202, 251, and
252), and cleaning area (CLRM1):

(b) New Units; NTT wire enameling process lines (701-1 and 702-2):

1. 40 CFR 63.3880;
2. 40 CFR 63.3881(a)(1), (a)(4), and (b);
3. 40 CFR 63.3882(a), (b), and (c);
4. 40 CFR 63.3883(a)(2) and (d);
5. 40 CFR 63.3890(a)(4);
6. 40 CFR 63.3891(c);
7. 40 CFR 63.3892(b) and (c);
8. 40 CFR 63.3893(b) and (c);
9. 40 CFR 63.3900(a)(2), (b), and (c);
10. 40 CFR 63.3901;
11. 40 CFR 63.3910 excluding sections (c)(8)(i) and (c)(8)(ii);
12. 40 CFR 63.3920 excluding sections (a)(5) and (a)(6);
13. 40 CFR 63.3930 excluding sections (c)(2), (c)(3), (k)(4), and (k)(5);
14. 40 CFR 63.3931;
15. 40 CFR 63.3960(a);
16. 40 CFR 63.3961;
17. 40 CFR 63.3963;
18. 40 CFR 63.3964;
19. 40 CFR 63.3965(a);
20. 40 CFR 63.3966;
21. 40 CFR 63.3967(b);
22. 40 CFR 63.3968(c)(2) and (c)(3);
23. 40 CFR 63.3980;
24. 40 CFR 63.3981;
25. Table 1 to Subpart MMMM of Part 63 (Item 2);
26. Table 2 to Subpart MMMM of Part 63;
27. Table 3 to Subpart MMMM of Part 63;
28. Table 4 to Subpart MMMM of Part 63.

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

E.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for this facility. Section B - Preventive
Maintenance Plan contains the Permittee’s obligation with regard to the preventive
maintenance plan required by this condition.
Source Name: Essex Group, Inc. - Franklin  
Source Address: 3200 Essex Drive, Franklin, Indiana 46131  
Part 70 Permit No.: T081-37526-00021  
Facility: HM wire enameling process lines 203, 204, 205, 206, 253, 254, 255, and 256  
Parameter: VOC input  
Limit: The input of VOC to the eight (8) HM wire enameling process lines, 203, 204, 205, 206, 253, 254, 255, and 256, including cleanup solvent shall be limited to 1,274.17 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

### Part 70 Quarterly Report

<table>
<thead>
<tr>
<th>QUARTER</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This Month (tons)</td>
<td>Previous 11 Months (tons)</td>
<td>12 Month Total (tons)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

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

Part 70 Quarterly Report

Source Name: Essex Group, Inc. - Franklin
Source Address: 3200 Essex Drive, Franklin, Indiana 46131
Part 70 Permit No.: T081-37526-00021
Facility: MI wire enameling process lines, 201, 202, 251, and 252
Parameter: VOC input
Limit: The input of VOC to the four (4) MI wire enameling process lines, 201, 202, 251, and 252, including cleanup solvent shall be limited to 630.68 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____________ YEAR: ________________

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This Month (tons)</td>
<td>Previous 11 Months (tons)</td>
<td>12 Month Total (tons)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
   Deviation has been reported on:

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

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

Part 70 Quarterly Report

Source Name: Essex Group, Inc. - Franklin
Source Address: 3200 Essex Drive, Franklin, Indiana 46131
Part 70 Permit No.: T081-37526-00021
Facility: Electric catalytic magnet wire ovens, 701-1 and 701-2
Parameter: VOC input
Limit: The input of VOC to the two (2) NTT wire enameling process lines, 701-1 and 701-2, including cleanup solvent shall be limited to 82.06 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _______________ YEAR: _______________

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This Month (tons)</td>
<td>Previous 11 Months (tons)</td>
<td>12 Month Total (tons)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
   Deviation has been reported on:

Submitted by: _______________________________________
Title / Position: _____________________________________
Signature: __________________________________________
Date: ______________________________________________
Phone: _____________________________________________
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 September 30, 2019.

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 081-41985-00021. The operation of this proposed modification shall be subject to the conditions of the attached proposed Significant Permit Modification No. 081-42198-00021.

The staff recommends to the Commissioner that the Part 70 Significant Source Modification and Significant Permit Modification be approved.

IDEM Contact

(a) If you have any questions regarding this permit, please contact Deena Levering, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 234-5400 or (800) 451-6027, and ask for Deena Levering or (317) 234-5400.

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

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.
## Appendix A: Emission Calculations

### PTE Summary

**Company Name:** Essex Group, Inc.  
**Source Address:** 3200 Essex Drive, Franklin, IN 46131  
**Significant Source Modification No.:** 081-41985-00021  
**Significant Permit Modification No.:** 081-42198-00021  
**Reviewer:** Deena Levering

### Uncontrolled Potential to Emit (tons/yr)

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight (8) HM wire enameling lines</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>33.02</td>
<td>-</td>
<td>1274.17</td>
<td>804.19</td>
</tr>
<tr>
<td>Four (4) MI wire enameling lines</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>16.51</td>
<td>630.68</td>
<td>401.17</td>
<td></td>
</tr>
<tr>
<td>One (1) Cleaning area</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14.67</td>
<td>-</td>
<td>4.05</td>
<td></td>
</tr>
<tr>
<td>Dry Lube</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>67.30</td>
<td>-</td>
<td>46.05</td>
</tr>
<tr>
<td>Processing Lines NTT 701-1 and 701-2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.83</td>
<td>-</td>
<td>82.06</td>
<td>46.05</td>
</tr>
<tr>
<td><strong>Total Excluding Fugitives</strong></td>
<td>0.26</td>
<td>0.63</td>
<td>0.63</td>
<td>0.17</td>
<td>60.79</td>
<td>2,068.40</td>
<td>5.87</td>
<td><strong>Fugitive Emissions</strong></td>
</tr>
</tbody>
</table>

*PM2.5 listed is direct PM2.5  **Fugitive HAP emissions are always included in the source-wide emissions

### Potential to Emit after Control (tons/yr)

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight (8) HM wire enameling lines</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>33.02</td>
<td>-</td>
<td>64.98</td>
<td>41.01</td>
</tr>
<tr>
<td>Four (4) MI wire enameling lines</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>16.51</td>
<td>32.16</td>
<td>20.46</td>
<td></td>
</tr>
<tr>
<td>One (1) Cleaning area</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14.67</td>
<td>-</td>
<td>4.05</td>
<td></td>
</tr>
<tr>
<td>Dry Lube</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>67.30</td>
<td>-</td>
<td>4.05</td>
</tr>
<tr>
<td>Processing Lines NTT 701-1 and 701-2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.83</td>
<td>-</td>
<td>2.59</td>
<td>1.77</td>
</tr>
<tr>
<td><strong>Total Excluding Fugitives</strong></td>
<td>0.26</td>
<td>0.63</td>
<td>0.63</td>
<td>0.17</td>
<td>60.79</td>
<td>182.23</td>
<td>5.87</td>
<td>46.05</td>
</tr>
</tbody>
</table>

*PM2.5 listed is direct PM2.5  **Fugitive HAP emissions are always included in the source-wide emissions

### Potential to Emit after Issuance (tons/yr)

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight (8) HM wire enameling lines</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>33.02</td>
<td>-</td>
<td>97.15</td>
<td>804.19</td>
</tr>
<tr>
<td>Four (4) MI wire enameling lines</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>16.51</td>
<td>80.98</td>
<td>401.17</td>
<td></td>
</tr>
<tr>
<td>One (1) Cleaning area</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14.67</td>
<td>-</td>
<td>4.05</td>
<td></td>
</tr>
<tr>
<td>Dry Lube</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>67.30</td>
<td>-</td>
<td>4.05</td>
</tr>
<tr>
<td>Processing Lines NTT 701-1 and 701-2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.83</td>
<td>-</td>
<td>2.59</td>
<td>48.05</td>
</tr>
<tr>
<td><strong>Total Excluding Fugitives</strong></td>
<td>0.26</td>
<td>0.63</td>
<td>0.63</td>
<td>0.17</td>
<td>60.79</td>
<td>192.23</td>
<td>5.87</td>
<td>48.05</td>
</tr>
</tbody>
</table>

*PM2.5 listed is direct PM2.5  **Fugitive HAP emissions are always included in the source-wide emissions

Note: The gray shaded cells indicate where limits are included.
### Company Name:
Essex Group, Inc.

### Significant Source Modification No.:
081-41985-00021

### Significant Permit Modification No.:
081-42198-00021

### Emissions Unit

<table>
<thead>
<tr>
<th></th>
<th>Xylene</th>
<th>Phenol</th>
<th>Mixed Cresols</th>
<th>Ethylbenzene</th>
<th>Cumene</th>
<th>Benzene</th>
<th>Dichlorobenzene</th>
<th>Formaldehyde</th>
<th>Hexane</th>
<th>Toluene</th>
<th>Lead</th>
<th>Cadmium</th>
<th>Chromium</th>
<th>Magnesio</th>
<th>Nickel</th>
<th>1,3 Butadiene</th>
<th>Acetaldehyde</th>
<th>Acrolein</th>
<th>Total HAPs**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight (8) HM wire enameling lines</td>
<td>107.92</td>
<td>486.62</td>
<td>147.76</td>
<td>27.02</td>
<td>34.88</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>804.19</td>
<td><strong>Potential to Emit of HAPs after Controls (tons/yr)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four (4) MI wire enameling lines</td>
<td>53.96</td>
<td>243.31</td>
<td>73.13</td>
<td>13.51</td>
<td>17.26</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>401.17</td>
<td><strong>Potential to Emit of HAPs after Issuance (tons/yr)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One (1) Cleaning area</td>
<td>0.10</td>
<td>2.70</td>
<td>1.16</td>
<td>0.03</td>
<td>0.07</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.05</td>
<td><strong>Potential to Emit HAPs after Issuance (tons/yr)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovens NTT 701-1 and 701-2</td>
<td>7.13</td>
<td>28.78</td>
<td>6.72</td>
<td>2.74</td>
<td>4.80</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>50.17</td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combustion Units</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.36E-04</td>
<td>7.79E-05</td>
<td>4.87E-03</td>
<td>1.17E-01</td>
<td>2.21E-04</td>
<td>3.25E-05</td>
<td>7.14E-05</td>
<td>9.09E-05</td>
<td>2.47E-05</td>
<td>1.36E-04</td>
<td>1.23E-01</td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Generator</td>
<td>1.25E-04</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.08E-04</td>
<td>-</td>
<td>5.16E-04</td>
<td>-</td>
<td>1.79E-04</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3.36E-04</td>
<td>4.05E-05</td>
<td>1.69E-03</td>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The gray shaded cells indicate where limits are included.
### Uncontrolled Potential to Emit of the Modification (tons/yr)

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire enameling process lines 701-1 and 701-2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.83</td>
<td>82.06</td>
<td>-</td>
<td>46.05</td>
</tr>
<tr>
<td>Total</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.83</td>
<td>82.06</td>
<td>0.00</td>
<td>46.05</td>
</tr>
</tbody>
</table>

* PM2.5 listed is direct PM2.5  
**Fugitive HAP emissions are always included in the source-wide emissions

### Potential to Emit after Control of the Modification (tons/yr)

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire enameling process lines 701-1 and 701-2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.83</td>
<td>2.59</td>
<td>-</td>
<td>1.77</td>
</tr>
<tr>
<td>Total</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.83</td>
<td>2.59</td>
<td>0.00</td>
<td>1.77</td>
</tr>
</tbody>
</table>

* PM2.5 listed is direct PM2.5  
**Fugitive HAP emissions are always included in the source-wide emissions

### Potential to Emit after Issuance of the Modification (tons/yr)

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire enameling process lines 701-1 and 701-2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.83</td>
<td>2.59</td>
<td>-</td>
<td>46.05</td>
</tr>
<tr>
<td>Total</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.83</td>
<td>2.59</td>
<td>0.00</td>
<td>46.05</td>
</tr>
</tbody>
</table>

* PM2.5 listed is direct PM2.5  
**Fugitive HAP emissions are always included in the source-wide emissions

Note: The gray shaded cells indicate where limits are included.
### Particulate and VOC

**Material**

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (lbs/gal)</th>
<th>Weight % Volatile (water, VOC, and exempt compounds)*</th>
<th>Weight % NMP</th>
<th>Weight % VOC</th>
<th>Weight % Mixed Creas</th>
<th>Weight % Phenol</th>
<th>Weight % Ethybenzene</th>
<th>Weight % Cumene</th>
<th>Maximum Material Usage (gal/lb of wire)</th>
<th>Maximum Capacity (lb wire/hour)</th>
<th>Pounds NMP per gallon of coating Transfer Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>FORMVAR SX-48007</em></td>
<td>8.01</td>
<td>84.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>98.60%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.0088 lbs/gal</td>
<td>0.0088 lb/hour</td>
<td>0.00%</td>
</tr>
<tr>
<td>Amide Imide*</td>
<td>8.50</td>
<td>74.50%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>98.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.0088 lbs/gal</td>
<td>0.0088 lb/hour</td>
<td>0.00%</td>
</tr>
<tr>
<td>Topical Lubricant*</td>
<td>5.00</td>
<td>98.80%</td>
<td>0.20%</td>
<td>0.15%</td>
<td>98.60%</td>
<td>0.13%</td>
<td>0.02%</td>
<td>0.00%</td>
<td>0.0088 lbs/gal</td>
<td>0.0088 lb/hour</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

**VOC Coating**

Each Oven Combined Totals

| Total | 50.36 | 14.03 | 80.00 | 0.13 | 23.03 | 0.16 |

### Control Efficiency = 96.8%

### Amide Imide

- **Density**: 8.50 lbs/gal
- **Weight % Volatile** (water, VOC): 98.00%
- **Weight % NMP**: 0.20%
- **Weight % VOC**: 0.15%
- **Weight % Ethybenzene**: 0.13%
- **Weight % Phenol**: 0.02%
- **Maximum Material Usage (gal/lb of wire)**: 0.0088 lbs/gal
- **Maximum Capacity (lb wire/hour)**: 0.0088 lb/hour
- **Pounds NMP per gallon of coating**: 0.00%
- **Transfer Efficiency**: 0.00%

### Formvar SX-48007

- **Density**: 8.01 lbs/gal
- **Weight % Volatile** (water, VOC, and exempt compounds): 84.00%
- **Weight % NMP**: 0.00%
- **Weight % VOC**: 0.00%
- **Weight % Mixed Creas**: 98.60%
- **Weight % Phenol**: 0.00%
- **Weight % Ethybenzene**: 0.00%
- **Weight % Cumene**: 0.00%
- **Maximum Material Usage (gal/lb of wire)**: 0.0088 lbs/gal
- **Maximum Capacity (lb wire/hour)**: 0.0088 lb/hour
- **Pounds NMP per gallon of coating**: 0.00%
- **Transfer Efficiency**: 0.00%

### Formvar SX-93004

- **Density**: 5.00 lbs/gal
- **Weight % Volatile** (water, VOC, and exempt compounds): 98.80%
- **Weight % NMP**: 0.20%
- **Weight % VOC**: 0.15%
- **Weight % Ethybenzene**: 0.02%
- **Weight % Phenol**: 0.00%
- **Maximum Material Usage (gal/lb of wire)**: 0.0088 lbs/gal
- **Maximum Capacity (lb wire/hour)**: 0.0088 lb/hour
- **Pounds NMP per gallon of coating**: 0.00%
- **Transfer Efficiency**: 0.00%

### Amide Imide

- **Density**: 8.01 lbs/gal
- **Weight % Volatile** (water, VOC, and exempt compounds): 84.00%
- **Weight % NMP**: 0.00%
- **Weight % VOC**: 0.00%
- **Weight % Mixed Creas**: 98.60%
- **Weight % Phenol**: 0.00%
- **Weight % Ethybenzene**: 0.00%
- **Weight % Cumene**: 0.00%
- **Maximum Material Usage (gal/lb of wire)**: 0.0088 lbs/gal
- **Maximum Capacity (lb wire/hour)**: 0.0088 lb/hour
- **Pounds NMP per gallon of coating**: 0.00%
- **Transfer Efficiency**: 0.00%

### Formvar SX-48007

- **Density**: 8.01 lbs/gal
- **Weight % Volatile** (water, VOC, and exempt compounds): 84.00%
- **Weight % NMP**: 0.00%
- **Weight % VOC**: 0.00%
- **Weight % Mixed Creas**: 98.60%
- **Weight % Phenol**: 0.00%
- **Weight % Ethybenzene**: 0.00%
- **Weight % Cumene**: 0.00%
- **Maximum Material Usage (gal/lb of wire)**: 0.0088 lbs/gal
- **Maximum Capacity (lb wire/hour)**: 0.0088 lb/hour
- **Pounds NMP per gallon of coating**: 0.00%
- **Transfer Efficiency**: 0.00%

### Formvar SX-93004

- **Density**: 5.00 lbs/gal
- **Weight % Volatile** (water, VOC, and exempt compounds): 98.80%
- **Weight % NMP**: 0.20%
- **Weight % VOC**: 0.15%
- **Weight % Ethybenzene**: 0.02%
- **Weight % Phenol**: 0.00%
- **Maximum Material Usage (gal/lb of wire)**: 0.0088 lbs/gal
- **Maximum Capacity (lb wire/hour)**: 0.0088 lb/hour
- **Pounds NMP per gallon of coating**: 0.00%
- **Transfer Efficiency**: 0.00%
### Appendix A: Emissions Calculations

**VOC and Particulate**

**From Surface Coating Operations**

**HM Process Lines and MI Process Lines**

**Company Name:** Essex Group, Inc.

**Source Address:** 3200 Essex Drive, Franklin, IN 46131

**Significant Source Modification No.:** 081-41985-00021

**Significant Permit Modification No.:** 081-42198-00021

**Reviewer:** Deena Levering

#### HM Process Lines (Units 203, 204, 205, 206, 253, 254, 255, 256)

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (lb/Gal)</th>
<th>Weight % Volatile (H2O &amp; Organics)</th>
<th>Weight % Water</th>
<th>Volume % Organics</th>
<th>Volume % Non-Volatiles (solids)</th>
<th>Gal of Mat. (gall/units)</th>
<th>Maximum (unit/ hr)</th>
<th>Pounds VOC per gallon of coating</th>
<th>Potential VOC pounds per hour</th>
<th>Potential VOC pounds per day</th>
<th>Potential VOC tons per year</th>
<th>lb VOC/gal solids</th>
<th>Potential NOx tons per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theic Polyester SX-27911</td>
<td>9.96</td>
<td>51.60%</td>
<td>0.19%</td>
<td>51.50%</td>
<td>0.12%</td>
<td>45.25%</td>
<td>0.004704</td>
<td>850.000</td>
<td>5.14</td>
<td>5.13</td>
<td>26.51</td>
<td>492.23</td>
<td>89.83</td>
</tr>
<tr>
<td>Aramid-imide SX-83057</td>
<td>8.90</td>
<td>73.50%</td>
<td>0.15%</td>
<td>73.35%</td>
<td>0.15%</td>
<td>26.16%</td>
<td>0.002725</td>
<td>850.000</td>
<td>6.54</td>
<td>6.53</td>
<td>15.12</td>
<td>362.83</td>
<td>66.22</td>
</tr>
<tr>
<td>Formvar SX-48006</td>
<td>8.30</td>
<td>78.70%</td>
<td>0.18%</td>
<td>78.54%</td>
<td>0.03%</td>
<td>17.26%</td>
<td>0.007061</td>
<td>850.000</td>
<td>6.52</td>
<td>6.52</td>
<td>36.36</td>
<td>872.72</td>
<td>159.27</td>
</tr>
</tbody>
</table>

*There are eight (8) identical units which perform identical operations.

#### MI Process Lines (Units 201, 202, 251, 252)

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (lb/Gal)</th>
<th>Weight % Volatile (H2O &amp; Organics)</th>
<th>Weight % Water</th>
<th>Volume % Organics</th>
<th>Volume % Non-Volatiles (solids)</th>
<th>Gal of Mat. (gall/units)</th>
<th>Maximum (unit/ hr)</th>
<th>Pounds VOC per gallon of coating</th>
<th>Potential VOC pounds per hour</th>
<th>Potential VOC pounds per day</th>
<th>Potential VOC tons per year</th>
<th>lb VOC/gal solids</th>
<th>Potential NOx tons per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theic Polyester SX-27911</td>
<td>9.96</td>
<td>51.60%</td>
<td>0.19%</td>
<td>51.50%</td>
<td>0.12%</td>
<td>45.25%</td>
<td>0.004704</td>
<td>850.000</td>
<td>5.14</td>
<td>5.13</td>
<td>26.51</td>
<td>492.23</td>
<td>89.83</td>
</tr>
<tr>
<td>Aramid-imide SX-83057</td>
<td>8.90</td>
<td>73.50%</td>
<td>0.15%</td>
<td>73.35%</td>
<td>0.15%</td>
<td>26.16%</td>
<td>0.002725</td>
<td>850.000</td>
<td>6.54</td>
<td>6.53</td>
<td>15.12</td>
<td>362.83</td>
<td>66.22</td>
</tr>
<tr>
<td>Formvar SX-48006</td>
<td>8.30</td>
<td>78.70%</td>
<td>0.18%</td>
<td>78.54%</td>
<td>0.03%</td>
<td>17.26%</td>
<td>0.007061</td>
<td>850.000</td>
<td>6.52</td>
<td>6.52</td>
<td>36.36</td>
<td>872.72</td>
<td>159.27</td>
</tr>
</tbody>
</table>

*There are four (4) identical units which perform identical operations.

**Combined VOC Input (HM and MI Lines) (ton/yr)**

<table>
<thead>
<tr>
<th>Materials as Applied</th>
<th>Applicant Listed VOC Control Efficiency</th>
<th>Potential VOC pounds per hour per unit</th>
<th>Potential VOC pounds per day per unit</th>
<th>Potential VOC tons per year X 12 units</th>
<th>Potential NOx tons per year X 12 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formvar SX-48006</td>
<td>94.90%</td>
<td>1.85</td>
<td>44.51</td>
<td>32.16</td>
<td>4.13</td>
</tr>
</tbody>
</table>

**Total Limited Potential Emissions from the HM and MI Process Lines**

<table>
<thead>
<tr>
<th>Materials as Applied</th>
<th>Potential VOC pounds per hour per unit</th>
<th>Potential VOC pounds per day per unit</th>
<th>Potential VOC tons per year X 12 units</th>
<th>Potential NOx tons per year X 12 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formvar SX-48006</td>
<td>94.90%</td>
<td>1.84</td>
<td>44.06</td>
<td>32.16</td>
</tr>
</tbody>
</table>

**METHODOLOGY**

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

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

Potential VOC Pounds per Day X 12 units = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gall/unit) * Maximum (unit/ hr) / (24 hr/day)

Potential VOC Tons per Year X 12 units = Potential VOC Pounds per Day X 12 units / (2000 lbs)

Potential NOx Tons per Year X 12 units = Potential NOx Pounds per Day X 12 units / (2000 lbs)

Total = Worst Case + Sum of all solvents used
Appendix A: Emissions Calculations
Hazardous Air Pollutants (HAPs)
From Surface Coating Operations

Company Name: Essex Group, Inc.  
Source Address: 3200 Essex Drive, Franklin, IN 46131  
Significant Source Modification No.: 081-41985-00021  
Significant Permit Modification No.: 081-42198-00021  
Reviewer: Deena Levering

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>THEIC Polyester SX-27911</td>
<td>9.95</td>
<td>0.004704</td>
<td>850.00</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>34.16%</td>
<td>14.24%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>80.83</td>
<td>11.26</td>
<td>72.00</td>
</tr>
<tr>
<td>Amide-imide SX-83057</td>
<td>8.9</td>
<td>0.002725</td>
<td>850.00</td>
<td>14.94%</td>
<td>3.74%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>13.49</td>
<td>3.38</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>16.87</td>
</tr>
<tr>
<td>Formvar SX-48006</td>
<td>8.3</td>
<td>0.007061</td>
<td>790.00</td>
<td>0.94%</td>
<td>0.20%</td>
<td>2.15%</td>
<td>15.18%</td>
<td>20.24%</td>
<td>1.91</td>
<td>0.41</td>
<td>4.36</td>
<td>32.84</td>
<td>18.47</td>
<td>57.30</td>
</tr>
</tbody>
</table>

Total Potential Emissions per unit:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>THEIC Polyester SX-27911</td>
<td>94.90%</td>
<td>0.69</td>
<td>0.17</td>
<td>0.22</td>
<td>3.10</td>
<td>0.94</td>
<td>6.13</td>
</tr>
<tr>
<td>Amide-imide SX-83057</td>
<td>94.90%</td>
<td>5.50</td>
<td>1.38</td>
<td>1.78</td>
<td>24.82</td>
<td>7.54</td>
<td>41.01</td>
</tr>
</tbody>
</table>

* There are eight (8) identical units which perform identical operations

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gallon/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Limited PTE (tons/yr) = Unlimited PTE (ton/yr) * (100% - Destruction Efficiency)
Appendix A: Emissions Calculations
Hazardous Air Pollutants (HAPs)
From Surface Coating Operations

Company Name: Essex Group, Inc.
Source Address: 3200 Essex Drive, Franklin, IN 46131
Significant Source Modification No.: 081-41985-00021
Significant Permit Modification No.: 081-42198-00021
Reviewer: Deena Levering

<table>
<thead>
<tr>
<th>Material as Applied</th>
<th>Maximum (unit/hour)</th>
<th>Weight % Xylene</th>
<th>Weight % Ethylbenzene</th>
<th>Weight % Cumene</th>
<th>Weight % Phenol</th>
<th>Weight % Cresylic Acid</th>
<th>Xylene Emissions (ton/yr)</th>
<th>Ethylbenzene Emissions (ton/yr)</th>
<th>Cumene Emissions (ton/yr)</th>
<th>Phenol Emissions (ton/yr)</th>
<th>Mixed Cresols Emissions (ton/yr)</th>
<th>Total HAP Emissions (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEIC Polyester SX-27911</td>
<td>8.95</td>
<td>0.004704</td>
<td>850.00</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>14.24%</td>
<td>14.24%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>80.83</td>
</tr>
<tr>
<td>Amide-imide SX-83057</td>
<td>8.9</td>
<td>0.002725</td>
<td>850.00</td>
<td>14.94%</td>
<td>3.74%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>16.87</td>
</tr>
<tr>
<td>Formvar SX-48006</td>
<td>8.3</td>
<td>0.007125</td>
<td>775.00</td>
<td>0.94%</td>
<td>0.20%</td>
<td>2.15%</td>
<td>15.18%</td>
<td>1.89</td>
<td>0.40</td>
<td>4.32</td>
<td>32.50</td>
<td>18.28</td>
</tr>
</tbody>
</table>

* There are four (4) identical units which perform identical operations.

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gall/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs
Limited PTE (tons/yr) = Unlimited PTE (ton/yr) * (100% - Destruction Efficiency)
## Appendix A: Emissions Calculations

VOC and HAPs Emissions from Cleaning Room

Company Name: Essex Group, Inc.
Source Address: 3200 Essex Drive, Franklin, IN 46131
Significant Source Modification No.: 081-41985-00021
Significant Permit Modification No.: 081-42198-00021
Reviewer: Deena Levering

### VOC Emissions

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Density (Lb/Gal)</th>
<th>Weight % Volatile (H2O &amp; Organics)</th>
<th>Weight % Water</th>
<th>Weight % Organics</th>
<th>Volume % Water</th>
<th>Volume % Non-Volatiles (solids)</th>
<th>Net Loss (gal)</th>
<th>Net Consumption (gal/day)</th>
<th>Pounds VOC per gallon of solvent less water</th>
<th>Pounds VOC per gallon of solvent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent Blend SX-90702</td>
<td>8.57</td>
<td>100.00%</td>
<td>0.2%</td>
<td>99.8%</td>
<td>0.21%</td>
<td>0.00%</td>
<td>1200.00</td>
<td>3.288</td>
<td>8.57</td>
<td>8.55</td>
</tr>
<tr>
<td>Solvent Blend SX-90400</td>
<td>7.27</td>
<td>100.00%</td>
<td>0.2%</td>
<td>99.8%</td>
<td>0.18%</td>
<td>0.00%</td>
<td>1200.00</td>
<td>3.288</td>
<td>7.27</td>
<td>7.26</td>
</tr>
<tr>
<td>Solvent Blend SX-91400</td>
<td>8.66</td>
<td>100.00%</td>
<td>0.2%</td>
<td>99.8%</td>
<td>0.18%</td>
<td>0.00%</td>
<td>1200.00</td>
<td>3.288</td>
<td>8.66</td>
<td>8.64</td>
</tr>
</tbody>
</table>

**Potential Emissions Worst case for all solvents**

<table>
<thead>
<tr>
<th></th>
<th>Pounds VOC per gallon of solvent less water</th>
<th>Pounds VOC per gallon of solvent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worst Case:</td>
<td>28.12</td>
<td>5.13</td>
</tr>
</tbody>
</table>

### HAP Emissions

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Density (lb/gal)</th>
<th>Net Loss (gal)</th>
<th>Net Consumption (gal/day)</th>
<th>Weight % Xylene</th>
<th>Weight % Ethylbenzene</th>
<th>Weight % Cumene</th>
<th>Weight % Phenol</th>
<th>Xylene Emissions (ton/yr)</th>
<th>Ethylbenzene Emissions (ton/yr)</th>
<th>Cumene Emissions (ton/yr)</th>
<th>Phenol Emissions (ton/yr)</th>
<th>Mixed Cresols Emissions (ton/yr)</th>
<th>Total HAPs Emissions (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent Blend SX-90702</td>
<td>8.57</td>
<td>1200.00</td>
<td>3.29</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>50.00%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Solvent Blend SX-90400</td>
<td>7.27</td>
<td>1200.00</td>
<td>3.29</td>
<td>2.40%</td>
<td>0.60%</td>
<td>1.50%</td>
<td>0.00%</td>
<td>0.10</td>
<td>0.03</td>
<td>0.07</td>
<td>0.00</td>
<td>0.00</td>
<td>0.20</td>
</tr>
<tr>
<td>Solvent Blend SX-91400</td>
<td>8.66</td>
<td>1200.00</td>
<td>3.29</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Potential Emissions Worst case for all solvents**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Worst Case:</td>
<td>0.10</td>
<td>0.03</td>
<td>0.07</td>
<td>2.70</td>
<td>1.16</td>
<td>4.05</td>
</tr>
</tbody>
</table>

****MSDS for SX-90702 listed maximum possible amounts of HAP contents. Calculations based on worst case.

**Methodology:**

- Pounds of VOC per Gallon Solvent less Water = (Density (lb/gal) * Weight % Organics) / (1 - Volume % water)
- Pounds of VOC per Gallon Solvent = (Density (lb/gal) * Weight % Organics)
- Potential VOC Pounds per Day = Pounds of VOC per Gallon solvent (lb/gal) * Net Consumption (gal/day)
- Potential VOC Tons per Year = Pounds of VOC per Gallon solvent (lb/gal) * Net Consumption (gal/day)(1/day/24hr) * (8760 hr/yr) * (1 ton/2000 lbs)
- Total = Worst Coating + Sum of all solvents used
- HAPs emission rate (ton/yr) = Density (lb/gal)*Net Consumption (gal/day) * Weight % HAP * 1 day/24hr * 8760 hr/yr * 1ton/2000lb
Appendix A: Emissions Calculations
VOC Emissions
From Dry Lube

Company Name: Essex Group, Inc.
Source Address: 3200 Essex Drive, Franklin, IN 46131
Significant Source Modification No.: 081-41985-00021
Significant Permit Modification No.: 081-42198-00021
Reviewer: Deena Levering

VOC Emissions

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Density (Lb/Gal)</th>
<th>Weight % Volatile (H2O &amp; Organics)</th>
<th>Weight % Water</th>
<th>Weight % Organics</th>
<th>Volume % Water</th>
<th>Volume % Non-Volatiles (solids)</th>
<th>Net Consumption (gal)</th>
<th>Net Consumption (gal/day)</th>
<th>Pounds VOC per gallon of solvent less water</th>
<th>Pounds VOC per gallon of solvent</th>
<th>Potential VOC pounds per day</th>
<th>Potential VOC pounds per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Lube</td>
<td>7.84</td>
<td>98.00%</td>
<td>0.0%</td>
<td>98.0%</td>
<td>0.00%</td>
<td>2.00%</td>
<td>17,520.00</td>
<td>48.000</td>
<td>7.68</td>
<td>7.68</td>
<td>368.79</td>
<td>67.30</td>
</tr>
</tbody>
</table>

Methodology:

Pounds of VOC per Gallon Solvent less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Solvent = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Day = Pounds of VOC per Gallon solvent (lb/gal) * Net Consumption (gal/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon solvent (lb/gal) * Net Consumption (gal/day)*(1day/24hr) * (8760 hr/yr) * (1 ton/2000 lb)
Appendix A: Emissions Calculations
Natural Gas Combustion Emissions

Company Name: Essex Group, Inc.
Source Address: 3200 Essex Drive, Franklin, IN 46131
Significant Source Modification No.: 081-41985-00021
Significant Permit Modification No.: 081-42198-00021
Reviewer: Deena Levering

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Enameling Ovens</th>
<th>HVAC Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.8 MMBtu/hr</td>
<td>0.035-0.880 MMBtu/hr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>PM10*</td>
<td>0.49</td>
<td>0.49</td>
</tr>
<tr>
<td>direct PM2.5*</td>
<td>0.49</td>
<td>0.04</td>
</tr>
<tr>
<td>SO2</td>
<td>6.49</td>
<td>6.49</td>
</tr>
<tr>
<td>NOx</td>
<td>2.00</td>
<td>0.36</td>
</tr>
<tr>
<td>VOC</td>
<td>5.5</td>
<td>0.36</td>
</tr>
<tr>
<td>CO</td>
<td>84</td>
<td>5.46</td>
</tr>
</tbody>
</table>

Methodology

All emission factors are based on normal firing.

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/yr) = 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

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>Benzene</th>
<th>Dichlorobenzene</th>
<th>Formaldehyde</th>
<th>Hexane</th>
<th>Toluene</th>
<th>Total - Organics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total HAPs</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.12</td>
</tr>
</tbody>
</table>

HAPs - Metals

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>Lead</th>
<th>Cadmium</th>
<th>Chromium</th>
<th>Manganese</th>
<th>Nickel</th>
<th>Total - Metals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total HAPs</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.12</td>
</tr>
</tbody>
</table>

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.
Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<=600 HP)
Maximum Input Rate (<=4.2 MMBtu/hr)

Company Name: Essex Group, Inc.
Source Address: 3200 Essex Drive, Franklin, IN 46131
Significant Source Modification No.: 081-41985-00021
Significant Permit Modification No.: 081-42198-00021
Reviewer: Deena Levering

<table>
<thead>
<tr>
<th>Output Horsepower Rating (hp)</th>
<th>250.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Hours Operated per Year</td>
<td>500</td>
</tr>
<tr>
<td>Potential Throughput (hp-hr/yr)</td>
<td>125,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/hp-hr</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>0.0022</td>
<td>0.14</td>
</tr>
<tr>
<td>PM10*</td>
<td>0.0022</td>
<td>0.14</td>
</tr>
<tr>
<td>direct PM2.5*</td>
<td>0.0021</td>
<td>0.14</td>
</tr>
<tr>
<td>SO2</td>
<td>0.0310</td>
<td>1.94</td>
</tr>
<tr>
<td>NOx</td>
<td>0.0025</td>
<td>0.16</td>
</tr>
<tr>
<td>VOC</td>
<td>0.0022</td>
<td>0.42</td>
</tr>
<tr>
<td>CO</td>
<td>0.0025</td>
<td></td>
</tr>
</tbody>
</table>

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

### Hazardous Air Pollutants (HAPs)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Total PAH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>6.53E-06</td>
</tr>
<tr>
<td>Toluene</td>
<td>2.86E-06</td>
</tr>
<tr>
<td>Xylene</td>
<td>2.00E-06</td>
</tr>
<tr>
<td>1,3-Butadiene</td>
<td>2.74E-07</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>8.26E-06</td>
</tr>
<tr>
<td>Acetaldehyde</td>
<td>5.37E-06</td>
</tr>
<tr>
<td>Acrolein</td>
<td>6.48E-07</td>
</tr>
<tr>
<td>HAPs***</td>
<td>1.18E-06</td>
</tr>
</tbody>
</table>

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

****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

| Potential Emission of Total HAPs (tons/yr) | 1.69E-03 |

Methodology
Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1, 3.4-2, 3.4-3, and 3.4-4.
Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]
### Paved Roads at Industrial Site

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

<table>
<thead>
<tr>
<th>Vehicle Information (provided by source)</th>
<th>Maximum number of vehicles per day</th>
<th>Number of one-way trips per day</th>
<th>Maximum Weight of Loaded Vehicle (tons/trip)</th>
<th>Maximum one-way distance (miles/day)</th>
<th>Maximum one-way distance (miles/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi Truck (entering plant) (one-way trip)</td>
<td>7.0</td>
<td>1.0</td>
<td>39.5</td>
<td>39.5</td>
<td>440</td>
</tr>
<tr>
<td>Semi Truck (leaving plant) (one-way trip)</td>
<td>7.0</td>
<td>1.0</td>
<td>39.5</td>
<td>39.5</td>
<td>440</td>
</tr>
<tr>
<td>Box Van (entering plant) (one-way trip)</td>
<td>2.0</td>
<td>1.0</td>
<td>20.0</td>
<td>20.0</td>
<td>440</td>
</tr>
<tr>
<td>Box Van (leaving plant) (one-way trip)</td>
<td>2.0</td>
<td>1.0</td>
<td>20.0</td>
<td>20.0</td>
<td>440</td>
</tr>
<tr>
<td>Parcel (entering plant) (one-way trip)</td>
<td>1.0</td>
<td>1.0</td>
<td>5.0</td>
<td>5.0</td>
<td>440</td>
</tr>
<tr>
<td>Parcel (leaving plant) (one-way trip)</td>
<td>1.0</td>
<td>1.0</td>
<td>5.0</td>
<td>5.0</td>
<td>440</td>
</tr>
<tr>
<td>Cars (entering plant) (one-way trip)</td>
<td>1.0</td>
<td>1.0</td>
<td>2.0</td>
<td>2.0</td>
<td>440</td>
</tr>
<tr>
<td>Cars (leaving plant) (one-way trip)</td>
<td>1.0</td>
<td>1.0</td>
<td>2.0</td>
<td>2.0</td>
<td>440</td>
</tr>
</tbody>
</table>

**Totals**

- Average Vehicle Weight Per Trip = 29.4 tons/trip
- Average Miles Per Trip = 0.08 miles/trip

**Unmitigated Emission Factor, \( E_f \)**

\[
E_f = k \times (sL)^{0.91} \times (W)^{1.02}
\]

where:
- \( k = 0.011 \times 0.0022 \times 0.00054 \) lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
- \( W = 29.4 \times 29.4 \times 29.4 \) tons = average vehicle weight
- \( sL = 9.7 \times 9.7 \times 9.7 \) g/m² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

**Mitigated Emission Factor, \( E_{ext} \)**

\[
E_{ext} = E_f \times \left[ 1 - \frac{p}{4N} \right]
\]

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

**Dust Control Efficiency**

\[50\%\]

**Mitigated PTE of PM, PM10, PM2.5 (Before Control) (tons/yr)**

<table>
<thead>
<tr>
<th>Process</th>
<th>Mitigated PTE of PM (ton/yr)</th>
<th>Mitigated PTE of PM10 (ton/yr)</th>
<th>Mitigated PTE of PM2.5 (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi Truck (entering plant)</td>
<td>0.27</td>
<td>0.05</td>
<td>0.01</td>
</tr>
<tr>
<td>Semi Truck (leaving plant)</td>
<td>0.08</td>
<td>0.02</td>
<td>0.00</td>
</tr>
<tr>
<td>Box Van (entering plant)</td>
<td>0.04</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>Box Van (leaving plant)</td>
<td>0.04</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>Parcel (entering plant)</td>
<td>0.04</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>Parcel (leaving plant)</td>
<td>0.04</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>Cars (entering plant)</td>
<td>0.04</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>Cars (leaving plant)</td>
<td>0.04</td>
<td>0.01</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Mitigated PTE of PM, PM10, PM2.5 (After Control) (tons/yr)**

<table>
<thead>
<tr>
<th>Process</th>
<th>Mitigated PTE of PM (ton/yr)</th>
<th>Mitigated PTE of PM10 (ton/yr)</th>
<th>Mitigated PTE of PM2.5 (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi Truck (entering plant)</td>
<td>0.13</td>
<td>0.03</td>
<td>0.01</td>
</tr>
<tr>
<td>Semi Truck (leaving plant)</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Box Van (entering plant)</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Box Van (leaving plant)</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Parcel (entering plant)</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Parcel (leaving plant)</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Cars (entering plant)</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Cars (leaving plant)</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Totals**

- Mitigated PTE of PM (ton/yr) = 0.84
- Mitigated PTE of PM10 (ton/yr) = 0.17
- Mitigated PTE of PM2.5 (ton/yr) = 0.04

**Methodology**

- Total Weight driven per day (ton/day) = \( \text{Maximum Weight of Loaded Vehicle (tons/trip)} \times \text{Maximum trips per day (trip/day)} \) PM = Particulate Matter
- Maximum one-way distance (miles/day) = \( \text{Maximum one-way distance (miles/trip)} \times \text{Maximum trips per day (trip/day)} \) PM10 = Particulate Matter (<10 um)
- Average Vehicle Weight Per Trip (ton/day) = \( \text{Total Weight driven per day (ton/day)} \) PM2.5 = Particle Matter (<2.5 um)
- Average Miles Per Trip (miles/trip) = \( \text{Total Weight driven per day (ton/day)} \times \text{Average Vehicle Weight Per Trip (ton/trip)} \) PTE = Potential to Emit
- Unmitigated PTE (ton/yr) = \( \text{Mitigated PTE of PM (ton/yr)} \times \text{Dust Control Efficiency} \) Tons/yr = Tons/year
December 20, 2019

David Miller  
ESSEX GROUP INC    FRANKLIN  
3200 Essex Dr  
Franklin, IN 46131  

Re: Public Notice  
Essex Group  
Permit Level: Title V Significant Source Mod. (Minor PSD/EO) (120) & Title V Significant Permit Modification  
Permit Number: 081-41985-00021 & 081-42198-00021  

Dear David Miller:

Enclosed is a copy of your draft Title V Significant Source Mod. (Minor PSD/EO) (120) & Title V Significant Permit Modification, Technical Support Document, emission calculations, and the Public Notice.  

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

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

OAQ has submitted the draft permit package to the Johnson County Public Library - Franklin Branch, 401 State Street in Franklin IN 46131. 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 Deena Levering, 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 4-5400 or dial (317) 234-5400.  

Sincerely,

L. Pogost  

L. Pogost  
Permits Branch  
Office of Air Quality  

Enclosures  
PN Applicant Cover Letter 4/12/19
December 20, 2019

To: Johnson County Public Library - Franklin Branch 401 State Street Franklin IN 46131 (Library)

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

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

Applicant Name: Essex Group
Permit Number: 081-41985-00021 & 081-42198-00021

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

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

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

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

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

Enclosures
PN Library updated 4/2019
Notice of Public Comment

December 20, 2019
Essex Group
081-41985-00021 & 081-42198-00021

Dear Concerned Citizen(s):

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

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

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

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

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

Enclosure
PN AAA Cover Letter 4/12/2019
Mail Code 61-53

<table>
<thead>
<tr>
<th>Name and address of Sender</th>
<th>Type of Mail: CERTIFICATE OF MAILING ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Line</th>
<th>Article Number</th>
<th>Name, Address, Street and Post Office Address</th>
<th>Postage</th>
<th>Handing Charges</th>
<th>Act. Value (If Registered)</th>
<th>Insured Value</th>
<th>Due Send if COD</th>
<th>R.R. Fee</th>
<th>S.D. Fee</th>
<th>S.H. Fee</th>
<th>Rest. Del. Fee</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>David Miller ESSEX GROUP INC FRANKLIN 3200 Essex Dr Franklin IN 46131 (Source CAATS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Jerardo Cano Plant Manager ESSEX GROUP INC FRANKLIN 3200 Essex Dr Franklin IN 46131 (RO CAATS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Johnson County Public Library - Franklin Branch 401 State Street Franklin IN 46131 (Library)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Johnson County Commissioners 86 West Court Street Franklin IN 46131 (Local Official)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Johnson County Health Department 86 W. Court St, Courthouse Annex Franklin IN 46131-2345 (Health Department)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Frederick &amp; Iva Moore 6019 W 650 N Ligonier IN 46767 (Affected Party)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Larry and Becky Bischoff 10979 North Smokey Row Road Mooresville IN 46158 (Affected Party)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Greenwood City Council and Mayors Office 300 South Madison Avenue Greenwood IN 46142-3149 (Local Official)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 mail merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on insured and COD mail. See International Mail Manual for limitations of coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.