INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

To:	Interested Parties
Date:	November 24, 2014
From:	Matthew Stuckey, Chief Permits Branch Office of Air Quality
Source Name:	Essex Group, Inc.
Permit Level:	Title V – SSM
Permit Number:	003-34878-00269
Source Location:	1601 Wall St Fort Wayne, Indiana 46802
Type of Action Taken:	Modification at an existing source

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above.

The final decision is available on the IDEM website at: http://www.in.gov/apps/idem/caats/
To view the document, select Search option 3, then enter permit 34878.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

(continues on next page)

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

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

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

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

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

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Mr. Dustin Schweitzer
Essex Group, Inc.
1601 Wall Street
Fort Wayne, IN 46802

November 24, 2014

Re: 003-34878-00269
Significant Source Modification

Dear Mr. Schweitzer:

Essex Group, Inc. was issued Part 70 Operating Permit Renewal No. T003-30777-00269 on April 10, 2012 for a stationary magnet wire manufacturing operation located at 1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana. An application to modify the source was received on August 29, 2014. 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 and/or modification at the source:

- One (1) Weatherite V - 14 magnet wire oven, with two (2) sides, identified as 10 and 11, constructed in 2008 and approved in 2014 for modification, with each side using a 0.15 MMBtu/hr natural gas fired annealer (identified as Annealer 10 and Annealer 11), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with two (2) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 10 and 11) to control VOC emissions, and exhausting through stacks S-10 and S-11, respectively.

- One (1) indirect natural gas fired water evaporator, identified as EV-2, approved in 2014 for installation, with a maximum heat input capacity of 0.4 MMBtu/hr, with a maximum input rate of 37.5 gallons of mop water per hour, and exhausting through Stack EV-2. Under 40 CFR 63, Subpart DDDDD, EV-2 is considered a new affected source.

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.

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

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

If you have any questions on this matter, please contact Laura Spriggs Thompson of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Laura Spriggs Thompson or extension 3-5693 or dial (317) 233-5693.

Sincerely,

Jason R. Krawczyk, Section Chief
Permits Branch
Office of Air Quality

Attachments: Significant Source Modification and Technical Support Document

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

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Commissioner

Significant Source Modification to a Part 70 Source

OFFICE OF AIR QUALITY

Essex Group, Inc.
1601 Wall Street and 1700 West Swinney
Fort Wayne, Indiana 46802

(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 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 No.: 003-34878-00269	
Issued by: Jason R. Krawczyk, Section Chief Permits Branch Office of Air Quality	Issuance Date: November 24, 2014

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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

Attachment C: 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Attachment D: 40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

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, A.3 through A.4 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 operation.

Source Address:	1601 Wall Street, and 1700 West Swinney, Fort Wayne, Indiana 46802
General Source Phone Number:	(260) 461-4000
SIC Code	3357 (Drawing and Insulating of Nonferrous Wire) and 2851 (Paints, Varnishes, Lacquers, Enamels and Allied Products)
County Location:	Allen
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

Pursuant to T003-7654-00269, issued on September 30, 1999, this stationary chemical processing and magnet wire coating company consists of two (2) plants:

(a) Chemical Processing Plant is located at 1700 West Swinney, Fort Wayne, Indiana 46802; and

(b) Magnet Wire Coating Plant is located at 1601 Wall Street, Fort Wayne, Indiana 46802.

Since the Chemical Processing Plant supports the Magnet Wire Coating Plant, and these two (2) plants are under common control of the same entity, they are considered one (1) source.

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

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

Chemical Processing Plant

(a) One (1) 16.74 MMBtu per hour natural gas fired firetube boiler, identified as emission unit EB, constructed in 1994, and exhausting to stack SCB. Under 40 CFR 60, Subpart Dc, EB is considered an affected facility. Under 40 CFR 63, Subpart DDDDD, EB is considered an existing affected source.

(b) One (1) 16.74 MMBtu per hour natural gas fired firetube boiler, identified as emission unit WB, constructed in 1994, and exhausting to stack SCB. Under 40 CFR 60, Subpart Dc, WB is considered an affected facility. Under 40 CFR 63, Subpart DDDDD, WB is considered an existing affected source.

(c) Two (2) 4000 gallon hot oil heated reactors with fume scrubbers, agitator condenser and distillation column identified as emission units R-1 and R-2, and constructed in 1973 and 1981, respectively.

(d) Six (6) jacketed mix kettles, all constructed after January 1, 1980 and identified as follows:

(1) One (1) 2000 gallon jacketed mix kettle equipped with agitator and condenser, identified as emission unit K-2, and constructed prior to 1982.

(2) One (1) 1000 gallon jacketed mix kettle equipped with agitator and condenser, identified as K-3, and constructed prior to 1982.

(3) One (1) 4000 gallon jacketed mix kettle equipped with an agitator and a condenser, identified as emission unit K-4, replaced in 2001.

(4) One (1) 5000 gallon jacketed mix kettle equipped with an agitator and a condenser, identified as emission unit K-5, and constructed in 1990.

(5) Two (2) 10000 gallon jacketed kettles each equipped with an agitator and a condenser, identified as emission units K-6 and K-7, constructed in 1973 and 1981, respectively.

(e) One (1) 560 gallon water cooled polymer batch reactor, identified as R-3, approved for construction in 2013, with a maximum capacity of 4,900 pounds per batch of solid and solvent materials, using a baghouse for PM control, and exhausting to stacks R-3B. The outside of the tank is cleaned after each batch with VOC containing cleaning solvent.

Note: The reactor is also equipped with a condenser and corresponding stack, but it is not going to be used all the time as a control, therefore it was not used for permitting purposes and not indicated in the unit's description.

Magnet Wire Coating Plant

(a) One (1) wire enameling oven with an integral internal thermal oxidizer, identified as emission unit 52, constructed in 1996, with a maximum capacity of 531 pounds of wire per hour, with emissions exhausting at stack S52.

(b) The following eight (8) wire enameling ovens with add-on thermal incinerators for control. After production, a wire lube is applied to the enameled wire, with a combined maximum total usage of 0.4 pounds per hour for all eight (8) ovens.

(1) Five (5) wire enameling ovens, identified as emission units 53, 54, 55, 56 and 57, constructed in 1958, with a maximum capacity of 157.63 pounds of aluminum wire per hour each or a maximum capacity of 399.2 pounds of copper wire per hour each, with add-on thermal incinerators for control, with emissions exhausting at the west incinerator identified as SWI.

(2) Three (3) wire enameling ovens, identified as emission units 58, 59 and 60, constructed in 1962, with a maximum capacity of 157.63 pounds of aluminum wire per hour each or a maximum capacity of 399.2 pounds of copper wire per hour each, with add-on thermal incinerators for control, with emissions exhausting at the east incinerator identified as SEI.

(c) Two (2) wire enameling ovens with an internal thermal oxidizer, identified as emission units 65 and 66, constructed in 1997, with a maximum capacity of 891 pounds of

copper/aluminum wire per hour each, with emissions exhausting at stacks S65 and S66, respectively.

(d) Three (3) wire coating machines, identified as emission units 24, 25 and 26, constructed in 1996, with a maximum capacity of 272 pounds of wire per hour each, with no controls, with emissions exhausting at stack SF-1.

(e) One (1) wire coating machine, identified as emission unit 27, constructed in 2004, with a maximum capacity of 272 pounds of wire per hour, with no controls, and with emissions exhausting a stack SF-1.

(f) One (1) wire coating machine, identified as emission unit 28, constructed in the 1970's, with a maximum capacity of 272 pounds of wire per hour, with no controls, and with emissions exhausting at stack SF-1.

(g) One (1) wire coating machine, identified as emission unit 37, constructed in the 1980's, with a maximum capacity of 172.39 pounds of wire per hour, with no controls, and with emissions exhausting at stack SF-2.

(h) Two (2) Weatherite V - 14 magnet wire ovens, each with two (2) sides, identified as 61, 62, 63, and 64, constructed in 2008, with two (2) 0.15 MMBtu/hr natural gas fired annealers (identified as Annealer 63 and Annealer 64), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with four (4) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 61, 62, 63, and 64) to control VOC emissions, and exhausting through stacks S61, S62, S63, and S64, respectively.

(i) One (1) Weatherite V - 14 magnet wire oven, with two (2) sides, identified as 10 and 11, constructed in 2008 and approved in 2014 for modification, with each side using a 0.15 MMBtu/hr natural gas fired annealer (identified as Annealer 10 and Annealer 11), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with two (2) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 10 and 11) to control VOC emissions, and exhausting through stacks S-10 and S-11, respectively.

(j) One (1) magnet wire oven, identified as Magnet Wire Oven 12, approved in 2013 for construction, using a 0.15 MMBtu/hr natural gas fired annealer, with a maximum flow coating capacity of 500 pounds of copper or aluminum per hour, with an internal 1.0 MMBtu/hr natural gas fired recuperative thermal oxidizer for VOC control, and exhausting to stack S12.

(k) Cleaning room area, constructed after 1980, exhausting through stack CR-1, consisting of:

(1) Four (4) tanks containing cleaning solvents, identified as cleaning tanks 1 through 4, each with a capacity of 500 gallons. Tanks 1 and 4 contain no HAPs or VOCs.

(2) Two (2) tanks for die cleaning, identified as north die cleaning tank and south die cleaning tank, each with a capacity of 15 gallons.

Under 40 CFR 63, Subpart MMMM, wire enameling ovens 52-60, 65, and 66, wire coating machines 24-28 and 37, magnet wire ovens 61-64, 10, 11, and 12, cleaning tanks 2 and 3, and the two (2) die cleaning tanks are considered part of an existing affected source.

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

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

(a) One (1) emergency diesel generator, identified as EG-1, installed in 1993, rated at 900 horsepower, engine displacement volume less than 30 liters per cylinder and exhausting to the atmosphere. Under 40 CFR Part 63, Subpart ZZZZ, EG-1 is considered an existing affected source.

(b) One (1) natural gas fired spark ignition emergency generator, identified as EG-2, installed in 1960, rated at 18 horsepower. Under 40 CFR Part 63, Subpart ZZZZ, EG-2 is considered an existing affected source.

Chemical Processing Plant

(a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]

(b) The following storage tanks emitting less than 15 pounds per day of VOC, and under 40 CFR Part 63, Subpart MMMM, are considered part of an existing affected source:

(1) Seven (7) outside storage tanks, identified as tanks TK-17, TK-18, TK-19, TK-20, TK-21, TK-22, and TK-23, constructed after July 23, 1984, storing volatile organic liquids and having a maximum storage capacity less than 75 cubic meters.

(2) Fifteen (15) outside storage tanks, identified as tanks TK-1, TK-2, TK-3, TK-4, TK-5, TK-7, TK-8, TK-9, TK-10, TK-11, TK-12, TK-13, TK-15, TK-16, and TK-24, all constructed before July 23, 1984, except for tanks TK-3, and TK-9, storing volatile organic liquids and having a maximum storage capacity less than 40 cubic meters.

(3) Two (2) outside storage tanks, identified as tanks TK-6, and TK-14, approved in 2010 for construction, storing volatile organic liquids and having a maximum storage capacity less than 40 cubic meters.

(4) Three (3) inside storage tanks, storing volatile organic liquids and having maximum storage capacities less than 40 cubic meters, identified as:
(A) TK-25 and TK-32, constructed after July 23, 1984.

(B) TK-30, constructed prior to July 23, 1984.

(c) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons. [40 CFR 63, Subpart MMMM]

(d) Two (2) natural gas fired process heaters, identified as OH-1, constructed in 2012, with a capacity of 3.3 MMBTU/hr and OH-2, constructed in 1993, with a capacity of 4 MMBTU/hr. Under 40 CFR 63, Subpart DDDDD, OH-1 is considered a new affected source and OH-2 is considered an existing affected source.

Magnet Wire Coating Plant

(a) Aluminum wire drawing cleaning operation, with a maximum usage of 3500 pounds of hydrocarbon solvent per year. This operation uses felts soaked with hydrocarbon to clean tramp oils from aluminum process wire.

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]

(c) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(d) One (1) wire coating processing lab, identified as Lab-1, for research and development, approved for construction in 2013, with a maximum capacity of 345 pounds per hour of copper or aluminum and 13 pounds of pelletized resins, using no control, and exhausting inside the building.

Note: The above Lab-1 is the experimental magnet wire coating line for research and development and no commercial products are involved in this Lab-1.

(e) One (1) wire coating processing line (also known as extrusion), identified as E-1, approved for construction in 2013, with a maximum capacity of 345 pounds per hour of copper or aluminum and 13 pounds of pelletized resins, using no control, and exhausting inside the building.

(f) One (1) cold cleaning tank, identified as MT-1, installed in 2012, using less than one hundred forty-five (145) gallons of Safety-Kleen premium solvent per twelve (12) months.

(g) One (1) indirect natural gas fired water evaporator, identified as EV-2, approved in 2014 for installation, with a maximum heat input capacity of 0.4 MMBtu/hr, with a maximum input rate of 37.5 gallons of mop water per hour, and exhausting through Stack EV-2. Under 40 CFR 63, Subpart DDDDD, EV-2 is considered a new affected source.

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

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

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 – Applicability).

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, T003-30777-00269, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

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

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

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

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

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

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

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

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

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

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

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

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

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

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

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

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

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

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

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

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

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

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

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

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

(a) All terms and conditions of permits established prior to T003-30777-00269 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

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

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

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

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

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-

5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

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

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

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(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:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

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

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

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(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

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

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

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

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(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(12)] [40 CFR 68]

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

C.13 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]

(l) 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)

(a) CAM *Response to excursions or exceedances.*

(1) 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 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)(a)(2) 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)(a)(2) of this condition 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(a)(1), the Permittee shall submit by July 1 of each year 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] [326 IAC 2-2] [326 IAC 2-3]

(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) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

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

(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.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (ww) and/or 326 IAC 2-3-1 (pp), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part 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

(g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

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 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Chemical Processing Plant - Boilers

(a) One (1) 16.74 MMBtu per hour natural gas fired firetube boiler, identified as emission unit EB, constructed in 1994, and exhausting to stack SCB. Under 40 CFR 60, Subpart Dc, EB is considered an affected facility. Under 40 CFR 63, Subpart DDDDD, EB is considered an existing affected source.

(b) One (1) 16.74 MMBtu per hour natural gas fired firetube boiler, identified as emission unit WB, constructed in 1994, and exhausting to stack SCB. Under 40 CFR 60, Subpart Dc, WB is considered an affected facility. Under 40 CFR 63, Subpart DDDDD, WB is considered an existing affected source.

Insignificant Activities

(d) Two (2) natural gas fired process heaters, identified as OH-1, constructed in 2012, with a capacity of 3.3 MMBTU/hr and OH-2, constructed in 1993, with a capacity of 4 MMBTU/hr. Under 40 CFR 63, Subpart DDDDD, OH-1 is considered a new affected source and OH-2 is considered an existing affected source.

(g) One (1) indirect natural gas fired water evaporator, identified as EV-2, approved in 2014 for installation, with a maximum heat input capacity of 0.4 MMBtu/hr, with a maximum input rate of 37.5 gallons of mop water per hour, and exhausting through Stack EV-2. Under 40 CFR 63, Subpart DDDDD, EV-2 is considered a new affected source.

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

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

D.1.1 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions shall be limited as follows:

(a) Particulate emissions from process heater OH-2 shall be limited to 0.6 lb/MMBtu.

(b) Particulate emissions from boilers EB and WB and process heater OH-1 shall be limited to 0.42 lb/MMBtu each.

(c) Particulate emissions from water evaporator EV-2 shall be limited to 0.41 lb/MMBtu.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the facilities described in this section. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Magnet Wire Coating Plant

(a) One (1) wire enameling oven with an integral internal thermal oxidizer, identified as emission unit 52, constructed in 1996, with a maximum capacity of 531 pounds of wire per hour, with emissions exhausting at stack S52.

(d) Three (3) wire coating machines, identified as emission units 24, 25 and 26, constructed in 1996, with a maximum capacity of 272 pounds of wire per hour each, with no controls, with emissions exhausting at stack SF-1.

(e) One (1) wire coating machine, identified as emission unit 27, constructed in 2004, with a maximum capacity of 272 pounds of wire per hour, with no controls, and with emissions exhausting a stack SF-1.

Under 40 CFR 63, Subpart MMMM, wire enameling oven 52 and wire coating machines 24-27 are considered part of an existing affected source.

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

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

D.2.1 Volatile Organic Compound (VOC) Emission Limitations [326 IAC 8-2-8]

(a) Pursuant to 326 IAC 8-2-8 (Magnet Wire Coating Operations), for the wire enameling oven identified as 52, the Permittee shall not allow the discharge, into the atmosphere, of any VOC in excess of 1.7 pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

(b) The VOC emissions from wire coating machines 24, 25, 26, and 27 shall be less than fifteen (15) pounds per day per oven. Compliance with this limit shall render the requirements of 326 IAC 8-2-8 not applicable to these facilities.

D.2.2 PSD Minor Limit [326 IAC 2-2]

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

Pursuant to Modification No. 003-4841-00077, issued in 1996, the VOC emissions from oven 52 shall be less than 31.25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, combined with potential VOC emissions from ovens 24, 25, and 26, shall limit the VOC emissions from the modification to less than forty (40) tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 not applicable to the 1996 modification.

D.2.3 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.

Compliance Determination Requirements

D.2.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a) and in order to ensure compliance with Conditions D.2.1(a) and D.2.2, the Permittee shall operate the integral internal thermal oxidizer for the wire enameling oven identified as 52 at all times that this facility is in operation.

D.2.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

Compliance with the VOC content, usage, and emission limitations contained in Conditions D.2.1(a) and (b) and D.2.2 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.2.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2(b),(c)]

Compliance with the VOC content limitation contained in Condition D.2.1(a) shall be determined as follows for wire enameling oven 52 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.2.1(a).

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

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

Where:

L= Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating.

D= 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 thermal oxidizer 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, 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.

(2) Pursuant to T003-7654-00269, issued on September 30, 1999, and 326 IAC 8-1-2(c), the equivalent overall efficiency of the thermal oxidizer for oven 52 shall be not less than 95.19% or the required destruction efficiency demonstrated by the most recent valid stack test for the worst case VOC coating currently used. For a higher VOC content coating, the overall control efficiency of this thermal oxidizer shall be no less than the estimated control efficiency required to achieve compliance with the limit in Condition D.2.1(a).

D.2.7 Volatile Organic Compounds (VOC) [326 IAC 2-2]

Compliance with Condition D.2.2 shall be determined by calculating the VOC emissions for enameling oven 52 using the following equation:

VOC Emissions (tons/month) = Σ (VOC Content i (%) x Coating Amount i (tons/month) x (1 - Control Efficiency % / 100))

Where:

Control Efficiency % = control efficiency as demonstrated in most recent valid compliance test.

VOC Content i = Percent VOC content of coating i used .

Amount i = Usage, in tons of the coating i per month.

D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.2.1(a) and D.2.2, the Permittee shall conduct performance testing on one (1) representative thermal oxidizer from the three (3) thermal oxidizers controlling the wire enameling ovens identified as 52, 65 and 66 to verify VOC control efficiency per Conditions D.2.6(b) and D.3.6(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 thermal 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) 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 Conditions D.2.1(a)and D.2.2 for the integral internal thermal oxidizer using methods approved by the Commissioner.

(c) 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 minimum required control efficiency for the new coating (O_{new}), using the equation in Condition D.2.6(b)(1).

(2) If O_{new} is lower than the stack test control efficiency, the Permittee shall be allowed to use the higher VOC content enamel.

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

D.2.9 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. 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 shall be recorded as three-hour average temperatures whenever the thermal oxidizer is in operation.

(b) The Permittee shall determine the three-hour average temperatures from the latest valid stack test that demonstrates compliance with Conditions. D.2.1(a) and D.2.2.

(c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizers at or above the respective three-hour average temperatures observed during the latest compliant stack test.

(d) If the primary continuous monitoring system is not in operation, the internal integral thermal oxidizer temperature shall 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 internal integral thermal oxidizers. Continuous monitoring shall mean no less often than once per fifteen (15) minutes.

(e) If the three-hour average temperature falls below the above mentioned three-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. 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.2.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.1(a), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC content limit established in Condition D.2.1(a).

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

(2) The actual VOC content of the coating, in units of pounds of VOC per gallon of coating solids as applied.

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

(b) To document the compliance status with Condition D.2.1(b), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3)

shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.2.1(b).

(1) The amount of coating material and solvent less water used on a daily basis.

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

(3) The VOC usage for each day.

(c) To document the compliance status with Condition D.2.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limit established in Condition D.2.2.

(1) The VOC content of each coating material and solvent used.

(2) The amount of coating material and solvent used on a monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(3) The total VOC usage for each month.

(d) To document the compliance status with Condition D.2.9, the Permittee shall maintain continuous temperature records (on a three-hour average basis) for the thermal oxidizer and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

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

D.2.11 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.2.1(b) and D.2.2 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, 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.3 FACILITY OPERATION CONDITIONS

Emissions Unit Description:

Magnet Wire Coating Plant

(c) Two (2) wire enameling ovens with an internal thermal oxidizer, identified as emission units 65 and 66, constructed in 1997, with a maximum capacity of 891 pounds of copper/aluminum wire per hour each, with emissions exhausting at stacks S65 and S66, respectively.

Under 40 CFR 63, Subpart MMMM, wire enameling ovens 65 and 66 are considered part of an existing 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.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-8]

Pursuant to 326 IAC 8-2-8 (Magnet Wire Coating Operations), for wire enameling ovens 65 and 66, the Permittee shall not allow the discharge, into the atmosphere, of any VOC in excess of 1.7 pounds VOC per gallon of coating, excluding water, as delivered to the applicator.

D.3.2 PSD Minor Limit [326 IAC 2-2]

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

The VOC emissions from ovens 65 and 66 shall be less than forty (40) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit shall render the requirements of 326 IAC 2-2 not applicable to the modification performed in 1997.

D.3.3 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.

Compliance Determination Requirements

D.3.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a) and in order to ensure compliance with Conditions D.3.1 and D.3.2, the thermal oxidizers shall be in operation whenever the associated two (2) wire enameling ovens 65 and 66 are in operation.

D.3.5 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 Conditions D.3.1 and D.3.2 shall be determined pursuant to 326 IAC 8-1-4(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ reserve the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4

D.3.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2(b),(c)]

Compliance with the VOC content limitation contained in Condition D.3.1 shall be determined as follows for the wire enameling ovens 65 and 66 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.3.1.

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

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

Where:

L = Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating.

D = 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 internal thermal 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, 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.

(2) Pursuant to T003-7654-00269, issued on September 30, 1999, and 326 IAC 8-1-2(c), the equivalent overall efficiency of the thermal oxidizers for each oven (65 and 66) shall be not less than 94.10% or the required destruction efficiency

demonstrated by the most recent valid stack test for the worst case VOC coating currently used. For a higher VOC content coating, the overall control efficiency of these thermal oxidizers shall be no less than the estimated control efficiency required to achieve compliance with the limit in Condition D.3.1.

D.3.7 Volatile Organic Compounds (VOC) [326 IAC 2-2]

Compliance with Condition D.3.2 shall be determined by calculating the VOC emissions for enameling ovens 65 and 66 using the following equation:

VOC Emissions (tons/month) = Σ (VOC Content i (%) x Coating Amount i (tons/month) x (1 - Control Efficiency % / 100))

Where:

Control Efficiency % = control efficiency as demonstrated in most recent valid compliance test.

VOC Content i = Percent VOC content of coating i used.

Amount i = Usage, in tons of the coating i per month.

D.3.8 Testing requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.3.1 and D.3.2, the Permittee shall conduct performance testing on one (1) representative thermal oxidizer from the three (3) thermal oxidizers controlling the wire enameling ovens identified as 52, 65, and 66 to verify VOC control efficiency per Conditions D.2.6(b) and D.3.6(b) utilizing methods approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. The thermal 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) 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.3.6 for the thermal oxidizers using methods approved by the commissioner.

(c) 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 minimum required control efficiency for the new coating (O_{new}), using the equation in Condition D.3.6(b)(1).

(2) If O_{new} is lower than the stack test control efficiency, the Permittee shall be allowed to use the higher VOC content enamel.

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

D.3.9 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizers for measuring operating temperature. 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 shall be recorded as three-hour average temperatures whenever the oxidizers are in operation.

(b) The Permittee shall determine the three-hour average temperature from the latest valid stack test that demonstrates compliance with Conditions D.3.1 and D.3.2.

(c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizers at or above the respective three-hour average temperatures observed during the latest compliant stack test.

(d) If the primary continuous monitoring system is not in operation, the oxidizer temperature shall 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 oxidizers. Continuous monitoring shall mean no less often than once per fifteen (15) minutes.

(e) If the three-hour average temperature falls below the above mentioned three-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. 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.3.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC content limit established in Condition D.3.1.

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

(2) The actual VOC content of the coating, in units of pounds of VOC per gallon of coating solids as applied.

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

(b) To document the compliance status with Condition D.3.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limit established in Condition D.3.2.

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

(2) The amount of coating material and solvent used on a monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(3) The total weight of VOCs emitted each month.

(c) To document the compliance status with Condition D.3.9, the Permittee shall maintain the continuous temperature records (on a three-hour average basis) for each thermal oxidizer and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

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

D.3.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.3.2 shall be submitted using the reporting form located at the end of this permit, or its equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting 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.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Magnet Wire Coating Plant

(h) Two (2) Weatherite V - 14 magnet wire ovens, each with two (2) sides, identified as 61, 62, 63, and 64, constructed in 2008, with two (2) 0.15 MMBtu/hr natural gas fired annealers (identified as Annealer 63 and Annealer 64), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with four (4) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 61, 62, 63, and 64), to control VOC emissions, and exhausting through stacks S61, S62, S63, and S64, respectively.

(i) One (1) Weatherite V - 14 magnet wire oven, with two (2) sides, identified as 10 and 11, constructed in 2008 and approved in 2014 for modification, with each side using a 0.15 MMBtu/hr natural gas fired annealer (identified as Annealer 10 and Annealer 11), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with two (2) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 10 and 11) to control VOC emissions, and exhausting through stacks S-10 and S-11, respectively.

Under 40 CFR 63, Subpart MMMM, magnet wire ovens 10, 11, and 61-64 are considered part of an existing affected source.

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

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

D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-8]

Pursuant to 326 IAC 8-2-8 (Magnet Wire Coating Operations), for the three (3) Weatherite V - 14 magnet wire ovens (10, 11, and 61-64), the Permittee shall not allow the discharge, into the atmosphere, of any VOC in excess of 1.7 pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

D.4.2 PSD Minor Limits [326 IAC 2-2]

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

The combined VOC emissions from the three (3) Weatherite V - 14 magnet wire ovens (10, 11, and 61-64) shall be less than 39.8 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limit, combined with the potential to emit VOC from the magnet wire oven and annealer combustion emissions, shall limit the VOC from the modification to less than forty (40) tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable to the 2008 modification.

D.4.3 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.

Compliance Determination Requirements

D.4.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a) and in order to ensure compliance with Conditions D.4.1 and D.4.2, the internal thermal oxidizers shall be in operation whenever the associated three (3) Weatherite V - 14 magnet wire oven lines (10, 11, and 61-64) are in operation.

D.4.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

Compliance with the VOC content, emission, and usage limitations contained in Conditions D.4.1 and D.4.2 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.4.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2(b),(c)]

Compliance with the VOC content limitation contained in Condition D.4.1 shall be determined as follows for the three (3) Weatherite V - 14 magnet wire ovens (10, 11, and 61-64) 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.4.1.

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

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

Where:

L= Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating.

D= 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 internal thermal 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, 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.

(2) The overall efficiency of the internal thermal oxidizers for ovens 10, 11, and 61-64 shall be equal to or greater than 95.88% or the efficiency required to demonstrate compliance with Condition D.4.1.

D.4.7 Volatile Organic Compounds (VOC) [326 IAC 2-2]

Compliance with Condition D.4.2 shall be determined by calculating the VOC emissions for the three (3) Weatherite magnet wire ovens (10, 11, and 61-64) using the following equation:

VOC Emissions (tons/month) = Σ (VOC Content i (%) x Coating Amount i (tons/month) x (1 - Control Efficiency % / 100))

Where:

Control Efficiency % = control efficiency as demonstrated in most recent valid compliance test.

VOC Content i = Percent VOC content of coating i used .

Amount i = Usage, in tons of the coating i per month.

D.4.8 Testing requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.4.1 and D.4.2, the Permittee shall conduct performance testing on one (1) representative thermal oxidizer from 10, 11, 61, 62, 63 and 64 to verify the VOC control efficiency per Condition D.4.6 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be alternated between thermal oxidizers 10, 11, 61, 62, 63, and 64 for each test cycle, such that testing on a thermal oxidizer shall not be repeated until 10, 11, 61, 62, 63, and 64 have each been tested. 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) 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 the VOC control efficiency as per Condition D.4.6 for the thermal oxidizer using methods approved by the commissioner.

(c) 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 minimum required control efficiency for the new coating (O_{new}), using the equation in Condition D.4.6(b)(1).

(2) If O_{new} is lower than the stack test control efficiency, the Permittee shall be allowed to use the higher VOC content enamel.

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

D.4.9 Thermal Oxidizer Temperature [40 CFR 64]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizers (61-64) for measuring operating temperature. 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 shall be recorded as three-hour average temperatures whenever the oxidizers are in operation.

(b) The Permittee shall determine the three-hour average temperatures from the latest valid stack test that demonstrates compliance with Conditions D.4.1 and D.4.2.

(c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizers at or above the respective three-hour average temperatures observed during the latest compliant stack test.

(d) If the primary continuous monitoring system is not in operation, the oxidizer temperature shall 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 oxidizers. Continuous monitoring shall mean no less often than once per fifteen (15) minutes.

(e) If the three-hour average temperature falls below the above mentioned three-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. Failure to take response steps shall be considered a deviation from this permit.

This compliance monitoring requirement shall satisfy 40 CFR 64 (Compliance Assurance Monitoring) for the two (2) Weatherite V - 14 ovens (61-64).

D.4.10 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizers (10 and 11) for measuring operating temperature. 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 shall be recorded as three-hour average temperatures whenever the oxidizers are in operation.

(b) The Permittee shall determine the three-hour average temperatures from the latest valid stack test that demonstrates compliance with Conditions D.4.1 and D.4.2.

(c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizers at or above the respective three-hour average temperatures observed during the latest compliant stack test.

(d) If the primary continuous monitoring system is not in operation, the oxidizer temperature shall 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 oxidizers. Continuous monitoring shall mean no less often than once per fifteen (15) minutes.

(e) If the three-hour average temperature falls below the above mentioned three-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. 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.4.11 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC content limit established in Condition D.4.1.

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

(2) The actual VOC content of the coating, in units of pounds of VOC per gallon of coating solids as applied.

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

(b) To document the compliance status with Condition D.4.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) below shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limit established in Condition D.4.2.

(1) The VOC content of each coating material and solvent used.

(2) The amount of coating material and solvent used on a monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(3) The total weight of VOCs emitted each month.

(c) To document the compliance status with Conditions D.4.9 and D.4.10, the Permittee shall maintain continuous temperature records (on a three-hour average basis) for each thermal oxidizer and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

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

D.4.12 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.4.2 shall be submitted using the reporting form located at the end of this permit, or its equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting 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.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Magnet Wire Coating Plant

(j) One (1) magnet wire oven, identified as Magnet Wire Oven 12, approved in 2013 for construction, using a 0.15 MMBtu/hr natural gas fired annealer, with a maximum flow coating capacity of 500 pounds of copper or aluminum per hour, with an internal 1.0 MMBtu/hr natural gas fired recuperative thermal oxidizer for VOC control, and exhausting to stack S12.

Under 40 CFR 63, Subpart MMMM, magnet wire oven 12 is considered part of an existing affected source.

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

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

D.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-8]

Pursuant to 326 IAC 8-2-8 (Magnet Wire Coating Operations), for Magnet Wire Oven 12, the Permittee shall not allow the discharge, into the atmosphere, of any VOC in excess of 1.7 pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

D.5.2 PSD Minor Limit [326 IAC 2-2]

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

The VOC emissions from Magnet Wire Oven 12 shall be less than 39.7 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limit, combined with the potential to emit VOC from TK-32 and Magnet Wire Oven 12 combustion emissions, shall limit the VOC from the modification to less than forty (40) tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable to the 2013 modification.

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.5.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a) and in order to ensure compliance with Conditions D.5.1 and D.5.2, the internal thermal oxidizer shall be in operation whenever Magnet Wire Oven 12 is in operation.

D.5.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

Compliance with the VOC content limitation contained in Condition D.5.1 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.5.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2(b),(c)]

Compliance with the VOC content limitation contained in Condition D.5.1 shall be determined as follows for Magnet Wire Oven 12 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.5.1.

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

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

Where:

L = Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating.

D = 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 thermal oxidizer 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, 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.

(2) The overall efficiency of the internal thermal oxidizer for oven 12 shall be equal to or greater than 95.88% or the efficiency required to demonstrate compliance with Condition D.5.1.

D.5.7 Volatile Organic Compounds (VOC) [326 IAC 2-2]

Compliance with Condition D.5.2 shall be determined by calculating the VOC emissions for Magnet Wire Oven 12 using the following equation:

VOC Emissions (tons/month) = Σ (VOC Content i (%) x Coating Amount i (tons/month) x (1 - Control Efficiency % / 100))

Where:

Control Efficiency % = control efficiency as demonstrated in most recent valid compliance test.

VOC Content i = Percent VOC content of coating i used .

Amount i = Usage, in tons of the coating i per month.

D.5.8 Testing requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Not later than 180 days after the startup of Magnet Wire Oven 12 and in order to demonstrate compliance with Conditions D.5.1 and D.5.2, the Permittee shall conduct performance testing on Magnet Wire Oven 12 to verify the VOC control efficiency per Condition D.5.6 utilizing methods approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) 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 the VOC control efficiency as per Condition D.5.6 for the thermal oxidizer using methods approved by the commissioner.

(c) 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 minimum required control efficiency for the new coating (O_{new}), using the equation in Condition D.5.6(b)(1).

(2) If O_{new} is lower than the stack test control efficiency, the Permittee shall be allowed to use the higher VOC content enamel.

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

D.5.9 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. 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 shall be recorded as three-hour average temperatures whenever the oxidizers are in operation.

(b) The Permittee shall determine the three-hour average temperatures from the latest valid stack test that demonstrates compliance with Conditions D.5.1 and D.5.2.

(c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizers at or above the respective three-hour average temperatures observed during the latest compliant stack test.

(d) If the primary continuous monitoring system is not in operation, the oxidizer temperature shall 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 oxidizers. Continuous monitoring shall mean no less often than once per fifteen (15) minutes.

(e) If the three-hour average temperature falls below the above mentioned three-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. 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.5.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.5.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC content limit established in Condition D.5.1.

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

(2) The actual VOC content of the coating, in units of pounds of VOC per gallon of coating solids as applied.

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

(b) To document the compliance status with Condition D.5.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limit established in Condition D.5.2.

(1) The VOC content of each coating material and solvent used.

(2) The amount of coating material and solvent used on a monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(3) The total weight of VOCs emitted each month.

(c) To document the compliance status with Condition D.3.9, the Permittee shall maintain continuous temperature records (on a three-hour average basis) for the thermal oxidizer and the three-hour average temperature 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.5.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.5.2 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, 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.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Magnet Wire Coating Plant

(k) Cleaning room area, constructed after 1980, exhausting through stack CR-1, consisting of:

(1) Four (4) tanks containing cleaning solvents, identified as cleaning tanks 1 through 4, each with a capacity of 500 gallons. Tanks 1 and 4 contain no HAPs or VOCs.

(2) Two (2) tanks for die cleaning, identified as north die cleaning tank and south die cleaning tank, each with a capacity of 15 gallons.

Insignificant Activity:

(f) One (1) cold cleaning tank, identified as MT-1, installed in 2012, using less than one hundred forty-five (145) gallons of Safety-Kleen premium solvent per twelve (12) months.

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

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

D.6.1 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), for the degreasing operations, the Permittee shall ensure that the following control equipment and operating requirements are met for cleaning tanks 2 and 3, the two (2) die cleaning tanks, and cold cleaning tank MT-1:

(a) Equip the degreaser with a cover.

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

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

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

(e) Provide a permanent, conspicuous label that lists the operating requirements in (c), (d), (f), and (g) of this condition.

(f) Store waste solvent only in closed containers.

(g) 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.

D.6.2 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), on and after January 1, 2015, 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).

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

D.6.3 Record Keeping Requirements

(a) Pursuant to 326 IAC 8-3-8(c)(2) and to document the compliance status with Condition D.6.2, on and after January 1, 2015, 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.

SECTION E.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Magnet Wire Coating Plant

(a) One (1) wire enameling oven with an integral internal thermal oxidizer, identified as emission unit 52, constructed in 1996, with a maximum capacity of 531 pounds of wire per hour, with emissions exhausting at stack S52.

(b) The following eight (8) wire enameling ovens with add-on thermal incinerators for control. After production, a wire lube is applied to the enameled wire, with a combined maximum total usage of 0.4 pounds per hour for all eight (8) ovens.

(1) Five (5) wire enameling ovens, identified as emission units 53, 54, 55, 56 and 57, constructed in 1958, with a maximum capacity of 157.63 pounds of aluminum wire per hour each or a maximum capacity of 399.2 pounds of copper wire per hour each, with add-on thermal incinerators for control, with emissions exhausting at the west incinerator identified as SWI.

(2) Three (3) wire enameling ovens, identified as emission units 58, 59 and 60, constructed in 1962, with a maximum capacity of 157.63 pounds of aluminum wire per hour each or a maximum capacity of 399.2 pounds of copper wire per hour each, with add-on thermal incinerators for control, with emissions exhausting at the east incinerator identified as SEI.

(c) Two (2) wire enameling ovens with an internal thermal oxidizer, identified as emission units 65 and 66, constructed in 1997, with a maximum capacity of 891 pounds of copper/aluminum wire per hour each, with emissions exhausting at stacks S65 and S66, respectively.

(d) Three (3) wire coating machines, identified as emission units 24, 25 and 26, constructed in 1996, with a maximum capacity of 272 pounds of wire per hour each, with no controls, with emissions exhausting at stack SF-1.

(e) One (1) wire coating machine, identified as emission unit 27, constructed in 2004, with a maximum capacity of 272 pounds of wire per hour, with no controls, and with emissions exhausting a stack SF-1.

(f) One (1) wire coating machine, identified as emission unit 28, constructed in the 1970's, with a maximum capacity of 272 pounds of wire per hour, with no controls, and with emissions exhausting at stack SF-1.

(g) One (1) wire coating machine, identified as emission unit 37, constructed in the 1980's, with a maximum capacity of 172.39 pounds of wire per hour, with no controls, and with emissions exhausting at stack SF-2.

(h) Two (2) Weatherite V - 14 magnet wire ovens, each with two (2) sides, identified as 61, 62, 63, and 64, constructed in 2008, with two (2) 0.15 MMBtu/hr natural gas fired annealers (identified as Annealer 63 and Annealer 64), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with four (4) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 61, 62, 63, and 64) to control VOC emissions, and exhausting through stacks S61, S62, S63, and S64, respectively.

(i) One (1) Weatherite V - 14 magnet wire oven, with two (2) sides, identified as 10 and 11, constructed in 2008 and approved in 2014 for modification, with each side using a 0.15 MMBtu/hr

natural gas fired annealer (identified as Annealer 10 and Annealer 11), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with two (2) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 10 and 11) to control VOC emissions, and exhausting through stacks S-10 and S-11, respectively.

(j) One (1) magnet wire oven, identified as Magnet Wire Oven 12, approved in 2013 for construction, using a 0.15 MMBtu/hr natural gas fired annealer, with a maximum flow coating capacity of 500 pounds of copper or aluminum per hour, with an internal 1.0 MMBtu/hr natural gas fired recuperative thermal oxidizer for VOC control, and exhausting to stack S12.

(k) Cleaning room area, constructed after 1980, exhausting through stack CR-1, consisting of:

(1) Four (4) tanks containing cleaning solvents, identified as cleaning tanks 1 through 4, each with a capacity of 500 gallons. Tanks 1 and 4 contain no HAPs or VOCs.

(2) Two (2) tanks for die cleaning, identified as north die cleaning tank and south die cleaning tank, each with a capacity of 15 gallons.

Under 40 CFR 63, Subpart MMMM, wire enameling ovens 52-60, 65, and 66, wire coating machines 24-26, 28, and 37, magnet wire ovens 61-64 and 10, 11, and 12, cleaning tanks 2 and 3, and the two (2) die cleaning tanks are considered part of an existing affected source.

Insignificant Activities

Chemical Processing Plant

(b) The following storage tanks emitting less than 15 pounds per day of VOC, and under 40 CFR Part 63, Subpart MMMM, are considered part of an existing affected source:

(1) Seven (7) outside storage tanks, identified as tanks TK-17, TK-18, TK-19, TK-20, TK-21, TK-22, and TK-23, constructed after July 23, 1984, storing volatile organic liquids and having a maximum storage capacity less than 75 cubic meters.

(2) Fifteen (15) outside storage tanks, identified as tanks TK-1, TK-2, TK-3, TK-4, TK-5, TK-7, TK-8, TK-9, TK-10, TK-11, TK-12, TK-13, TK-15, TK-16, and TK-24, all constructed before July 23, 1984, except for tanks TK-3, and TK-9, storing volatile organic liquids and having a maximum storage capacity less than 40 cubic meters.

(3) Two (2) outside storage tanks, identified as tanks TK-6, and TK-14, approved in 2010 for construction, storing volatile organic liquids and having a maximum storage capacity less than 40 cubic meters.

(4) Three (3) inside storage tanks, storing volatile organic liquids and having maximum storage capacities less than 40 cubic meters, identified as:

(A) TK-25 and TK-32, constructed after July 23, 1984.

(B) TK-30, constructed prior to July 23, 1984.

(c) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons. [40 CFR 63, Subpart MMMM]

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

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

E.1.1 General Provisions Relating to NESHAP Subpart MMMM (National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products) [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.3901, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 as specified in Table 2 of 40 CFR Part 63, Subpart MMMM in accordance with schedule in 40 CFR 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 NESHAP Subpart MMMM Requirements [40 CFR 63, Subpart MMMM] [326 IAC 20-80]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart MMMM (included as Attachment A of this permit), which are incorporated by reference as 326 IAC 20-80, for all of the magnet wire coating ovens (52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 10, 11, and 12), wire coating machines (24, 25, 26, 27, 28, and 37), and associated solvent cleaning and coating mixing operations involving HAPs:

(1) 40 CFR 63.3880
(2) 40 CFR 63.3881(a)(1), (a)(4), (b)
(3) 40 CFR 63.3882(a), (b), (e)
(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
(12) 40 CFR 63.3920
(13) 40 CFR 63.3930
(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
(20) 40 CFR 63.3966
(21) 40 CFR 63.3967(a), (b)
(22) 40 CFR 63.3968(a), (b), (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

SECTION E.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Insignificant Activities

(a) One (1) emergency diesel generator, identified as EG-1, installed in 1993, rated at 900 horsepower, engine displacement volume less than 30 liters per cylinder and exhausting to the atmosphere. Under 40 CFR Part 63, Subpart ZZZZ, EG-1 is considered an existing affected source.

(b) One (1) natural gas fired spark ignition emergency generator, identified as EG-2, installed in 1960, rated at 18 horsepower. Under 40 CFR Part 63, Subpart ZZZZ, EG-2 is considered an existing affected source.

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

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

E.2.1 General Provisions Relating to NESHAP Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.6665, for EG-2, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as specified in 40 CFR Part 63, Subpart ZZZZ in accordance with schedule in 40 CFR 63, Subpart ZZZZ.

E.2.2 NESHAP Subpart ZZZZ Requirements [40 CFR 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 20-82 for EG-1 and EG-2:

(a) For EG-1:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)
(3) 40 CFR 63.6590(a)(1)(i), (b)(3)(iii)
(4) 40 CFR 63.6665
(5) 40 CFR 63.6670
(6) 40 CFR 63.6675

(b) For EG-2:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)
(3) 40 CFR 63.6590(a)(1)(ii)
(4) 40 CFR 63.6595(a)(1)
(5) 40 CFR 63.6602
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625(e)(2), (f), (h), (j)
(8) 40 CFR 6640(a), (b), (f)(1)-(f)(3)
(9) 40 CFR 63.6645(a)(5)
(10) 40 CFR 63.6650(f)

(11) 40 CFR 63.6655(d), (e)(2)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6670
(15) 40 CFR 63.6675
(16) Table 2c to Subpart ZZZZ of Part 63, item (6)
(17) Table 6 to Subpart ZZZZ of Part 63, item (9)
(18) Table 8 to Subpart ZZZZ of Part 63

SECTION E.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Chemical Processing Plant - Boilers

(a) One (1) 16.74 MMBtu per hour natural gas fired firetube boiler, identified as emission unit EB, constructed in 1994, and exhausting to stack SCB. Under 40 CFR 60, Subpart Dc, EB is considered an affected facility. Under 40 CFR 63, Subpart DDDDD, EB is considered an existing affected source.

(b) One (1) 16.74 MMBtu per hour natural gas fired firetube boiler, identified as emission unit WB, constructed in 1994, and exhausting to stack SCB. Under 40 CFR 60, Subpart Dc, WB is considered an affected facility. Under 40 CFR 63, Subpart DDDDD, WB is considered an existing affected source.

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

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

E.3.1 General Provisions Relating to NSPS Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, apply to boilers EB and WB except when otherwise specified in 40 CFR 60, Subpart Dc.

E.3.2 NSPS Subpart Dc Requirements [40 CFR 60, Subpart Dc] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR 60, Subpart Dc (included as Attachment C of this permit), which are incorporated by reference as 326 IAC 12, for boilers EB and WB:

(1) 40 CFR 60.40c(a), (b), (c), (d)
(2) 40 CFR 60.41c
(3) 40 CFR 60.48c(a), (g), (i)

SECTION E.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Chemical Processing Plant - Boilers

(a) One (1) 16.74 MMBtu per hour natural gas fired firetube boiler, identified as emission unit EB, constructed in 1994, and exhausting to stack SCB. Under 40 CFR 60, Subpart Dc, EB is considered an affected facility. Under 40 CFR 63, Subpart DDDDD, EB is considered an existing affected source.

(b) One (1) 16.74 MMBtu per hour natural gas fired firetube boiler, identified as emission unit WB, constructed in 1994, and exhausting to stack SCB. Under 40 CFR 60, Subpart Dc, WB is considered an affected facility. Under 40 CFR 63, Subpart DDDDD, WB is considered an existing affected source.

Insignificant Activities

(d) Two (2) natural gas fired process heaters, identified as OH-1, constructed in 2012, with a capacity of 3.3 MMBTU/hr and OH-2, constructed in 1993, with a capacity of 4 MMBTU/hr. Under 40 CFR 63, Subpart DDDDD, OH-1 is considered a new affected source and OH-2 is considered an existing affected source.

(g) One (1) indirect natural gas fired water evaporator, identified as EV-2, approved in 2014 for installation, with a maximum heat input capacity of 0.4 MMBtu/hr, with a maximum input rate of 37.5 gallons of mop water per hour, and exhausting through Stack EV-2. Under 40 CFR 63, Subpart DDDDD, EV-2 is considered a new affected source.

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

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

E.4.1 General Provisions Relating to NESHAP Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.7565, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 as specified in Table 10 of 40 CFR Part 63, Subpart DDDDD in accordance with schedule in 40 CFR 63 Subpart DDDDD.

E.4.2 NESHAP Subpart DDDDD Requirements [40 CFR 63, Subpart DDDDD] [326 IAC 20-95]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart DDDDD (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 20-95 for boilers EB and WB, process heaters OH-1 and OH-2, and the water evaporator EV-2:

(a) For Boilers EB and WB:

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490(a), (d)
(4) 40 CFR 63.7495(b), (d)
(5) 40 CFR 63.7499(l)
(6) 40 CFR 63.7500(a)(1), (a)(3), (b), (e), (f)
(7) 40 CFR 63.7501

(8) 40 CFR 63.7505(a)
(9) 40 CFR 63.7510(e)
(10) 40 CFR 63.7515(d)
(11) 40 CFR 63.7530(d), (e), (f)
(12) 40 CFR 63.7540(a)(10), (a)(13), (b)
(13) 40 CFR 63.7545(a), (b), (e)(1), (e)(8), (f), (h)
(14) 40 CFR 63.7550(a), (b), (c), (h)(1), (h)(3)
(15) 40 CFR 63.7555(a), (i), (j)
(16) 40 CFR 63.7560
(17) 40 CFR 63.7565
(18) 40 CFR 63.7570
(19) 40 CFR 63.7575
(20) Table 3 to Subpart DDDDD of Part 63, items (3), (4)
(21) Table 9 to Subpart DDDDD of Part 63
(22) Table 10 to Subpart DDDDD of Part 63

(b) For Process Heater OH-1 and Water Evaporator EV-2:

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490(a), (b)
(4) 40 CFR 63.7495(a), (d)
(5) 40 CFR 63.7499(l)
(6) 40 CFR 63.7500(a)(1), (a)(3), (b), (e), (f)
(7) 40 CFR 63.7501
(8) 40 CFR 63.7505(a)
(9) 40 CFR 63.7510(g)
(10) 40 CFR 63.7515(d)
(11) 40 CFR 63.7530(d), (f)
(12) 40 CFR 63.7540(a)(12), (a)(13), (b)
(13) 40 CFR 63.7545(a), (b), (e)(1), (e)(8)(i), (f), (h)
(14) 40 CFR 63.7550(a), (b), (c), (h)(1), (h)(3)
(15) 40 CFR 63.7555(a), (i), (j)
(16) 40 CFR 63.7560
(17) 40 CFR 63.7565
(18) 40 CFR 63.7570
(19) 40 CFR 63.7575
(20) Table 3 to Subpart DDDDD of Part 63, item (1)
(21) Table 9 to Subpart DDDDD of Part 63
(22) Table 10 to Subpart DDDDD of Part 63

(c) For Process Heater OH-2:

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490(a), (d)
(4) 40 CFR 63.7495(b), (d)
(5) 40 CFR 63.7499(l)
(6) 40 CFR 63.7500(a)(1), (a)(3), (b), (e), (f)
(7) 40 CFR 63.7501
(8) 40 CFR 63.7505(a)
(9) 40 CFR 63.7510(e)
(10) 40 CFR 63.7515(d)
(11) 40 CFR 63.7530(d), (e), (f)
(12) 40 CFR 63.7540(a)(12), (a)(13), (b)
(13) 40 CFR 63.7545(a), (b), (e)(1), (e)(8)(i), (e)(8)(ii), (f), (h)

(14) 40 CFR 63.7550(a), (b), (c), (h)(1), (h)(3)
(15) 40 CFR 63.7555(a), (i), (j)
(16) 40 CFR 63.7560
(17) 40 CFR 63.7565
(18) 40 CFR 63.7570
(19) 40 CFR 63.7575
(20) Table 3 to Subpart DDDDD of Part 63, items (1), (4)
(21) Table 9 to Subpart DDDDD of Part 63
(22) Table 10 to Subpart DDDDD of Part 63

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

Source Name: Essex Group, Inc.
Source Address: 1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802
Part 70 Permit No.: T003-30777-00269

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

Please check what document is being certified:

□ Annual Compliance Certification Letter

□ Test Result (specify)

□ Report (specify)

□ Notification (specify)

□ Affidavit (specify)

□ Other (specify)

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

Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Essex Group, Inc.
Source Address: 1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802
Part 70 Permit No.: T003-30777-00269

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)

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

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

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

Part 70 Quarterly Report

Source Name: Essex Group, Inc.
Source Address: 1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802
Part 70 Permit No.: T003-30777-00269
Facility: Wire Coating Machines 24, 25, 26, and 27
Parameter: VOC emissions
Limit: Less than fifteen (15) pounds per day each

Month: _____ **Year:** _____

Day	Coating Machine 24	Coating Machine 25	Coating Machine 26	Coating Machine 27	Day	Coating Machine 24	Coating Machine 25	Coating Machine 26	Coating Machine 27
1					17				
2					18				
3					19				
4					20				
5					21				
6					22				
7					23				
8					24				
9					25				
10					26				
11					27				
12					28				
13					29				
14					30				
15					31				
16									

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
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.
Source Address: 1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802
Part 70 Permit No.: T003-30777-00269
Facility: Oven 52
Parameter: VOC emissions
Limit: Less than 31.25 tons per twelve (12) consecutive month period

QUARTER : YEAR:

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

☐ No deviation occurred in this quarter.

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

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

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

Part 70 Quarterly Report

Source Name: Essex Group, Inc.
Source Address: 1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802
Part 70 Permit No.: T003-30777-00269
Facility: Oven 65 and 66
Parameter: VOC emissions
Limit: Less than 40 tons total per twelve (12) consecutive month period

QUARTER : YEAR:

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

☐ No deviation occurred in this quarter.

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

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

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

Part 70 Quarterly Report

Source Name: Essex Group, Inc.
Source Address: 1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802
Part 70 Permit No.: T003-30777-00269
Facility: Three (3) Weatherite V - 14 magnet wire ovens (10, 11, and 61-64)
Parameter: VOC emissions
Limit: Less than 39.8 tons total per twelve (12) consecutive month period

QUARTER : YEAR:

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

☐ No deviation occurred in this quarter.

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

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

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

Part 70 Quarterly Report

Source Name: Essex Group, Inc.
Source Address: 1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802
Part 70 Permit No.: T003-30777-00269
Facility: Magnet Wire Oven 12
Parameter: VOC emissions
Limit: Less than 39.7 tons total per twelve (12) consecutive month period

QUARTER : YEAR:

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

☐ No deviation occurred in this quarter.

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

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

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

Source Name: Essex Group, Inc.
Source Address: 1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802
Part 70 Permit No.: T003-30777-00269

Months: _____ to _____ Year: _____

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

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

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Part 70 Significant Source Modification and Significant Permit Modification

Source Background and Description

Source Name:	Essex Group, Inc.
Source Location:	1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802
County:	Allen
SIC Code:	3357 (Drawing and Insulating of Nonferrous Wire) and 2851 (Paints, Varnishes, Lacquers, Enamels and Allied Products)
Operation Permit No.:	T003-30777-00269
Operation Permit Issuance Date:	April 10, 2012
Significant Source Modification No.:	003-34878-00269
Significant Permit Modification No.:	003-34892-00269
Permit Reviewer:	Laura Spriggs Thompson

On October 17, 2014, the Office of Air Quality (OAQ) had a notice published in the *Journal Gazette* in Fort Wayne, Indiana, stating that Essex Group, Inc. had applied for a significant modification to modify a magnet wire oven to convert it from research and development use to production use. The notice also stated that the OAQ proposed to issue a Significant Source Modification and Significant Permit Modification for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Addition of Insignificant Activity

Description of Insignificant Activity

On, November 17, 2014, Essex Group, Inc. submitted an application (No. 003-35152-00269) for the addition of a natural gas fired water evaporator, classified as an insignificant activity pursuant to 326 IAC 2-7-1(21)(J)(i)(AA). IDEM, OAQ has combined permit application No. 003-35152-00269 into the existing Significant Permit Modification No. 003-34892-00269. The insignificant activity is described as follows:

> One (1) indirect natural gas fired water evaporator, identified as EV-2, approved in 2014 for installation, with a maximum heat input capacity of 0.4 MMBtu/hr, with a maximum input rate of 37.5 gallons of mop water per hour, and exhausting through Stack EV-2.

Emissions Calculations

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

Permit Level Determination – Part 70 Modification to an Existing Source

The following table is revised from the table in the TSD to reflect the addition of the water evaporator.

Total PTE Increase Due to the Modification			
Pollutant	**PTE New Emission Units*** (ton/yr)	**Increase to PTE of Modified Emission Units**** (ton/yr)	**Total PTE for New and Modified Units** (ton/yr)
PM	0.003	0.01	0.011
PM_{10}	0.013	0.03	0.044
$PM_{2.5}$	0.013	0.03	0.044
SO_2	0.001	0.002	0.003
VOC	0.009	142.96	142.97
CO	0.144	0.34	0.49
NO_X	0.172	5.39	5.56
Phenol	--	31.82	31.82
Total HAPs	0.003	58.55	58.55

*PTE New Emission Units is for the water evaporator.
**Increase to PTE of Modified Emission Units is as calculated previously for the modified units.

There is no change in the Part 70 permit level determination as a result of the addition of the water evaporator.

Permit Level Determination - PSD
The addition of the water evaporator (EV-2) is not part of the 2008 modification therefore; there is no change in the PSD permit level determination.

Federal Rule Applicability Determination

40 CFR 63.7480, Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
The water evaporator is subject to the requirements of 40 CFR 63, Subpart DDDDD because it is considered an indirect fired process heater located at a major source of HAP. Pursuant to 40 CFR 63.7490(b), the unit is considered a new unit because construction is commenced after June 4, 2010. Pursuant to 40 CFR 63.7495, the Permittee shall comply with Subpart DDDDD for the water evaporator upon startup.

The entire rule is included as Attachment D to the permit. The water evaporator is subject to the following provisions of 40 CFR 63, Subpart DDDDD:

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490(a), (b)
(4) 40 CFR 63.7495(a), (d)
(5) 40 CFR 63.7499(l)
(6) 40 CFR 63.7500(a)(1), (a)(3), (b), (e), (f)
(7) 40 CFR 63.7501
(8) 40 CFR 63.7505(a)
(9) 40 CFR 63.7510(g)
(10) 40 CFR 63.7515(d)
(11) 40 CFR 63.7530(d), (f)
(12) 40 CFR 63.7540(a)(12), (a)(13), (b)
(13) 40 CFR 63.7545(a), (b), (e)(1), (e)(8)(i), (f), (h)
(14) 40 CFR 63.7550(a), (b), (c), (h)(1), (h)(3)
(15) 40 CFR 63.7555(a), (i), (j)

(16) 40 CFR 63.7560
(17) 40 CFR 63.7565
(18) 40 CFR 63.7570
(19) 40 CFR 63.7575
(20) Table 3 to Subpart DDDDD of Part 63, item (1)
(21) Table 9 to Subpart DDDDD of Part 63
(22) Table 10 to Subpart DDDDD of Part 63

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the water evaporator described in this section except when otherwise specified in 40 CFR 63 Subpart DDDDD.

State Rule Applicability Determination

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The water evaporator is subject to the provisions of 326 IAC 6-2 because it is a source of indirect heating. Pursuant to 326 IAC 6-2-1(d), particulate emissions from the combustion of fuel for the water evaporator shall be limited by 326 IAC 6-2-4 because it will receive approval to construct after September 21, 1983.

Pursuant to 326 IAC 6-2-4(a), particulate emissions from indirect heating facilities constructed after September 21, 1983 shall be limited by the following equation:

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

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.
Q = Total source maximum operating capacity rating (MMBtu/hr). The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used. As each new indirect heating facility is added to a plant, Q will increase.

Q for the water evaporator, EV-2, is 41.18 MMBtu/hr based on the table below:

Unit	Year	Capacity (MMBtu/hr)	Q (MMBtu/hr)
OH-2	1993	4	4
EB	1994	16.74	37.48
WB	1994	16.74	37.48
OH-1	2012	3.3	40.78
EV-2	2015	0.4	41.18

Therefore, particulate emissions from the water evaporator, EV-2 shall be limited to 0.41 lb/MMBtu heat input.

Compliance Determination and Compliance Monitoring Requirements
There are no compliance determination or compliance monitoring requirements applicable to the water evaporator, EV-2.

Additional Changes

It was determined that the 326 IAC 6-2-4 particulate emission limits for the boilers, EB and WB, and the process heater, OH-1, were not determined correctly. These limits are being corrected as part of this permitting action.

As shown above, for Q varies for each unit based on the installation year. The allowable particulate emissions from each unit, Pt, are shown in the table below. Pursuant to 326 IAC 6-2-4(a), particulate emissions from indirect heating facilities constructed after September 21, 1983 shall be limited by the following equation:

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

Unit	Year	Capacity (MMBtu/hr)	Q (MMBtu/hr)	Pt (lb/MMBtu)
OH-2	1993	4	4	0.60*
EB	1994	16.74	37.48	0.42
WB	1994	16.74	37.48	0.42
OH-1	2012	3.3	40.78	0.42
EV-2	2015	0.4	41.18	0.41

*Pursuant to 326 IAC 6-2-4(a), for Q les than 10 MMBtu/hr, Pt shall not exceed 0.6 lb/MMBtu.

Proposed Changes

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The permit changes discussed in this Addendum to the Technical Support Document are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

The permit has been revised as follows:

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

* * *

Magnet Wire Coating Plant

* * *

(g) One (1) indirect natural gas fired water evaporator, identified as EV-2, approved in 2014 for installation, with a maximum heat input capacity of 0.4 MMBtu/hr, with a maximum input rate of 37.5 gallons of mop water per hour, and exhausting through Stack EV-2. Under 40 CFR 63, Subpart DDDDD, EV-2 is considered a new affected source.

* * * * *

SECTION D.1 FACILITY OPERATION CONDITIONS

* * *

Insignificant Activities

(d) * * *

(g) One (1) indirect natural gas fired water evaporator, identified as EV-2, approved in 2014 for installation, with a maximum heat input capacity of 0.4 MMBtu/hr, with a maximum input rate of 37.5 gallons of mop water per hour, and exhausting through Stack EV-2. Under 40 CFR 63, Subpart DDDDD, EV-2 is considered a new affected source.

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

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

D.1.1 Particulate Matter (PM) [326 IAC 6-2-4]

~~(a)~~ Pursuant to 326 IAC 6-2-4 (Particulate ~~e~~**E**mission ~~l~~**L**imitations for ~~s~~**S**ources of ~~i~~**I**ndirect ~~h~~**H**eating), particulate emissions **shall be limited as follows:** ~~from boilers EB and WB shall be limited to 0.417 pounds PM per MMBtu heat input each based on the following equation:~~

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

~~Where:~~
~~Pt = pounds of particulate matter emitted per MMBtu heat input.~~
~~Q = Total source maximum operating capacity rating in MMBtu per hour = 40.08 MMBtu/hr.~~

(~~b~~**a**) ~~Pursuant to 326 IAC 6-2-4(a), the p~~**P**articulate emissions from **process heater** ~~OH-1 and~~ OH-2 shall **be limited to** not exceed 0.6 lb/MMBtu~~, each~~.

(b) Particulate emissions from boilers EB and WB and process heater OH-1 shall be limited to 0.42 lb/MMBtu each.

(c) Particulate emissions from water evaporator EV-2 shall be limited to 0.41 lb/MMBtu.

* * * * *

SECTION E.4 FACILITY OPERATION CONDITIONS

* * *
Insignificant Activities

(d) * * *

(g) One (1) indirect natural gas fired water evaporator, identified as EV-2, approved in 2014 for installation, with a maximum heat input capacity of 0.4 MMBtu/hr, with a maximum input rate of 37.5 gallons of mop water per hour, and exhausting through Stack EV-2. Under 40 CFR 63, Subpart DDDDD, EV-2 is considered a new affected source.

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

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

E.4.1 General Provisions Relating to NESHAP Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) [326 IAC 20-1] [40 CFR Part 63, Subpart A]

* * *

E.4.2 NESHAP Subpart DDDDD Requirements [40 CFR 63, Subpart DDDDD] [326 IAC 20-95]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart DDDDD (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 20-95 for boilers EB and WB**,** ~~and~~ process heaters OH-1 and OH-2**, and the water evaporator EV-2**:

(a) * * *

(b) For Process Heater OH-1 **and Water Evaporator EV-2**:

* * *

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Laura Spriggs Thompson at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-5693 or toll free at 1-800-451-6027 extension 3-5693.

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

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

ATSD Appendix A: Emission Calculations
Modification Summary

Company Name: Essex Group, Inc.
Source Location: 1601 Wall St and 1700 W Swinney, Fort Wayne, IN 46802
SSM No.: 003-34878-00269
SPM No.: 003-34892-00269
Reviewer: Laura Spriggs Thompson

Project

Currently, oven 11 (installed in 2008) consists of 2 indpendent sides using a common annealer so that only one side can be used at a time. The modification involves the addition of a new annealer so that both sides (10 and 11) can be run for production purposes. Additionally, a water evaporator is being added.

Part 70 Permit Level Determination

	Uncontrolled PTE (ton/yr)									
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Single HAP	HAP
Before Modification										
Oven 11 Process Emissions	0	0	0	--	--	142.94	--	58.54	31.82	Phenol
Oven 11 NOx Emissions	--	--	--	--	4.98	--	--	--	--	--
Oven 11 Combustion Emissions	0.007	0.026	0.026	0.002	0.34	0.02	0.29	0.01	0.01	Hexane
Annealer 11 Combustion Emissions	0.001	0.005	0.005	0.0004	0.06	0.004	0.05	0.001	0.001	Hexane
Total Before Modification	***0.008***	***0.031***	***0.031***	***0.002***	***5.39***	***142.96***	***0.34***	***58.55***	***31.82***	***Phenol***
After Modification										
Oven 10 Process Emissions	0	0	0	--	--	142.94	--	58.54	31.82	Phenol
Oven 11 Process Emissions	0	0	0	--	--	142.94	--	58.54	31.82	Phenol
Oven 10 NOx Emissions	--	--	--	--	4.98	--	--	--	--	--
Oven 11 NOx Emissions	--	--	--	--	4.98	--	--	--	--	--
Oven 10 Combustion Emissions	0.007	0.026	0.026	0.002	0.34	0.02	0.29	0.01	0.01	Hexane
Oven 11 Combustion Emissions	0.007	0.026	0.026	0.002	0.34	0.02	0.29	0.01	0.01	Hexane
Annealer 10 Combustion Emissions	0.001	0.005	0.005	0.0004	0.06	0.004	0.05	0.001	0.001	Hexane
Annealer 11 Combustion Emissions	0.001	0.005	0.005	0.0004	0.06	0.004	0.05	0.001	0.001	Hexane
Total After Modification	***0.016***	***0.062***	***0.062***	***0.005***	***10.77***	***285.93***	***0.69***	***117.09***	***63.64***	***Phenol***
Increase From Modification	**0.01**	**0.03**	**0.03**	**0.002**	**5.39**	**142.96**	**0.34**	**58.55**	**31.82**	**Phenol**
New Units										
Water Evaporator Combustion Emissions	0.003	0.013	0.013	0.001	0.172	0.009	0.144	0.003	0.003	Hexane
Total for Project	**0.011**	**0.044**	**0.044**	**0.003**	**5.56**	**142.97**	**0.49**	**58.55**	**31.82**	**Phenol**

The Part 70 Permit Level Determination of the modification is based on the Uncontrolled PTE After Modification - the Uncontrolled PTE Before Modification. See the following pages for detailed calculations

PSD Permit Level Determination

	Limited PTE (ton/yr)						
Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO
Oven 61 Process and NOx Emissions	0	0	0	--	4.98	39.8	--
Oven 62 Process and NOx Emissions	0	0	0	--	4.98		--
Oven 63 Process and NOx Emissions	0	0	0	--	4.98		--
Oven 64 Process and NOx Emissions	0	0	0	--	4.98		--
Oven 10 Process and NOx Emissions	0	0	0	--	4.98		--
Oven 11 Process and NOx Emissions	0	0	0	--	4.98		--
Oven 61 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 62 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 63 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 64 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 63 Combustion Emissions	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Annealer 64 Combustion Emissions	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Oven 10 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 10 Combustion Emissions	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Oven 11 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 11 Combustion Emissions	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Total	**0.04**	**0.18**	**0.18**	**0.01**	**32.18**	**39.93**	**1.95**

MSM No. 003-26441-00269, issued on May 5, 2008 provided construction approval for two (2) Weatherite V - 14 magnet wire ovens (61-64) for production purposes and one (1) Weatherite V - 14 magnet wire oven (11) for research and development purposes. The research and development magnet wire oven is being modified to add an annealer so that both sides can be used (ovens 10 and 11) and to convert the unit to be used for production purposes. Since the modified unit was part of the 2008 modification and the modification was limited to be minor for PSD, emissions from all three (3) units must remain limited to below the PSD significant levels. The table above represents the limited potential to emit. VOC emissions from coating operations are being limited such that the limit combined with the potential to emit VOC from the combustion processes shall limit emissions from the 2008 modification to less than forty (40) tons of VOC per year. The water evaporator was not part of the 2008 modification, so it is not being evaluated here.

ATSD Appendix A: Emission Calculations
VOC and Particulate Emissions from Ovens 61-64, 10 and 11

Company Name: **Essex Group, Inc.**
Source Location: **1601 Wall St and 1700 W Swinney, Fort Wayne, IN 46802**
SSM No.: **003-34878-00269**
SPM No.: **003-34892-00269**
Reviewer: **Laura Spriggs Thompson**

VOC and Particulate Emissions

Unit ID	Stack ID	Coating Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/lb Cu)	Maximum throughput (lb Cu/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (ton/yr)	Transfer Efficiency	Particulate Potential (ton/yr)	lb VOC/ gal Coating Solids	Emission Limit per 8-2-8 (lb VOC/gal coating excluding water)	Equivalent 326 IAC 8-2-8 Emission Limit (lb VOC/gal Coating Solids)	Minimum Control efficiency (%)	Controlled VOC PTE (ton/yr)
61	S61	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89
62	S62	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89
63	S63	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89
64	S64	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89
10	S-10	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89
11	S-11	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89

PTE based on the worst case Formvar

Methodology

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

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

Potential VOC (lb/hr) = Gal of Mat. (gal/lb Cu) * Maximum Throughput (lb Cu/hr) * Pounds VOC per gallon of Coating

Potential VOC (lb/day) = Gal of Mat. (gal/lb Cu) * Maximum Throughput (lb Cu/hr) * Pounds VOC per gallon of Coating * (24 hr/day)

Potential VOC (ton/yr) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/lb Cu) * Maximum Throughput (lb Cu/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Transfer Efficiency = 100% based on flowcoating

Particulate Potential (ton/yr) = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) *(1 ton/2000 lbs)

lb VOC/gal Coating Solids as provided by the Source

Equivalent 326 IAC 8-2-8 Emission Limit (lb VOC/gal Coating Solids) = 326 IAC 8-2-8 Emission Limit (lb VOC/gal of Coating less Water) / (1 - (326 IAC 8-2-8 Emission Limit/7.36))

Minimum Control Efficiency = Minimum needed control efficiency to meet 326 IAC 8-2-8 limit = (lb VOC/gal Coating Solids - 326 IAC 8-2-8 Equivalent Emission limit) / (lb VOC/gal Coating Solids)

Controlled/Limited VOC PTE (After Oxidizers) (tons/yr) = Potential VOC Emissions (tons/yr) x Oxidizer Eff. (%) Needed to meet 326 IAC 8-2-8 Emission Limit

ATSD Appendix A: Emission Calculations
HAP Emissions from Ovens 61-64, 10 and 11

Company Name: Essex Group, Inc.
Source Location: 1601 Wall St and 1700 W Swinney, Fort Wayne, IN 46802
SSM No.: 003-34878-00269
SPM No.: 003-34892-00269
Reviewer: Laura Spriggs Thompson

HAP Emissions

													Uncontrolled Emissions (ton/yr)					
Oven ID	Stack ID	Material	Density (lbs/gal)	Volume % Non-Volatiles (solids)	Weight % VOC	Usage (gal/lb)	Max Throughput (lbs/hr)	Weight of % Ethyl Benzene	Weight of % Xylene	Weight of % Cumene	Weight of % Phenol	Weight of % Mixed Cresols	Ethyl Benzene	Xylene	Cumene	Phenol	Mixed Cresols	Total HAPs
61	S61	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54
62	S62	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54
63	S63	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54
64	S64	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54
10	S-10	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54
11	S-11	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54

PTE based on the worst case Formvar

			Controlled Emissions (ton/yr)						Limited PTE (ton/yr)					
Oven ID	Stack ID	Minimum Control efficiency (%)	Ethyl Benzene	Xylene	Cumene	Phenol	Mixed Cresols	Total HAPs	Ethyl Benzene	Xylene	Cumene	Phenol	Mixed Cresols	Total HAPs
61	S61	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66
62	S62	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66
63	S63	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66
64	S64	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66
10	S-10	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66
11	S-11	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66

Methodology

Uncontrolled Potential Emissions (ton/yr) = Density (lb/gal) * Usage (gal/lb) * Max Throughput (lb/hr) * Wt % HAP * (8760 hr/yr) * (1 ton/2000 lb)
Controlled Potential Emissions (ton/yr) = Uncontrolled Potential Emissions (ton/yr) * (1 - Minimum Control Efficiency Needed to Meet 326 IAC 8-2-8 Emisison Limit)
Limited PTE Total HAPs (ton/yr) = 40 CFR 63, Subpart MMMM Total HAP Emission Limit (1 lb HAP/gal solids) * (Volume % Solids) * Usage (gal/lb) * Max Throughput (lb/hr) * (8760 hr/yr) * (1 ton/2000 lb)
Limited PTE Single HAP (ton/yr) = Limited PTE Total HAPs (ton/yr) x Wt% HAP / (Sum of Wt% of all HAPs)

ATSD Appendix A: Emission Calculations
NOx Emissions from Ovens 61-64, 10 and 11

Company Name: Essex Group, Inc.
Source Location: 1601 Wall St and 1700 W Swinney, Fort Wayne, IN 46802
SSM No.: 003-34878-00269
SPM No.: 003-34892-00269
Reviewer: Laura Spriggs Thompson

Unit IDs	Stack IDs	Coating Material	Density (Lb/Gal)	Weight % NMP	Gal of Mat. (gal/lb Cu)	Maximum Throughput (lb Cu/hour)	Pounds NMP per gallon of coating	Potential NOx pounds per hour	Potential NOx pounds per day	Transfer Efficiency	Minimum Control efficiency (%)	Uncontrolled NOx PTE (ton/yr)
61	S61	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98
62	S62	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98
63	S63	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98
64	S64	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98
10	S-10	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98
11	S-11	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98

PTE based on the worst case Amide-Imide

Methodology

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

Potential NOx (ton/yr) = Pounds of NMP per Gallon coating (lb/gal) * Gal of Material (gal/lb) * Maximum Throughput (lb/hr) * 0.086 lb NOx/lb NMP * (8760 hr/yr) * (1 ton/2000 lbs)

Note: Emission factor of NOx = 0.086 lb NOx/ lb NMP is from a stack test from the Franklin, TN facility.

ATSD Appendix A: Emission Calculations
Combustion Emissions from Ovens 61-64, 10 and 11 and Water Evaporator
Natural Gas < 100 MMBtu/hr

Company Name: Essex Group, Inc.
Source Location: 1601 Wall St and 1700 W Swinney, Fort Wayne, IN 46802
SSM No.: 003-34878-00269
SPM No.: 003-34892-00269
Reviewer: Laura Spriggs Thompson

			Criteria Pollutants						
			PM*	PM10*	PM2.5*	SO2	NOx**	VOC	CO
Emission Factor in lb/MMCF			1.9	7.6	7.6	0.6	100.0	5.5	84.0
Emission Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)						
Oven 61	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 62	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 63	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 64	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 63	0.15	1.288	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Annealer 64	0.15	1.288	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Oven 10	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 10	0.15	1.288	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Oven 11	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 11	0.15	1.288	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Water Evaporator	0.4	3.435	0.003	0.013	0.013	0.0010	0.172	0.009	0.144
Total			0.05	0.19	0.19	0.01	2.49	0.14	2.09

Emission Factors are from AP-42, Tables 1.4-1 and 1.4-2.

*PM emission factor is filterable PM only. PM10 emission factors are filterable PM10 and condensable PM combined. PM2.5 emission factor is filterable PM2.5 and condensable PM combined.

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

			HAPs - Organics					HAPs - Metals					Total HAPs
			Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Lead	Cadmium	Chromium	Manganese	Nickel	
Emission Factor in lb/MMCF			2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	1.8880
Emission Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)										
Oven 61	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Oven 62	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Oven 63	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Oven 64	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Annealer 63	0.15	1.288	1.4E-06	7.7E-07	4.8E-05	1.2E-03	2.2E-06	3.2E-07	7.1E-07	9.0E-07	2.4E-07	1.4E-06	1.2E-03
Annealer 64	0.15	1.288	1.4E-06	7.7E-07	4.8E-05	1.2E-03	2.2E-06	3.2E-07	7.1E-07	9.0E-07	2.4E-07	1.4E-06	1.2E-03
Oven 10	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Annealer 10	0.15	1.288	1.4E-06	7.7E-07	4.8E-05	1.2E-03	2.2E-06	3.2E-07	7.1E-07	9.0E-07	2.4E-07	1.4E-06	1.2E-03
Oven 11	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Annealer 11	0.15	1.288	1.4E-06	7.7E-07	4.8E-05	1.2E-03	2.2E-06	3.2E-07	7.1E-07	9.0E-07	2.4E-07	1.4E-06	1.2E-03
Water Evaporator	0.4	3.435	3.6E-06	2.1E-06	1.3E-04	3.1E-03	5.8E-06	8.6E-07	1.9E-06	2.4E-06	6.5E-07	3.6E-06	3.2E-03
Total			4.9E-05	2.8E-05	1.7E-03	4.2E-02	7.9E-05	1.2E-05	2.6E-05	3.2E-05	8.8E-06	4.9E-05	4.4E-02

Emission Factors are from AP-42, Tables 1.4-3 and 1.4-4.

The five highest organic and metal HAPs emission factors are provided above. The total HAPs is the sum of all HAPs listed in AP-42, Tables 1.4-3 and 1.4-4.

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

Methodology

Heating Value of Natural Gas is assumed to be 1020 MMBtu/MMCF

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

Potential Emission (tons/yr) = Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * (1 ton/2,000 lb)

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	Essex Group, Inc.
Source Location:	1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802
County:	Allen
SIC Code:	3357 (Drawing and Insulating of Nonferrous Wire) and 2851 (Paints, Varnishes, Lacquers, Enamels and Allied Products)
Operation Permit No.:	T003-30777-00269
Operation Permit Issuance Date:	April 10, 2012
Significant Source Modification No.:	003-34878-00269
Significant Permit Modification No.:	003-34892-00269
Permit Reviewer:	Laura Spriggs Thompson

Source Definition

This stationary chemical processing and magnet wire coating company consists of two (2) plants:

(a) Chemical Processing Plant is located at 1700 West Swinney, Fort Wayne, Indiana 46802; and

(b) Magnet Wire Coating Plant is located at 1601 Wall Street, Fort Wayne, Indiana 46802.

Since the Chemical Processing Plant supports the Magnet Wire Coating Plant, and these two plants are under common control of the same entity, they are considered one (1) source.

(Note: The TSD of permit renewal No. T003-30777-00269, issued on April 10, 2012 indicated that the above mentioned source definition was carried over from T003-7654-00269, issued on September 30, 1999.)

Existing Approvals

The source was issued Part 70 Operating Permit No. T003-30777-00269 on April 10, 2012. The source has since received the following approvals:

(a) Administrative Amendment No. 003-32834-00269, issued on April 8, 2013.

(b) Minor Source Modification No. 003-33490-00269, issued on October 21, 2013.

(c) Significant Permit Modification No. 003-33510-00269, issued on December 17, 2013.

(d) Significant Permit Modification No. 003-33785-00269, issued on March 13, 2014.

County Attainment Status

The source is located in Allen County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.[1]
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005, for the annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.	

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

(b) $PM_{2.5}$
Allen County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Allen County has been classified as attainment or unclassifiable in Indiana for SO2, CO, PM10, NO2, and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

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

Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	**Emissions** (ton/yr)
PM	Less than 100
PM_{10}	Less than 100
$PM_{2.5}$	Less than 100
SO_2	Less than 100
VOC	Greater than 250
CO	Less than 100
NO_X	Less than 100

Pollutant	**Emissions** (ton/yr)
Single HAP	Greater than 10
Total HAPs	Greater than 25

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

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

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant, excluding GHGs, is emitted at a rate of 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 HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

(c) These emissions are based upon the technical support document for Significant Permit Modification No. 003-33785-00269, issued on March 13, 2013.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Essex Group, Inc. on August 29, 2014, relating to the conversion of a magnet wire oven used for research and development purposes to a production magnet wire oven.

On May 5, 2008, Essex Group, Inc. was issued Minor Source Modification No. 003-26441-00269, which provided construction approval for two (2) Weatherite V - 14 magnet wire ovens (61-64) for production purposes and one (1) Weatherite V - 14 magnet wire oven (11) for research and development purposes. The source has requested that magnet wire oven (11) be converted to a production unit.

Currently oven 11 consists of two (2) independent sides using a common annealer. Due to the layout, only one (1) side can be run at a time. The modification to this unit will involve installing an additional annealer so that both sides can be used. The unit will be described as follows:

- One (1) Weatherite V - 14 magnet wire oven, with two (2) sides, identified as 10 and 11, constructed in 2008 and approved in 2014 for modification, with each side using a 0.15 MMBtu/hr natural gas fired annealer (identified as Annealer 10 and Annealer 11), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with two (2) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 10 and 11) to control VOC emissions, and exhausting through stacks S-10 and S-11, respectively.

Note: Essex Group, Inc. asserts that the magnet wire oven internal thermal oxidizers are integral to the process. However, justification for this claim was not provided by the Permittee. Additionally, the control efficiency of the thermal oxidizers is dependent on temperature. Therefore, IDEM does not consider the thermal oxidizers to be integral to the process for magnet wire ovens 10/11.

Additionally, the source has requested to clarify that the four (4) natural gas-fired internal thermal oxidizers (61 - 64) each have a maximum capacity of 0.8 MMBtu/hr.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (^{0}F)
S-10	Magnet Wire Oven 10	34	1.0	800	825
S-11	Magnet Wire Oven 11	34	1.0	800	825

Emission Calculations

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

Permit Level Determination – Part 70 Modification to an Existing Source

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

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

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

PTE Change of the Modified Process			
Pollutant	**PTE Before Modification** (ton/yr)	**PTE After Modification** (ton/yr)	**Increase from Modification** (ton/yr)
PM	0.008	0.016	0.01
PM_{10}	0.031	0.062	0.03
$PM_{2.5}$	0.031	0.062	0.03
SO_2	0.002	0.005	0.002
VOC	142.96	285.93	142.96
CO	0.34	0.69	0.34

PTE Change of the Modified Process			
Pollutant	**PTE Before Modification** (ton/yr)	**PTE After Modification** (ton/yr)	**Increase from Modification** (ton/yr)
NO_X	5.39	10.77	5.39
Phenol	31.82	63.64	31.82
Total HAPs	58.55	117.09	58.55

This source modification is subject to 326 IAC 2-7-10.5(g)(4)(D) and (g)(6) because the increase in the potential to emit due the modification is greater than twenty-five (25) tons of VOC, ten (10) tons of a single HAP, and twenty-five (25) tons of a combination of HAPs per year. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a Significant Permit Modification pursuant to 326 IAC 2-7-12(d)(1) because the modification requires a case-by-case determination of an emission limitation and significant changes to monitoring requirements.

Permit Level Determination – PSD

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 Source Modification and Permit Modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process / Emission Unit	**Project Emissions** (ton/yr)						
	PM	**PM_{10}**	**$PM_{2.5}$ ***	**SO_2**	**VOC**	**CO**	**NO_X**
Oven 61 Process and NOx Emissions	0	0	0	--	39.8	--	4.98
Oven 62 Process and NOx Emissions	0	0	0	--		--	4.98
Oven 63 Process and NOx Emissions	0	0	0	--		--	4.98
Oven 64 Process and NOx Emissions	0	0	0	--		--	4.98
Oven 10 Process and NOx Emissions	0	0	0	--		--	4.98
Oven 11 Process and NOx Emissions	0	0	0	--		--	4.98
Combustion Emissions from Ovens 10, 11, and 61-64 and Annealers 10, 11, 63, and 64	0.04	0.18	0.18	0.01	0.13	1.95	2.32
Total for 2008 Modification	0.04	0.18	0.18	0.01	39.93	1.95	32.18
Significant Thresholds	25	15	10	40	40	100	40
Subject to Regulation	---	---	---	---	---	---	---

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

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases

(GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

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

This modification to an existing major PSD stationary source is not major because the emissions increase of each PSD regulated pollutant, excluding GHGs, are less than the PSD significant thresholds.

Since this source is considered a major PSD source and the unrestricted potential to emit of the 2008 modification is greater than forty (40) tons of VOC per year, the source has elected to limit the potential to emit of the 2008 modification as follows:

> The combined VOC emissions from the three (3) Weatherite V - 14 magnet wire ovens (10, 11, and 61-64) shall be less than 39.8 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limit, combined with the potential to emit VOC from the magnet wire oven and annealer combustion emissions, shall limit the VOC from the modification to less than forty (40) tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable to the 2008 modification.

Federal Rule Applicability Determination

The following is a discussion of the federal rule applicability for the source due to this modification:

New Source Performance Standards (NSPS):

(a) *40 CFR 60.460, Subpart TT: Standards of Performance for Metal Coil Surface Coating*

The requirements of 40 CFR 60, Subpart TT are not applicable to the Weatherite V - 14 Magnet Wire Oven (10 and 11) because the magnet wire coated by this unit does not meet the definition of metal coil pursuant to 40 CFR 60.461 because it is not a continuous metal strip with a thickness of 0.15 millimeter or more.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(c) *40 CFR 63.3880, Subpart MMMM: National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*

The Weatherite V - 14 Magnet Wire Oven (10 and 11) is subject to the requirements of 40 CFR 63, Subpart MMMM, which are incorporated by reference as 326 IAC 20-80 because the magnet wire oven will be used to coat miscellaneous metal parts and products as described in 40 CFR 63.3881. Pursuant to 40 CFR 63.3882, Magnet Wire Oven (10 and 11) is considered part of an existing affected source because the source commenced construction prior to August 13, 2002. The affected source is the collection

of all coating operations as defined in 40 CFR 63.3981; all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed; all manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation. The affected facility is described as follows:

- One (1) Weatherite V - 14 magnet wire oven, with two (2) sides, identified as 10 and 11, constructed in 2008 and approved in 2014 for modification, with each side using a 0.15 MMBtu/hr natural gas fired annealer (identified as Annealer 10 and Annealer 11), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with two (2) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 10 and 11) to control VOC emissions, and exhausting through stacks S-10 and S-11, respectively.

The entire rule is included as Attachment A to the permit. Magnet Wire Oven (10 and 11) is subject to the following provisions of 40 CFR 63, Subpart MMMM:

(1) 40 CFR 63.3880
(2) 40 CFR 63.3881(a)(1), (a)(4), (b)
(3) 40 CFR 63.3882(a), (b), (e)
(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
(12) 40 CFR 63.3920
(13) 40 CFR 63.3930
(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
(20) 40 CFR 63.3966
(21) 40 CFR 63.3967(a), (b)
(22) 40 CFR 63.3968(a), (b), (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

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to Magnet Wire Oven (10 and 11) except when otherwise specified in 40 CFR 63 Subpart MMMM.

(d) *40 CFR 63.5080, Subpart SSSS: National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil*

The requirements of 40 CFR 63, Subpart SSSS are not applicable to Magnet Wire Oven (10 and 11) because the magnet wire coated by this unit does not meet the definition of

metal coil pursuant to 40 CFR 63.5110 because it is not a continuous metal strip that is at least 0.15 millimeter thick.

Compliance Assurance Monitoring

(d) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;

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

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

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

CAM Applicability Analysis							
Emission Unit - Pollutant	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
Magnet Wire Oven (10 and 11) - VOC	Y - TO	Y	> 100	< 100	100	Y	N
Magnet Wire Oven (10 and 11) - Total HAP	Y - TO	Y	> 25	< 25	25	N	N

TO = Thermal Oxidizer

Pursuant to 40 CFR 64.2(b)(1)(i), the requirements of CAM shall not apply to emission limitations or standards proposed by EPA after November 15, 1990 pursuant to section 111 or 112 of the Clean Air Act. Magnet Wire Oven (10 and 11) is subject to 40 CFR 63, Subpart MMMM, which was promulgated after November 15, 1990. Subpart MMMM includes an emission limitation for total organic HAP emissions. Therefore, Magnet Wire Oven (10 and 11) is not subject to CAM for total HAPs.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to Magnet Wire Oven (10 and 11) for VOC upon issuance of the next Title V Renewal because not all the VOC used in Magnet Wire Oven (10 and 11) is a HAP that is covered under 40 CFR 63, Subpart MMMM. A CAM plan must be submitted as part of the next Renewal application.

State Rule Applicability Determination

The following is a discussion of the state rule applicability for the source due to this modification:

326 IAC 2-2 (Prevention of Significant Deterioration)
PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of Magnet Wire Oven (10 and 11) will emit greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 would apply to Magnet Wire Oven (10 and 11); however, pursuant to 326 IAC 2-4.1-1(b)(2), because this unit is specifically regulated by NESHAP 40 CFR 63, Subpart MMMM,

which was issued pursuant to Section 112(d) of the CAA, Magnet Wire Oven (10 and 11) is exempt from the requirements of 326 2-4.1.

326 IAC 2-6 (Emission Reporting)
This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC is greater than 250 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(1), annual reporting is required. An emission statement shall be submitted by July 1, 2015, and every year thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(7), the requirements of 326 IAC 6-3 are not applicable to Magnet Wire Oven (10 and 11) because this unit uses flow coating methods of application.

326 IAC 8-1-6 (General Reduction Requirements for New Facilities)
The provisions of 326 IAC 8-1-6 apply to new facilities (as of January 1, 1980) that have potential VOC emissions of twenty-five (25) tons or more per year; are located anywhere in the state, and that are not otherwise regulated by another provision of 326 IAC 8, 326 IAC 20-48, or 326 IAC 20-56. Magnet Wire Oven (10 and 11) has potential VOC emissions greater than twenty-five (25) tons per year; however, the unit is subject to 326 IAC 8-2-8. Therefore, Magnet Wire Oven (10 and 11) is not subject to the requirements of 326 IAC 8-1-6.

326 IAC 8-2-8 (Magnet Wire Coating Operations)
The provisions of 326 IAC 8-2-8 apply to Magnet Wire Oven (10 and 11) because it commenced construction after January 1, 1980 and it has potential emissions of twenty-five (25) tons or greater per year of VOC. Pursuant to 326 IAC 8-2-9(b), the Permittee shall not cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 1.7 pounds per gallon excluding water, delivered to the coating applicator from magnet wire coating operations.

326 IAC 8-2-9 (Miscellaneous Metal Coating)
Pursuant to 326 IAC 8-2-9(b)(1), the provisions of 326 IAC 8-2-9 are not applicable to surface coating of any metal parts or products limited by other sections of 326 IAC 8. Magnet Wire Oven (10 and 11) is subject to 326 IAC 8-2-8 (Magnet Wire Coating Operations); therefore, Magnet Wire Oven (10 and 11) is not subject to 326 IAC 8-2-9.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure 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.

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

Control Device Requirement
In order to ensure compliance with 326 IAC 8-2-8 and the 326 IAC 2-2 (PSD) minor limit, the thermal oxidizers for Magnet Wire Ovens 10 and 11 shall be in operation whenever the magnet wire oven is in operation.

VOC Data Sheets
Compliance with the VOC content limitation as specified for 326 IAC 8-2-8 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.

Determining Compliance with 326 IAC 8-2-8 Emission Limitation

(a) Compliance with the 326 IAC 8-2-8 emission limitation shall be determined pursuant to 326 IAC 8-1-2(b). The VOC emissions from Magnet Wire Oven (10 and 11) shall be limited to no greater than the equivalent emissions, expressed as pounds of VOC per gallon of coating solids, as allowed by 326 IAC 8-2-8.

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

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

Where:

L = Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating.

D = 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 thermal oxidizer shall be no less than the equivalent overall efficiency necessary to comply with the equivalent emission limitation in (a)(2).

(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 non-compliant coating or, if multiple non-compliant coatings are used, the daily weighted average VOC content of all non-compliant 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.

(2) The overall efficiency of the internal thermal oxidizers for ovens 10 and 11 shall be equal to or greater than 95.88% or the efficiency required to demonstrate compliance with the 326 IAC 8-2-8 emission limitation.

Equation for Determining Compliance with PSD Minor Limits

Compliance with the PSD Minor Limit for the three (3) Weatherite magnet wire ovens (10, 11, and 61-64) shall be determined by calculating the VOC emissions using the following equation:

VOC Emissions (tons/month) = Σ (VOC Content i (%) x Coating Amount i (tons/month) x (1 - Control Efficiency % / 100))

Where:

Control Efficiency % = control efficiency as demonstrated in most recent valid compliance test.

VOC Content i = Percent VOC content of coating i used .

Amount i = Usage, in tons of the coating i per month.

Testing Requirement

Summary of Testing Requirements					
Emission Unit	**Control Device**	**Timeframe for Testing**	**Pollutant**	**Frequency of Testing**	**Limit or Requirement**
Magnet Wire Ovens 10 and 11	Thermal Oxidizers	*	VOC	Once every 5 years	326 IAC 8-2-8

*Ovens 10 and 11 are grouped with ovens 61-64 for testing purposes. One representative thermal oxidizer from 10, 11, 61, 62, 63, and 64 shall be tested at least once every five (5) years. Testing shall be alternated between thermal oxidizers 10, 11, 61, 62, 63, and 64 for each test cycle, such that testing on a thermal oxidizer shall not be repeated until 10, 11, 61, 62, 63, and 64 have each been tested.

The compliance monitoring requirements applicable to this modification are as follows:

Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizers (10 and 11) for measuring operating temperature. 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 shall be recorded as three-hour average temperatures whenever the oxidizers are in operation.

(b) The Permittee shall determine the three-hour average temperature from the latest valid stack test that demonstrates compliance with 326 IAC 8-2-8 and the PSD minor limit.

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

(d) If the primary continuous monitoring system is not in operation, the oxidizer temperature

shall 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 oxidizers. Continuous monitoring shall mean no less often than once per fifteen (15) minutes.

(e) If the three-hour average temperature falls below the above mentioned three-hour average temperature, the Permittee shall take a reasonable response.

These compliance monitoring requirements are necessary because the thermal oxidizers for ovens 10 and 11 must operate properly in order to ensure compliance with 326 IAC 8-2-8 (Magnet Wire Coating Operations) and 40 CFR 63, Subpart MMMM and in order to render 326 IAC 2-2 (PSD) not applicable.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T003-30777-00269. These changes may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

(a) The emission unit description for the two (2) Weatherite V - 14 magnet wire ovens (61-64) was revised for clarity in Sections A.3, D.4, and E.1 of the permit.

(b) The emission unit description for the Weatherite V - 14 magnet wire oven (10 and 11), reflecting the modification, was included in Sections A.3, D.4, and E.1 of the permit. Subsequent units were renumbered.

(c) The description for the Weatherite V - 14 magnet wire oven (11) for research and development purposes was removed from A.4 of the permit. Subsequent units were renumbered.

(d) Conditions D.4.1, D.4.4, D.4.6, D.4.7, and D.4.8 were revised to include ovens 10 and 11. A new Condition D.4.10 was added to include compliance monitoring requirements for ovens 10 and 11.

(e) Condition D.4.2 was revised to include ovens 10 and 11 in the PSD minor limit, as well as to revise the PSD minor limit. The 15 pound per day limit for oven 11 was removed.

(f) Conditions D.4.10 and D.4.11 (now D.4.11 and D.4.12) were revised to remove the record keeping and reporting requirements for the 15 pound per day limit, which was removed in Condition D.4.2. Additionally, the corresponding reporting form was removed.

(g) The reporting form for the 2008 modification was revised to include all three magnet wire ovens (10, 11, and 61-64) as well as to revise the limit.

The permit has been revised as follows:

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

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

* * *

Magnet Wire Coating Plant

(a) * * *
(b) * * *
(c) * * *
(d) * * *
(e) * * *
(f) * * *
(g) * * *
(h) Two (2) Weatherite V - 14 magnet wire ovens, each with two (2) sides, identified as 61, 62, 63, and 64, constructed in 2008, **with two (2) 0.15 MMBtu/hr natural gas fired annealers (identified as Annealer 63 and Annealer 64),** with a maximum **flow coating** capacity of 284 pounds of copper or aluminum per hour per side, with four (4) **0.8 MMBtu/hr** natural gas fired internal thermal oxidizers~~,~~ **(**identified as 61, 62, 63, and 64**)**~~, respectively~~ to control VOC emissions, and exhausting through stacks S61, S62, S63, and S64, respectively. ~~Each oven pair has one (1) annealer, identified as 63 and 64, with a maximum heat input capacity of 0.15 million Btu per hour.~~

(i) One (1) Weatherite V - 14 magnet wire oven, with two (2) sides, identified as 10 and 11, constructed in 2008 and approved in 2014 for modification, with each side using a 0.15 MMBtu/hr natural gas fired annealer (identified as Annealer 10 and Annealer 11), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with two (2) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 10 and 11) to control VOC emissions, and exhausting through stacks S-10 and S-11, respectively.

(~~i~~**j**) * * *
(**k**~~j~~) * * *

Under 40 CFR 63, Subpart MMMM, wire enameling ovens 52-60, 65, and 66, wire coating machines 24-28 and 37, magnet wire ovens 61-64**, 10, 11,** and 12, cleaning tanks 2 and 3, and the two (2) die cleaning tanks are considered part of an existing affected source.

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

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

* * *

Magnet Wire Coating Plant

(a) * * *
(b) * * *
(c) * * *
~~(d) One (1) Weatherite V - 14 magnet wire oven, identified as 11, constructed in 2008, with a maximum capacity of 284 pounds of copper or aluminum per hour, each, with two (2) sides. This unit is for Research and Development purposes only and it is not for production.~~
(~~e~~**d**) * * *
(~~f~~**e**) * * *
(~~g~~**f**) * * *

* * * * *

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:
Magnet Wire Coating Plant

(h) Two (2) Weatherite V - 14 magnet wire ovens, each with two (2) sides, identified as 61, 62, 63, and 64, constructed in 2008, **with two (2) 0.15 MMBtu/hr natural gas fired annealers (identified as Annealer 63 and Annealer 64),** with a maximum **flow coating** capacity of 284 pounds of copper or aluminum per hour per side, with four (4) **0.8 MMBtu/hr** natural gas fired internal thermal oxidizers~~,~~ **(**identified as 61, 62, 63, and 64**)**, ~~respectively~~ to control VOC emissions, and exhausting through stacks S61, S62, S63, and S64, respectively. ~~Each oven pair has one (1) annealer, identified as 63 and 64, with a maximum heat input capacity of 0.15 million Btu per hour.~~

(i) One (1) Weatherite V - 14 magnet wire oven, with two (2) sides, identified as 10 and 11, constructed in 2008 and approved in 2014 for modification, with each side using a 0.15 MMBtu/hr natural gas fired annealer (identified as Annealer 10 and Annealer 11), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with two (2) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 10 and 11) to control VOC emissions, and exhausting through stacks S-10 and S-11, respectively.

Under 40 CFR 63, Subpart MMMM, magnet wire ovens **10, 11, and** 61-64 are considered part of an existing affected source.

~~Insignificant Activity:~~

~~(d) One (1) Weatherite V - 14 magnet wire oven, identified as 11, constructed in 2008, with a maximum capacity of 284 pounds of copper or aluminum per hour, each, with two (2) sides. This unit is for Research and Development purposes only and it is not for production.~~

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

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

D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-8]

Pursuant to 326 IAC 8-2-8 (Magnet Wire Coating Operations), for the **three**~~two~~ (~~2~~**3**) Weatherite V - 14 magnet wire ovens **(10, 11, and 61-64)**, the Permittee shall not allow the discharge, into the atmosphere, of any VOC in excess of 1.7 pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

D.4.2 PSD Minor Limits [326 IAC 2-2] ~~[326 8-2-8]~~

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

~~(a)~~ The combined VOC emissions from the ~~two~~**three** (~~2~~**3**) Weatherite V - 14 magnet wire ovens **(10, 11, and 61-64)** shall be less than ~~37.1~~**39.8** tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

~~(b) The VOC emissions from the R & D Weatherite magnet wire oven shall be less than 15 pounds per day.~~

Compliance with the above limit~~s~~, combined with the potential to emit VOC from the magnet wire oven **and annealer** combustion emissions, shall limit the VOC from the modification to less than forty (40) tons per twelve (12) consecutive month period and render 326 IAC 2-2 not applicable to the 2008 modification. ~~Compliance with (b) above shall also render 326 IAC 8-2-8 not applicable to the R & D Weatherite magnet wire oven 11.~~

D.4.3 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~~s~~ with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.4.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a) and in order to ensure compliance with Conditions D.4.1 and D.4.2~~(a)~~, the internal thermal oxidizers shall be in operation whenever the associated ~~two~~**three** (~~2~~**3**) Weatherite V - 14 magnet wire oven lines **(10, 11, and 61-64)** are in operation.

D.4.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

* * *

D.4.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2(b),(c)]

Compliance with the VOC content limitation contained in Condition D.4.1 shall be determined as follows for the ~~two~~**three** (~~2~~**3**) Weatherite V - 14 magnet wire ovens **(10, 11, and 61-64)** using formulation data supplied by the coating manufacturer.

(a) * * *

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

(1) * * *

(2) The overall efficiency of the internal thermal oxidizers for ovens **10, 11, and** 61-64 shall be equal to or greater than 95.88% or the efficiency required to demonstrate compliance with Condition D.4.1.

D.4.7 Volatile Organic Compounds (VOC) [326 IAC 2-2]

Compliance with Condition D.4.2~~(a)~~ shall be determined by calculating the VOC emissions for the ~~two~~**three** (~~2~~**3**) Weatherite magnet wire ovens **(10, 11, and 61-64)** using the following equation:

* * *

D.4.8 Testing requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.4.1 and D.4.2~~(a)~~, the Permittee shall conduct performance testing on one (1) representative thermal oxidizer from **10, 11,** 61, 62, 63 and 64 to verify the VOC control efficiency per Condition D.4.6 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. **Testing shall be alternated between thermal oxidizers 10, 11, 61, 62, 63, and 64 for each test cycle, such that testing on a thermal oxidizer shall not be repeated until 10, 11, 61, 62, 63, and 64 have each been tested.** ~~The thermal 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) * * *
(c) * * *

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

D.4.9 Thermal Oxidizer Temperature [40 CFR 64]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizers **(61-64)** for measuring operating temperature. 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 shall be recorded as three-hour average temperatures whenever the oxidizers are in operation.

(b) The Permittee shall determine the three-hour average temperatures from the latest valid stack test that demonstrates compliance with Conditions D.4.1 and D.4.2~~(a)~~.

(c) * * *
(d) * * *
(e) * * *

* * *

D.4.10 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizers (10 and 11) for measuring operating temperature. 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 shall be recorded as three-hour average temperatures whenever the oxidizers are in operation.

(b) The Permittee shall determine the three-hour average temperatures from the latest valid stack test that demonstrates compliance with Conditions D.4.1 and D.4.2.

(c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizers at or above the respective three-hour average temperatures observed during the latest compliant stack test.

(d) If the primary continuous monitoring system is not in operation, the oxidizer temperature -shall 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 oxidizers. Continuous monitoring shall mean no less often than once per fifteen (15) minutes.

(e) If the three-hour average temperature falls below the above mentioned three-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. 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.4.1~~0~~**1** Record Keeping Requirements

(a) * * *

(b) To document the compliance status with Condition D.4.2~~(a)~~, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) below shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limit established in Condition D.4.2~~(a)~~.

* * *

~~(c) To document the compliance status with Condition D.4.2(b), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.4.2(b).~~

~~(1) The amount of coating material and solvent less water used on a daily basis~~

~~(2) Records shall include purchase orders, invoices, and material safety data sheets~~

~~(MSDS) necessary to verify the type used;~~

~~(3) The VOC usage and VOC content for each day.~~

(~~d~~**c**) To document the compliance status with Condition**s** D.4.9 **and D.4.10**, the Permittee shall maintain continuous temperature records (on a three-hour average basis) for each thermal oxidizer and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(~~e~~**d**) * * *

D.4.11~~2~~ Reporting Requirements

A ~~Q~~**q**uarterly summary~~ies~~ of the information to document the compliance status with Condition~~s~~ D.4.2~~(a) and D.4.2(b)~~ shall be submitted using the reporting form located at the end of this permit, or its equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting 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.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Magnet Wire Coating Plant

(**j**~~i~~) * * *

* * *

* * * * *

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Magnet Wire Coating Plant

(~~j~~**k**) * * *

Insignificant Activity:

(~~g~~**f**) * * *

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

* * * * *

SECTION E.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

Magnet Wire Coating Plant
(a) * * *
(b) * * *
(c) * * *
(d) * * *
(e) * * *
(f) * * *
(g) * * *
(h) Two (2) Weatherite V - 14 magnet wire oven**s**, each with two (2) sides, identified as 61, 62, 63, and 64, constructed in 2008, **with two (2) 0.15 MMBtu/hr natural gas fired annealers (identified as Annealer 63 and Annealer 64),** with a maximum **flow coating** capacity of 284 pounds of copper or aluminum per hour per side, with four (4) **0.8 MMBtu/hr** natural gas fired internal thermal oxidizers~~,~~ **(**identified as 61, 62, 63, and 64**)**~~, respectively~~ to control VOC emissions, and exhausting through stacks S61, S62, S63, and S64, respectively. ~~Each oven pair has one (1) annealer, identified as 63 and 64, with a maximum heat input capacity of 0.15 million Btu per hour.~~

(i) One (1) Weatherite V - 14 magnet wire oven, with two (2) sides, identified as 10 and 11, constructed in 2008 and approved in 2014 for modification, with each side using a 0.15 MMBtu/hr natural gas fired annealer (identified as Annealer 10 and Annealer 11), with a maximum flow coating capacity of 284 pounds of copper or aluminum per hour per side, with two (2) 0.8 MMBtu/hr natural gas fired internal thermal oxidizers (identified as 10 and 11) to control VOC emissions, and exhausting through stacks S-10 and S-11, respectively.

(**j**~~i~~) * * *
(**k**~~j~~) * * *

Under 40 CFR 63, Subpart MMMM, wire enameling ovens 52-60, 65, and 66, wire coating machines 24-26, 28, and 37, magnet wire ovens 61-64 and **10, 11, and** 12, cleaning tanks 2 and 3, and the two (2) die cleaning tanks are considered part of an existing affected source.

* * *

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

E.1.1 General Provisions Relating to NESHAP Subpart MMMM (National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products) [326 IAC 20-1] [40 CFR Part 63, Subpart A]

* * *

E.1.2 NESHAP Subpart MMMM Requirements [40 CFR 63, Subpart MMMM] [326 IAC 20-80]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart MMMM (included as Attachment A of this permit), which are incorporated by reference as 326 IAC 20-80, for all of the magnet wire coating ovens (52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, **10, 11,** and 12), wire coating machines (24, 25, 26, 27, 28, and 37), and associated solvent cleaning and coating mixing operations involving HAPs:

* * *

* * * * *

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

Part 70 Quarterly Report

Source Name: Essex Group, Inc.
Source Address: 1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802
Part 70 Permit No.: T003-30777-00269
Facility: ~~Two~~**Three** (~~2~~**3**) Weatherite V - 14 magnet wire ovens (**10, 11, and** 61-64)
Parameter: VOC emissions
Limit: Less than ~~37.1~~**39.8** tons total per twelve (12) consecutive month period

QUARTER : YEAR:

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

☐ No deviation occurred in this quarter.

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

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

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

~~Part 70 Quarterly Report~~

~~Source Name: Essex Group, Inc.~~
~~Source Address: 1601 Wall Street and 1700 West Swinney, Fort Wayne, Indiana 46802~~
~~Part 70 Permit No.: T003-30777-00269~~
~~Facility: Weatherite V - 14 magnet wire oven 11~~
~~Parameter: VOC emissions~~
~~Limit: Less than fifteen (15) pounds per day~~

~~Month: _____ Year: _____~~

~~Day~~		~~Day~~	
~~1~~		~~17~~	
~~2~~		~~18~~	
~~3~~		~~19~~	
~~4~~		~~20~~	
~~5~~		~~21~~	
~~6~~		~~22~~	
~~7~~		~~23~~	
~~8~~		~~24~~	
~~9~~		~~25~~	
~~10~~		~~26~~	
~~11~~		~~27~~	
~~12~~		~~28~~	
~~13~~		~~29~~	
~~14~~		~~30~~	
~~15~~		~~31~~	
~~16~~			

~~☐ No deviation occurred in this month.~~

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

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

Conclusion and Recommendation

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 003-34878-00269 and Significant Permit Modification No. 003-34892-00269. The staff recommend to the Commissioner that this Part 70 Significant Source Modification and Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Laura Spriggs Thompson at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-5693 or toll free at 1-800-451-6027 extension 3-5693.

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

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

Appendix A: Emission Calculations
Modification Summary

Company Name: Essex Group, Inc.
Source Location: 1601 Wall St and 1700 W Swinney, Fort Wayne, IN 46802
SSM No.: 003-34878-00269
SPM No.: 003-34892-00269
Reviewer: Laura Spriggs Thompson

Project

Currently, oven 11 (installed in 2008) consists of 2 indpendent sides using a common annealer so that only one side can be used at a time. The modification involves the addition of a new annealer so that both sides (10 and 11) can be run for production purposes.

Part 70 Permit Level Determination

	Uncontrolled PTE (ton/yr)									
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Single HAP	HAP
Before Modification										
Oven 11 Process Emissions	0	0	0	--	--	142.94	--	58.54	31.82	Phenol
Oven 11 NOx Emissions	--	--	--	--	4.98	--	--	--	--	--
Oven 11 Combustion Emissions	0.007	0.026	0.026	0.002	0.34	0.02	0.29	0.01	0.01	Hexane
Annealer 11 Combustion Emissions	0.001	0.005	0.005	0.0004	0.06	0.004	0.05	0.001	0.001	Hexane
Total Before Modification	***0.008***	***0.031***	***0.031***	***0.002***	***5.39***	***142.96***	***0.34***	***58.55***	***31.82***	***Phenol***
After Modification										
Oven 10 Process Emissions	0	0	0	--	--	142.94	--	58.54	31.82	Phenol
Oven 11 Process Emissions	0	0	0	--	--	142.94	--	58.54	31.82	Phenol
Oven 10 NOx Emissions	--	--	--	--	4.98	--	--	--	--	--
Oven 11 NOx Emissions	--	--	--	--	4.98	--	--	--	--	--
Oven 10 Combustion Emissions	0.007	0.026	0.026	0.002	0.34	0.02	0.29	0.01	0.01	Hexane
Oven 11 Combustion Emissions	0.007	0.026	0.026	0.002	0.34	0.02	0.29	0.01	0.01	Hexane
Annealer 10 Combustion Emissions	0.001	0.005	0.005	0.0004	0.06	0.004	0.05	0.001	0.001	Hexane
Annealer 11 Combustion Emissions	0.001	0.005	0.005	0.0004	0.06	0.004	0.05	0.001	0.001	Hexane
Total After Modification	***0.016***	***0.062***	***0.062***	***0.005***	***10.77***	***285.93***	***0.69***	***117.09***	***63.64***	***Phenol***
Increase From Modification	**0.01**	**0.03**	**0.03**	**0.002**	**5.39**	**142.96**	**0.34**	**58.55**	**31.82**	**Phenol**

The Part 70 Permit Level Determination of the modification is based on the Uncontrolled PTE After Modification - the Uncontrolled PTE Before Modification. See the following pages for detailed calculations

PSD Permit Level Determination

	Limited PTE (ton/yr)						
Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO
Oven 61 Process and NOx Emissions	0	0	0	--	4.98	39.8	--
Oven 62 Process and NOx Emissions	0	0	0	--	4.98		--
Oven 63 Process and NOx Emissions	0	0	0	--	4.98		--
Oven 64 Process and NOx Emissions	0	0	0	--	4.98		--
Oven 10 Process and NOx Emissions	0	0	0	--	4.98		--
Oven 11 Process and NOx Emissions	0	0	0	--	4.98		--
Oven 61 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 62 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 63 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 64 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 63 Combustion Emissions	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Annealer 64 Combustion Emissions	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Oven 10 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 10 Combustion Emissions	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Oven 11 Combustion Emissions	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 11 Combustion Emissions	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Total	**0.04**	**0.18**	**0.18**	**0.01**	**32.18**	**39.93**	**1.95**

MSM No. 003-26441-00269, issued on May 5, 2008 provided construction approval for two (2) Weatherite V - 14 magnet wire ovens (61-64) for production purposes and one (1) Weatherite V - 14 magnet wire oven (11) for research and development purposes. The research and development magnet wire oven is being modified to add an annealer so that both sides can be used (ovens 10 and 11) and to convert the unit to be used for production purposes. Since the modified unit was part of the 2008 modification and the modification was limited to be minor for PSD, emissions from all three (3) units must remain limited to below the PSD significant levels. The table above represents the limited potential to emit. VOC emissions from coating operations are being limited such that the limit combined with the potential to emit VOC from the combustion processes shall limit emissions from the 2008 modification to less than forty (40) tons of VOC per year.

Appendix A: Emission Calculations
VOC and Particulate Emissions from Ovens 61-64, 10 and 11

Company Name: Essex Group, Inc.
Source Location: 1601 Wall St and 1700 W Swinney, Fort Wayne, IN 46802
SSM No.: 003-34878-00269
SPM No.: 003-34892-00269
Reviewer: Laura Spriggs Thompson

VOC and Particulate Emissions

Unit ID	Stack ID	Coating Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/lb Cu)	Maximum throughput (lb Cu/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (ton/yr)	Transfer Efficiency	Particulate Potential (ton/yr)	lb VOC/ gal Coating Solids	Emission Limit per 8-2-8 (lb VOC/gal coating excluding water)	Equivalent 326 IAC 8-2-8 Emission Limit (lb VOC/gal Coating Solids)	Minimum Control efficiency (%)	Controlled VOC PTE (ton/yr)
61	S61	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89
62	S62	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89
63	S63	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89
64	S64	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89
10	S-10	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89
11	S-11	Formvar	8.00	84.00%	0.0%	84.0%	0.0%	12.5%	0.01710	284.0	6.72	6.72	32.64	783.24	142.94	100%	0.00	53.64	1.70	2.21	95.88%	5.89

PTE based on the worst case Formvar

Methodology

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

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

Potential VOC (lb/hr) = Gal of Mat. (gal/lb Cu) * Maximum Throughput (lb Cu/hr) * Pounds VOC per gallon of Coating

Potential VOC (lb/day) = Gal of Mat. (gal/lb Cu) * Maximum Throughput (lb Cu/hr) * Pounds VOC per gallon of Coating * (24 hr/day)

Potential VOC (ton/yr) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/lb Cu) * Maximum Throughput (lb Cu/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Transfer Efficiency = 100% based on flowcoating

Particulate Potential (ton/yr) = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) *(1 ton/2000 lbs)

lb VOC/gal Coating Solids as provided by the Source

Equivalent 326 IAC 8-2-8 Emission Limit (lb VOC/gal Coating Solids) = 326 IAC 8-2-8 Emission Limit (lb VOC/gal of Coating less Water) / (1 - (326 IAC 8-2-8 Emission Limit/7.36))

Minimum Control Efficiency = Minimum needed control efficiency to meet 326 IAC 8-2-8 limit = (lb VOC/gal Coating Solids - 326 IAC 8-2-8 Equivalent Emission limit) / (lb VOC/gal Coating Solids)

Controlled/Limited VOC PTE (After Oxidizers) (tons/yr) = Potential VOC Emissions (tons/yr) x Oxidizer Eff. (%) Needed to meet 326 IAC 8-2-8 Emission Limit

Appendix A: Emission Calculations
HAP Emissions from Ovens 61-64, 10 and 11

Company Name: Essex Group, Inc.
Source Location: 1601 Wall St and 1700 W Swinney, Fort Wayne, IN 46802
SSM No.: 003-34878-00269
SPM No.: 003-34892-00269
Reviewer: Laura Spriggs Thompson

HAP Emissions

													Uncontrolled Emissions (ton/yr)					
Oven ID	Stack ID	Material	Density (lbs/gal)	Volume % Non-Volatiles (solids)	Weight % VOC	Usage (gal/lb)	Max Throughput (lbs/hr)	Weight of % Ethyl Benzene	Weight of % Xylene	Weight of % Cumene	Weight of % Phenol	Weight of % Mixed Cresols	Ethyl Benzene	Xylene	Cumene	Phenol	Mixed Cresols	Total HAPs
61	S61	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54
62	S62	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54
63	S63	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54
64	S64	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54
10	S-10	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54
11	S-11	Formvar	8.0	12.5%	84.00%	0.01710	284.0	0.20%	0.92%	2.88%	18.70%	11.70%	0.34	1.57	4.90	31.82	19.91	58.54

PTE based on the worst case Formvar

			Controlled Emissions (ton/yr)						Limited PTE (ton/yr)					
Oven ID	Stack ID	Minimum Control efficiency (%)	Ethyl Benzene	Xylene	Cumene	Phenol	Mixed Cresols	Total HAPs	Ethyl Benzene	Xylene	Cumene	Phenol	Mixed Cresols	Total HAPs
61	S61	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66
62	S62	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66
63	S63	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66
64	S64	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66
10	S-10	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66
11	S-11	95.88%	0.014	0.065	0.202	1.311	0.821	2.41	0.02	0.07	0.22	1.45	0.90	2.66

Methodology

Uncontrolled Potential Emissions (ton/yr) = Density (lb/gal) * Usage (gal/lb) * Max Throughput (lb/hr) * Wt % HAP * (8760 hr/yr) * (1 ton/2000 lb)
Controlled Potential Emissions (ton/yr) = Uncontrolled Potential Emissions (ton/yr) * (1 - Minimum Control Efficiency Needed to Meet 326 IAC 8-2-8 Emisison Limit)
Limited PTE Total HAPs (ton/yr) = 40 CFR 63, Subpart MMMM Total HAP Emission Limit (1 lb HAP/gal solids) * (Volume % Solids) * Usage (gal/lb) * Max Throughput (lb/hr) * (8760 hr/yr) * (1 ton/2000 lb)
Limited PTE Single HAP (ton/yr) = Limited PTE Total HAPs (ton/yr) x Wt% HAP / (Sum of Wt% of all HAPs)

Appendix A: Emission Calculations
NOx Emissions from Ovens 61-64, 10 and 11

Company Name: Essex Group, Inc.
Source Location: 1601 Wall St and 1700 W Swinney, Fort Wayne, IN 46802
SSM No.: 003-34878-00269
SPM No.: 003-34892-00269
Reviewer: Laura Spriggs Thompson

Unit IDs	Stack IDs	Coating Material	Density (Lb/Gal)	Weight % NMP	Gal of Mat. (gal/lb Cu)	Maximum Throughput (lb Cu/hour)	Pounds NMP per gallon of coating	Potential NOx pounds per hour	Potential NOx pounds per day	Transfer Efficiency	Minimum Control efficiency (%)	Uncontrolled NOx PTE (ton/yr)
61	S61	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98
62	S62	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98
63	S63	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98
64	S64	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98
10	S-10	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98
11	S-11	Amide Imide	8.84	60.0%	0.00877	284.0	5.30	1.14	27.27	100%	0.00%	4.98

PTE based on the worst case Amide-Imide

Methodology

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

Potential NOx (ton/yr) = Pounds of NMP per Gallon coating (lb/gal) * Gal of Material (gal/lb) * Maximum Throughput (lb/hr) * 0.086 lb NOx/lb NMP * (8760 hr/yr) * (1 ton/2000 lbs)

Note: Emission factor of NOx = 0.086 lb NOx/ lb NMP is from a stack test from the Franklin, TN facility.

Appendix A: Emission Calculations
Combustion Emissions from Ovens 61-64, 10 and 11
Natural Gas < 100 MMBtu/hr

Company Name: Essex Group, Inc.
Source Location: 1601 Wall St and 1700 W Swinney, Fort Wayne, IN 46802
SSM No.: 003-34878-00269
SPM No.: 003-34892-00269
Reviewer: Laura Spriggs Thompson

			Criteria Pollutants						
			PM*	PM10*	PM2.5*	SO2	NOx**	VOC	CO
Emission Factor in lb/MMCF			1.9	7.6	7.6	0.6	100.0	5.5	84.0
Emission Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)						
Oven 61	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 62	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 63	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Oven 64	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 63	0.15	1.288	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Annealer 64	0.15	1.288	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Oven 10	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 10	0.15	1.288	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Oven 11	0.8	6.871	0.007	0.026	0.026	0.002	0.344	0.019	0.289
Annealer 11	0.15	1.288	0.001	0.005	0.005	0.0004	0.064	0.004	0.054
Total			0.04	0.18	0.18	0.01	2.32	0.13	1.95

Emission Factors are from AP-42, Tables 1.4-1 and 1.4-2.

*PM emission factor is filterable PM only. PM10 emission factors are filterable PM10 and condensable PM combined. PM2.5 emission factor is filterable PM2.5 and condensable PM combined.

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

			HAPs - Organics					HAPs - Metals					Total HAPs
			Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Lead	Cadmium	Chromium	Manganese	Nickel	
Emission Factor in lb/MMCF			2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	1.8880
Emission Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)										
Oven 61	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Oven 62	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Oven 63	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Oven 64	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Annealer 63	0.15	1.288	1.4E-06	7.7E-07	4.8E-05	1.2E-03	2.2E-06	3.2E-07	7.1E-07	9.0E-07	2.4E-07	1.4E-06	1.2E-03
Annealer 64	0.15	1.288	1.4E-06	7.7E-07	4.8E-05	1.2E-03	2.2E-06	3.2E-07	7.1E-07	9.0E-07	2.4E-07	1.4E-06	1.2E-03
Oven 10	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Annealer 10	0.15	1.288	1.4E-06	7.7E-07	4.8E-05	1.2E-03	2.2E-06	3.2E-07	7.1E-07	9.0E-07	2.4E-07	1.4E-06	1.2E-03
Oven 11	0.8	6.871	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.7E-06	3.8E-06	4.8E-06	1.3E-06	7.2E-06	6.5E-03
Annealer 11	0.15	1.288	1.4E-06	7.7E-07	4.8E-05	1.2E-03	2.2E-06	3.2E-07	7.1E-07	9.0E-07	2.4E-07	1.4E-06	1.2E-03
Total			4.9E-05	2.8E-05	1.7E-03	4.2E-02	7.9E-05	1.2E-05	2.6E-05	3.2E-05	8.8E-06	4.9E-05	4.4E-02

Emission Factors are from AP-42, Tables 1.4-3 and 1.4-4.

The five highest organic and metal HAPs emission factors are provided above. The total HAPs is the sum of all HAPs listed in AP-42, Tables 1.4-3 and 1.4-4.

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

Methodology

Heating Value of Natural Gas is assumed to be 1020 MMBtu/MMCF

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

Potential Emission (tons/yr) = Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * (1 ton/2,000 lb)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
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Governor

Thomas W. Easterly
Commissioner

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TO: Dustin Schweitzer
Essex Group Incorporated
1601 Wall Street
Fort Wayne, IN 46802

DATE: November 24, 2014

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

SUBJECT: Final Decision
Title V
003-34878-00269

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to:
OAQ Permits Branch Interested Parties List

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

November 24, 2014

TO: Allen County Public Library

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

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

Applicant Name: Essex Group Inc
Permit Number: 003-34878-00269

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

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

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	CDENNY 11/24/2014 Essex Group Incorporated 003-34878-00269 (final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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1		Dustin Schweitzer Essex Group Incorporated 1601 Wall Street Fort Wayne IN 46802 (Source CAATS)									
2		Gregory Johnson Operations Mgr Essex Group Incorporated 1601 Wall Street Fort Wayne IN 46802 *(RO CAATS)*									
3		Daniel & Sandy Trimmer 15021 Yellow River Road Columbia City IN 46725 *(Affected Party)*									
4		Duane & Deborah Clark Clark Farms 6973 E. 500 S. Columbia City IN 46725 *(Affected Party)*									
5		Allen County Public Library 900 Library Plaza, P.O. Box 2270 Fort Wayne IN 46802 *(Library)*									
6		Fort Wayne City Council and Mayors Office 200 E Berry Street Ste 120 Fort Wayne IN 46802 *(Local Official)*									
7		Mr. Jeff Coburn Plumbers & Steamfitters, Local 166 2930 W Ludwig Rd Fort Wayne IN 46818-1328 *(Affected Party)*									
8		Allen Co. Board of Commissioners 200 E Berry Street Ste 410 Fort Wayne IN 46802 *(Local Official)*									
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