INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: August 24, 2011

RE: Willoughby Industries Inc. / 097 - 30378 - 00676

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

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 enclosed matter. 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.

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.

Enclosures
FNPER.dot12/03/07

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

Willoughby Industries, Inc.
5105 W. 78th St.
Indianapolis, Indiana 46268

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

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F097-30378-00676	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: August 24, 2011 Expiration Date: August 24, 2016

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SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary cast polymer plumbing fixture manufacturing operation.

Source Address:	5105 W. 78th St., Indianapolis, Indiana 46268
General Source Phone Number:	(317) 638-2381
SIC Code:	3088 (Plastic Plumbing Fixtures), 3444 (Sheet Metal Work), 3432 (Plumbing Fixture Fittings and Trim)
County Location:	Marion
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

(a) One (1) Solid Surface Casting Operation, identified as Unit 01, consisting of both open molding and closed molding operations, injecting a maximum of 91.90 pounds per hour of resin, producing a maximum of 206.5 pounds of plumbing fixtures per hour, using a styrene collector and exhausting controls and exhausting outside, consisting of the following:

(1) Two (2) pot mixers used for mixing resin, filler and catalyst.

(2) One (1) pot washer using Marblewash to clean pot mixers.

(3) One (1) pot sink, using acetone to clean small parts.

(b) One (1) Solid Surface Finishing Operation (performing machining and sanding operations), identified as unit 02, approved for construction in 2011, with a combined maximum capacity of 206.5 pounds of steel per hour, each sanding booth has four (4) cartridge dust collector units operated from a single control panel for particulate control, exhausting inside the building, and consisting of the following:

(1) Three (3) sanding booths, with a combined maximum capacity of 206.5 pounds per hour, each sanding booth.

(2) One (1) panel sander, with a maximum capacity of 206.5 pounds per hour, using a cartridge dust collector system, exhausting inside the building.

(3) One (1) electric powered Post Cure Oven.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

(a) One (1) Plastic Injection Molding Operation, approved for construction in 2011, processing a maximum of 21.58 pounds of plumbing fixtures per hour, with no controls, exhausting inside the building, and consisting of the following:

(1) Three (3) injection Molding Machines.

(2) Three (3) Plastic Regrind Machines.

(3) One Chiller for injection molding.

(b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 – Parts washer used in maintenance with a remote solvent reservoir. [326 IAC 8-3-2]

(c) One (1) Metal Cutting Operation, identified MC, approved for construction in 2011, with a total capacity of and consisting of the following:

(1) Two (2) CO2 lasers with a maximum capacity of 114 pounds of steel per hour, using no control and exhausting inside the building.

(2) One (1) plasma cutter with a maximum capacity of five (5) pounds of steel per hour.

(3) Two (2) turret punch press.

(4) One (1) shear.

(d) One (1) Metal Forming Operation, identified as forming, consisting four (4) press brakes approved for construction in 2011, using no controls and exhausting inside the building.

(e) One (1) Metal Welding Operation, identified as MW, approved for construction in 2011, using no controls and exhausting inside the building, consisting of the following:

(1) Two (2) robot MIG welders with a maximum capacity of 1.73 pounds of rod per hour each.

(2) Twenty-seven (27) welding stations consisting of:

(A) Sixteen (16) manual MIG welders, with a maximum capacity of 1.8 pounds of rod per hour, each.

(B) Thirty (30) manual TIG welders, with a maximum capacity of 0.6 pounds of rod per hour, each.

(3) One (1) spot welder.

(f) One (1) Metal Finishing Operation, identified as MF, approved for construction in 2011, consisting of the following:

(1) Five (5) grinding booths, identified as booth 1 through 5, with a maximum combined capacity of 260 pounds of metal per hour, each, using cartridge dust

collectors (four for each booth) for particulate control and exhausting inside the building.

(2) Two (2) Bead Blast Booths, using class beads media, with a maximum capacity of 50 pounds of metal per hour, each.

(3) Three (3) Bead Blast Cabinets, using class beads media, with a maximum capacity of 260 pounds of metal per hour, each, using filters for particulate control and exhausting inside the building

(4) Two (2) Seat Polishers, with a maximum capacity of 260 pounds of steel per hour, using a wet collector for control, and exhausting inside the building.

(g) One (1) Machine Shop Operation, identified as MS, approved for construction in 2011, using no controls and exhausting inside the building, and consisting of the following:

(1) Six (6) lathes with a maximum capacity of 15 pounds of steel per hour, each.

(2) Six (6) mills with a maximum capacity of 15 pounds of steel per hour, each.

(3) One (1) horizontal saw

(4) Two (2) roto-polishers using a wet process and stain steel balls (large machine) or stone media (small machine).

(5) Two (2) burr benches (vibrating machines) using a wet process with stone media.

(h) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million BTU per hour, including the following building heaters:

(1) Eleven (11) Natural Gas-fired Furnaces, rated at 0.3 MMBtu, each.

(2) Thirteen (13) Natural Gas-fired Furnaces, rated at 0.25 MMBtu, each.

(3) Six (6) Natural Gas-fired Furnaces, rated at 0.2 MMBtu, each.

(i) One (1) Tube Bending Operation, identified as TB, approved for construction in 2011, using no controls, exhausting inside the building and consisting of the following:

(1) Three (3) saws with a maximum capacity of 23 pounds of steel per hour, each.

(2) Two (2) large (2-3 inch diameter) tube benders with a maximum capacity of 23 pounds of steel per hour, each.

(3) One (1) mill with a maximum capacity of 23 pounds of steel per hour.

(j) One Draw Press Operation, identified as DP, approved for construction in 2011 and consisting of a combination of punch and draw presses.

(k) One (1) Electronic Assembly Operation, identified as EA, approved for construction in 2011, cabling, final assembly, and testing.

(l) One (1) Valve Assembly Operation, identified as VA, approved for construction in 2011, valve testing and final assembly.

(m) One (1) Tool Room consisting of various, drills, saws, lathes mills and surface grinders.

(n) Compressor Room E consisting of three (3) air compressors and one (1) air dryer.

(o) Compressor Room W consisting of two (2) air compressors and one (1) air dryer.

(p) VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

(q) Paved and unpaved roads and parking lots with public access.

(r) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(s) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(t) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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

B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4][326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

B.4 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, F097-30378-00676, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

B.5 Term of Conditions [326 IAC 2-1.1-9.5]

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

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

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

B.6 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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

B.7 Severability [326 IAC 2-8-4(4)]

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

B.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

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

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

B.10 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

(1) it contains a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1), and

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

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

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

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

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

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

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

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

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

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

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

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

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

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F097-30378-00676 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.16 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

(1) That this permit contains a material mistake.

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

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.18 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a

certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

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

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.19 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

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

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

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.20 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) 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 approval required by 326 IAC 2-8-11.1 has been obtained;

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

(4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(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 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(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 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.22 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as

such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

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

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

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

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

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

B.23 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

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

B.25 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM) and greenhouse gases (GHGs), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO2 equivalent emissions (CO2e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.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 thirty percent (30%) 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).

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

C.8 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted

by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 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 2-8-4][326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

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 or of initial start-up, whichever is later, 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 or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

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

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

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.14 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

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

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

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

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

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

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

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

(d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) Solid Surface Casting Operation, identified as Unit 01, consisting of both open molding and closed molding operations, injecting a maximum of 91.90 pounds per hour of resin, producing a maximum of 206.5 pounds of plumbing fixtures per hour, using a styrene collector and exhausting controls and exhausting outside, consisting of the following:

(1) Two (2) pot mixers used for mixing resin, filler and catalyst.

(2) One (1) pot washer using Marblewash to clean pot mixers.

(3) One (1) pot sink, using acetone to clean small parts.

(b) One (1) Solid Surface Finishing Operation (performing machining and sanding operations), identified as unit 02, approved for construction in 2011, with a combined maximum capacity of 206.5 pounds of steel per hour, each sanding booth has four (4) cartridge dust collector units operated from a single control panel for particulate control, exhausting inside the building, and consisting of the following:

(1) Three (3) sanding booths, with a combined maximum capacity of 206.5 pounds per hour, each sanding booth.

(2) One (1) panel sander, with a maximum capacity of 206.5 pounds per hour, using a cartridge dust collector system, exhausting inside the building.

(3) One (1) electric powered Post Cure Oven.

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

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

D.1.1 FESOP Limits [326 IAC 2-8-4] [326 IAC 2-4.1] [40 CFR 63, Subpart WWWW]

(a) Styrene (single HAP)
The use of resin in the resin mixing and casting operation (Unit 01) shall be limited such that the potential to emit (PTE) of styrene shall be limited such that the combined potential to emit (PTE) of any single HAP shall not exceed 9.9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) Methyl Methacrylate (MMA) (single HAP)
The use of resin in the resin mixing and casting operation (Unit 01) shall be limited such that the potential to emit (PTE) of methyl methacrylate (MMA) shall be limited such that the combined potential to emit (PTE) of any single HAP shall not exceed 9.9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) Styrene and Methyl Methacrylate (MMA) (total HAP)
The use of resin in the resin mixing and casting operation (Unit 01) shall be limited such that the potential to emit (PTE) of the combination of styrene and MMA shall be limited such that the total HAPs shall not exceed 24.79 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limits, combined with the potential to emit HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of any single HAP to less than ten (10) tons per 12 consecutive month period, and total HAPs to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP), and 40 CFR 63, Subpart WWWW not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

In order to render 326 IAC 8-1-6 not applicable, the use of resins and solvents in the resin mixing and casting operation (Unit 01) shall be limited such that the potential to emit (PTE) of VOC shall not exceed 24.84 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limit shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

Note: This VOC limit is for the VOC emissions from the resin, catalyst, mold release, pigments and pot cleaner.

D.1.3 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, the emission units Unit 01 and Unit 02 shall not allow or permit discharge to the atmosphere of any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for Unit 01 and Unit 02 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.1.5 Volatile Organic Compounds (VOC) and HAP [326 IAC 8-1-2][326 IAC 8-1-4]

To demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall keep the monthly Air Quality Compliance Data Log and will use the following formulas for calculating monthly emissions from the resin mixing and casting operation (Unit 01), utilizing the “Unified Emission Factors for Open Molding of Composites” (Composites Fabricators Association (CFA), July 23, 2001) or its updates:

(a) Styrene emission from resins:

E_S = $((F_1 * S) – C) * R * (1 ton/2,000 pounds resin)$, where:

E_S = Styrene emission from resins in tons per month

F_1 = Emission Factor of 0.157 in pound per pound of resin used (from CFA emission factor source noted above for “mechanical non-atomized” resin use)

S = Percent of styrene in resin (obtained from applicable MSDS sheet or manufacturer’s specification sheet)

C = Constant of 0.0165 (from CFA emission factor source noted above for “mechanical non-atomized” resin use)

R = Total amount of resin in pounds per month

(b) Methyl Methacrylate (MMA) emissions from resins:

E_M = $(F_2 * M) * R * (1 ton/2,000 pounds resin)$, where:

E_M = Methyl methacrylate (MMA) emission in tons per month

F_2 = Emission factor of 0.75 pound emitted per pound of resin used

(from CFA emission factor source noted above for MMA emissions)
M = Percent of MMA in resin
(obtained from applicable MSDS sheet or manufacturer's specification sheet)
R = Total amount of resin in pounds per month

(c) VOC from catalyst:
E_V = F_3 * V * K * (1 ton/2,000 pounds), where:
E_V = VOC emissions in tons per month
F_3 = Emission factor of 0.02
(based on information from the catalyst supplier, only 2% of VOCs are emitted, with the remainder being consumed in the reaction)
V = Percent of VOC content
(obtained from applicable MSDS sheet or manufacturer's specification sheet)
K = Total amount of catalyst in pounds per month

(d) VOC from pigment:
E_P = F_4 * V * P * (1 ton/2,000 pounds), where:
E_P = VOC emissions in tons per month
F_4 = Emission factor of 1.0
(in absence of other data, it is assumed that all VOC is emitted)
V = Percent of VOC content (obtained from applicable MSDS sheet or manufacturer's specification sheet)
P = Total amount of pigment in pounds per month

(e) VOC from mold release chemical:
$E_R = F_5$ * V * R * (1 ton/2,000 pounds), where:
E_R = VOC emission in tons per month
F_5 = Emission factor of 1.0
(in absence of other data, it is assumed that all VOC is emitted)
V = Percent of VOC content
(obtained from applicable MSDS sheet or manufacturer's specification sheet)
R = Total amount of mold release in pounds per month

(f) VOC from pot-washer chemical
$E_W = F_6$ *V * W * (1 ton/2,000 pounds), where:
E_W = VOC emissions in tons per month
F_6 = Emission factor of 0.25
(based on information from the chemical supplier, only 25% of the VOCs are emitted)
V = Percent of VOC content
(obtained from applicable MSDS sheet or manufacturer's specification sheet)
W = Total amount of pot-washer chemical in pounds per month.

(g) Combination of HAP emissions in tons = $E_S + E_M$

(h) Total VOC emissions in tons = $E_S + E_M + E_V + E_P + E_R + E_W$

D.1.6 Particulate Control

In order to comply with Condition D.1.3, the cartridge dust collector for particulate control shall be in operation and control emissions from the Unit 02 at all times Unit 02 is in operation.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.7 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1 and D.1.2, the Permittee shall maintain records, including monthly VOC and HAP emission calculations, in a monthly "Air Quality Compliance Log" in accordance with (1) through (6) below. These records shall be taken monthly and shall be complete and sufficient to demonstrate compliance with the VOC and/or HAP emission limits established in Conditions D.1.1 and D.1.2. These records shall be available within 30 days of the end of each compliance period and shall contain, but not be limited to, the following information:

(1) The VOC and HAP content of each resin and solvent used.

(2) The amount of resin and solvent less water 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 cleanup solvent usage for each month;

(4) The total VOC, single HAP, and combined HAP usage for each month; and

(5) Amount of VOC and HAPs emitted for each compliance period.

(6) Monthly inventory records necessary to verify the type and amount used.

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

D.1.8 Reporting Requirements

A quarterly summary of the information to document compliance status with Conditions D.1.1 and D.1.2 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligations 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 2-8-5(a)(1) by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

(a) One (1) Plastic Injection Molding Operation, approved for construction in 2011, processing a maximum of 21.58 pounds of plumbing fixtures per hour, with no controls, exhausting inside the building, and consisting of the following:

(1) Three (3) injection Molding Machines.

(2) Three (3) Plastic Regrind Machines.

(3) One Chiller for injection molding.

(b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 – Parts washer used in maintenance with a remote solvent reservoir. [326 IAC 8-3-2]

(c) One (1) Metal Cutting Operation, identified MC, approved for construction in 2011, with a total capacity of and consisting of the following:

(1) Two (2) CO2 lasers with a maximum capacity of 114 pounds of steel per hour, using no control and exhausting inside the building.

(2) One (1) plasma cutter with a maximum capacity of five (5) pounds of steel per hour.

(3) Two (2) turret punch press.

(4) One (1) shear.

(d) One (1) Metal Forming Operation, identified as forming, consisting four (4) press brakes approved for construction in 2011, using no controls and exhausting inside the building.

(e) One (1) Metal Welding Operation, identified as MW, approved for construction in 2011, using no controls and exhausting inside the building, consisting of the following:

(1) Two (2) robot MIG welders with a maximum capacity of 1.73 pounds of rod per hour each.

(2) Twenty-seven (27) welding stations consisting of:

(A) Sixteen (16) manual MIG welders, with a maximum capacity of 1.8 pounds of rod per hour, each.

(B) Thirty (30) manual TIG welders, with a maximum capacity of 0.6 pounds of rod per hour, each.

(3) One (1) spot welder.

(f) One (1) Metal Finishing Operation, identified as MF, approved for construction in 2011, consisting of the following:

(1) Five (5) grinding booths, identified as booth 1 through 5, with a maximum combined capacity of 260 pounds of metal per hour, each, using cartridge dust collectors (four for each booth) for particulate control and exhausting inside the building.

(2) Two (2) Bead Blast Booths, using class beads media, with a maximum capacity of 50 pounds of metal per hour, each.

(3) Three (3) Bead Blast Cabinets, using class beads media, with a maximum capacity of 260 pounds of metal per hour, each, using filters for particulate control and exhausting inside the building

(4) Two (2) Seat Polishers, with a maximum capacity of 260 pounds of steel per hour, using a wet collector for control, and exhausting inside the building.

(g) One (1) Machine Shop Operation, identified as MS, approved for construction in 2011, using no controls and exhausting inside the building, and consisting of the following:

(1) Six (6) lathes with a maximum capacity of 15 pounds of steel per hour, each.

(2) Six (6) mills with a maximum capacity of 15 pounds of steel per hour, each.

(3) One (1) horizontal saw

(4) Two (2) roto-polishers using a wet process and stain steel balls (large machine) or stone media (small machine).

(5) Two (2) burr benches (vibrating machines) using a wet process with stone media.

(h) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million BTU per hour, including the following building heaters:

(1) Eleven (11) Natural Gas-fired Furnaces, rated at 0.3 MMBtu, each.

(2) Thirteen (13) Natural Gas-fired Furnaces, rated at 0.25 MMBtu, each.

(3) Six (6) Natural Gas-fired Furnaces, rated at 0.2 MMBtu, each.

(i) One (1) Tube Bending Operation, identified as TB, approved for construction in 2011, using no controls, exhausting inside the building and consisting of the following:

(1) Three (3) saws with a maximum capacity of 23 pounds of steel per hour, each.

(2) Two (2) large (2-3 inch diameter) tube benders with a maximum capacity of 23 pounds of steel per hour, each.

(3) One (1) mill with a maximum capacity of 23 pounds of steel per hour.

(j) One Draw Press Operation, identified as DP, approved for construction in 2011 and consisting of a combination of punch and draw presses.

(k) One (1) Electronic Assembly Operation, identified as EA, approved for construction in 2011, cabling, final assembly, and testing.

(l) One (1) Valve Assembly Operation, identified as VA, approved for construction in 2011, valve testing and final assembly.

(m) One (1) Tool Room consisting of various, drills, saws, lathes mills and surface grinders.

(n) Compressor Room E consisting of three (3) air compressors and one (1) air dryer.

(o) Compressor Room W consisting of two (2) air compressors and one (1) air dryer.

(p) VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

(q) Paved and unpaved roads and parking lots with public access.

(r) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(s) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(t) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).

(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 2-8-4(1)]

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

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

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

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

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.2.2 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, the emission units shall not allow or permit discharge to the atmosphere of any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Willoughby Industries, Inc.
Source Address: 5105 W. 78th St., Indianapolis, Indiana 46268
FESOP Permit No.: F097-30378-00676

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

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

Signature:

Printed Name:

Title/Position:

Date:

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

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Willoughby Industries, Inc.
Source Address: 5105 W. 78th St., Indianapolis, Indiana 46268
FESOP Permit No.: F097-30378-00676

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

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

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

Source Name: Willoughby Industries, Inc.
Source Address: 5105 W. 78th St., Indianapolis, Indiana 46268
FESOP Permit No.: F097-30378-00676
Facility: resin mixing and casting operation (Unit 01)
Parameter: resin and solvent usage to limit VOC emissions
Limit: The use of resins and solvents in the resin mixing and casting operation (Unit 01) shall be limited such that the potential to emit (PTE) of VOC shall be limited to 24.84 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR:_____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total

☐ 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
FESOP Quarterly Report

Source Name: Willoughby Industries, Inc.
Source Address: 5105 W. 78th St., Indianapolis, Indiana 46268
FESOP Permit No.: F097-30378-00676
Facility: resin mixing and casting operation (Unit 01)
Parameter: resin and solvent usage to limit HAP emissions
Limit: (a) The use of resin in the resin mixing and casting operation (Unit 01) shall be limited such that the potential to emit (PTE) of styrene and methyl methacrylate (MMA) shall each be limited to 9.9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The use of resin in the resin mixing and casting operation (Unit 01) shall be limited such that the potential to emit (PTE) of the combination of styrene and methyl methacrylate (MMA) shall each be limited to 24.79 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:_____

Month	Total HAPs (tons)			Total HAPs (tons)			Total HAPs (tons)			All HAPs (tons)
	This Month			Previous 11 Months			12 Month Total			
	Styrene	MMA	Other	Styrene	MMA	Other	Styrene	MMA	Other	

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Willoughby Industries, Inc.
Source Address: 5105 W. 78th St., Indianapolis, Indiana 46268
FESOP Permit No.: F097-30378-00676

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. 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: _____

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

Willoughby Industries, Inc.
5105 W. 78th St.
Indianapolis, Indiana 46268

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)

4. I hereby certify that Willoughby Industries, Inc. 5105 W. 78th St., Indianapolis, Indiana 46268, completed construction of the cast polymer plumbing fixture manufacturing operation. on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality March 28, 2011 and as permitted pursuant to New Source Construction Permit and Federally Enforceable State Operating Permit No. F097-30378-00676, Plant ID No. 097-00676 issued on _____.

5. **Permittee, please cross out the following statement if it does not apply:** Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature_____
Date_____

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana

on this _____ day of _____, 20 _____. My Commission expires: _____.

Signature_____
Name_____ (typed or printed)

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a New Source Construction and New Source Review and Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	**Willoughby Industries, Inc.**
Source Location:	**5105 W. 78th St.**
County:	**Marion (Pike Township)**
SIC Code:	**3088, 3444, 3432**
Operation Permit No.:	**F097 30378 00676**
Permit Reviewer:	**Bruce Farrar**

On July 23, 2011, the Office of Air Quality (OAQ) had a notice published in The Indianapolis Star, Indianapolis, Indiana, stating that Willoughby Industries, Inc. had applied for a New Source Construction and New Source Review and Federally Enforceable State Operating Permit (FESOP) to construct and operate a new stainless steel and solid surface plumbing fixture products and accessories plant. The notice also stated that the OAQ proposed to issue a New Source Construction and New Source Review and Federally Enforceable State Operating Permit (FESOP) 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.

Additional Changes

IDEM, OAQ has decided to make additional revisions to the permit as described below, with deleted language as ~~strikeouts~~ and new language **bolded**.

(a) Upon further review, pursuant to 326 IAC 2-7-1(a)(21)(A) and (B) the One (1) Plastic Injection Molding Operation should be an insignificant item because its uncontrolled Potential to Emit (PTE) for VOC and PM10 is less than three (3) pounds per hour of VOC and five (5) pounds per hour of PM10.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

(a) One (1) Solid Surface Casting Operation, identified as Unit 01, consisting of both open molding and closed molding operations, injecting a maximum of 91.90 pounds per hour of resin, producing a maximum of 206.5 pounds of plumbing fixtures per hour, using a styrene collector and exhausting controls and exhausting outside, consisting of the following:

(1) Two (2) pot mixers used for mixing resin, filler and catalyst.

(2) One (1) pot washer using Marblewash to clean pot mixers.

(3) One (1) pot sink, using acetone to clean small parts.

(b) One (1) Solid Surface Finishing Operation (performing machining and sanding operations), identified as unit 02, approved for construction in 2011, with a combined maximum capacity of 206.5 pounds of steel per hour, each sanding booth has four (4) cartridge dust collector units operated from a single control panel for particulate control, exhausting inside the building, and consisting of the following:

(1) Three (3) sanding booths, with a combined maximum capacity of 206.5 pounds per hour, each sanding booth.

(2) One (1) panel sander, with a maximum capacity of 206.5 pounds per hour, using a cartridge dust collector system, exhausting inside the building.

(3) One (1) electric powered Post Cure Oven.

~~(c) One (1) Plastic Injection Molding Operation, approved for construction in 2011, processing a maximum of 21.58 pounds of plumbing fixtures per hour, with no controls, exhausting inside the building, and consisting of the following:~~

~~(1) Three (3) injection Molding Machines.~~

~~(2) Three (3) Plastic Regrind Machines.~~

~~(3) One Chiller for injection molding.~~

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

(a) One (1) Plastic Injection Molding Operation, approved for construction in 2011, processing a maximum of 21.58 pounds of plumbing fixtures per hour, with no controls, exhausting inside the building, and consisting of the following:

(1) Three (3) injection Molding Machines.

(2) Three (3) Plastic Regrind Machines.

(3) One Chiller for injection molding.

~~(a)~~**(b)** Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 – Parts washer used in maintenance with a remote solvent reservoir. [326 IAC 8-3-2]

~~(b)~~**(c)** One (1) Metal Cutting Operation, identified MC, approved for construction in 2011, with a total capacity of and consisting of the following:

(1) Two (2) CO2 lasers with a maximum capacity of 114 pounds of steel per hour, using no control and exhausting inside the building.

(2) One (1) plasma cutter with a maximum capacity of five (5) pounds of steel per hour.

(3) Two (2) turret punch press.

(4) One (1) shear.

~~(c)~~**(d)** One (1) Metal Forming Operation, identified as forming, consisting four (4) press brakes approved for construction in 2011, using no controls and exhausting inside the building.

~~(d)~~**(e)** One (1) Metal Welding Operation, identified as MW, approved for construction in 2011, using no controls and exhausting inside the building, consisting of the following:

(1) Two (2) robot MIG welders with a maximum capacity of 1.73 pounds of rod per hour each.

(2) Twenty-seven (27) welding stations consisting of:

(A) Sixteen (16) manual MIG welders, with a maximum capacity of 1.8 pounds of rod per hour, each.

(B) Thirty (30) manual TIG welders, with a maximum capacity of 0.6 pounds of rod per hour, each.

(3) One (1) spot welder.

~~(e)~~**(f)** One (1) Metal Finishing Operation, identified as MF, approved for construction in 2011, consisting of the following:

(1) Five (5) grinding booths, identified as booth 1 through 5, with a maximum combined capacity of 260 pounds of metal per hour, each, using cartridge dust collectors (four for each booth) for particulate control and exhausting inside the building.

(2) Two (2) Bead Blast Booths, using class beads media, with a maximum capacity of 50 pounds of metal per hour, each.

(3) Three (3) Bead Blast Cabinets, using class beads media, with a maximum capacity of 260 pounds of metal per hour, each, using filters for particulate control and exhausting inside the building

(4) Two (2) Seat Polishers, with a maximum capacity of 260 pounds of steel per hour, using a wet collector for control, and exhausting inside the building.

~~(f)~~**(g)** One (1) Machine Shop Operation, identified as MS, approved for construction in 2011, using no controls and exhausting inside the building, and consisting of the following:

(1) Six (6) lathes with a maximum capacity of 15 pounds of steel per hour, each.

(2) Six (6) mills with a maximum capacity of 15 pounds of steel per hour, each.

(3) One (1) horizontal saw

(4) Two (2) roto-polishers using a wet process and stain steel balls (large machine) or stone media (small machine).

(5) Two (2) burr benches (vibrating machines) using a wet process with stone media.

~~(g)~~**(h)** Natural gas-fired combustion sources with heat input equal to or less than ten (10) million BTU per hour, including the following building heaters:

(1) Eleven (11) Natural Gas-fired Furnaces, rated at 0.3 MMBtu, each.

(2) Thirteen (13) Natural Gas-fired Furnaces, rated at 0.25 MMBtu, each.

(3) Six (6) Natural Gas-fired Furnaces, rated at 0.2 MMBtu, each.

~~(h)~~**(i)** One (1) Tube Bending Operation, identified as TB, approved for construction in 2011, using no controls, exhausting inside the building and consisting of the following:

(1) Three (3) saws with a maximum capacity of 23 pounds of steel per hour, each.

(2) Two (2) large (2-3 inch diameter) tube benders with a maximum capacity of 23 pounds of steel per hour, each.

(3) One (1) mill with a maximum capacity of 23 pounds of steel per hour.

~~(i)~~**(j)** One Draw Press Operation, identified as DP, approved for construction in 2011 and consisting of a combination of punch and draw presses.

~~(j)~~**(k)** One (1) Electronic Assembly Operation, identified as EA, approved for construction in 2011, cabling, final assembly, and testing.

~~(k)~~**(l)** One (1) Valve Assembly Operation, identified as VA, approved for construction in 2011, valve testing and final assembly.

~~(l)~~**(m)** One (1) Tool Room consisting of various, drills, saws, lathes mills and surface grinders.

~~(m)~~**(n)** Compressor Room E consisting of three (3) air compressors and one (1) air dryer.

~~(n)~~**(o)** Compressor Room W consisting of two (2) air compressors and one (1) air dryer.

~~(o)~~**(p)** VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

~~(p)~~**(q)** Paved and unpaved roads and parking lots with public access.

~~(q)~~**(r)** Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

~~(r)~~**(s)** Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

~~(s)~~**(t)** Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) Solid Surface Casting Operation, identified as Unit 01, consisting of both open molding and closed molding operations, injecting a maximum of 91.90 pounds per hour of resin, producing a maximum of 206.5 pounds of plumbing fixtures per hour, using a styrene collector and exhausting controls and exhausting outside, consisting of the following:

(1) Two (2) pot mixers used for mixing resin, filler and catalyst.

(2) One (1) pot washer using Marblewash to clean pot mixers.

(3) One (1) pot sink, using acetone to clean small parts.

(b) One (1) Solid Surface Finishing Operation (performing machining and sanding operations), identified as unit 02, approved for construction in 2011, with a combined maximum capacity of 206.5 pounds of steel per hour, each sanding booth has four (4) cartridge dust collector units operated from a single control panel for particulate control, exhausting inside the building, and consisting of the following:

(1) Three (3) sanding booths, with a combined maximum capacity of 206.5 pounds per hour, each sanding booth.

(2) One (1) panel sander, with a maximum capacity of 206.5 pounds per hour, using a cartridge dust collector system, exhausting inside the building.

(3) One (1) electric powered Post Cure Oven.

~~(c) One (1) Plastic Injection Molding Operation, approved for construction in 2011, processing a maximum of 21.58 pounds of plumbing fixtures per hour, with no controls, exhausting inside the building, and consisting of the following:~~

~~(1) Three (3) injection Molding Machines.~~

~~(2) Three (3) Plastic Regrind Machines.~~

~~(3) One Chiller for injection molding.~~

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

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

***

D.1.3 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2, the emission units Unit 01~~,~~ **and** Unit 02, ~~and Plastic Injection Molding Operation~~ shall not allow or permit discharge to the atmosphere of any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for Unit 01 **and** Unit 02, ~~and Plastic Injection Molding~~

~~Operation~~ 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.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

(a) One (1) Plastic Injection Molding Operation, approved for construction in 2011, processing a maximum of 21.58 pounds of plumbing fixtures per hour, with no controls, exhausting inside the building, and consisting of the following:

(1) Three (3) injection Molding Machines.

(2) Three (3) Plastic Regrind Machines.

(3) One Chiller for injection molding.

~~(a)~~**(b)** Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 – Parts washer used in maintenance with a remote solvent reservoir.
[326 IAC 8-3-2]

~~(b)~~**(c)** One (1) Metal Cutting Operation, identified MC, approved for construction in 2011, with a total capacity of and consisting of the following:

(1) Two (2) CO2 lasers with a maximum capacity of 114 pounds of steel per hour, using no control and exhausting inside the building.

(2) One (1) plasma cutter with a maximum capacity of five (5) pounds of steel per hour.

(3) Two (2) turret punch press.

(4) One (1) shear.

~~(c)~~**(d)** One (1) Metal Forming Operation, identified as forming, consisting four (4) press brakes approved for construction in 2011, using no controls and exhausting inside the building.

~~(d)~~**(e)** One (1) Metal Welding Operation, identified as MW, approved for construction in 2011, using no controls and exhausting inside the building, consisting of the following:

(1) Two (2) robot MIG welders with a maximum capacity of 1.73 pounds of rod per hour each.

(2) Twenty-seven (27) welding stations consisting of:

(A) Sixteen (16) manual MIG welders, with a maximum capacity of 1.8 pounds of rod per hour, each.

(B) Thirty (30) manual TIG welders, with a maximum capacity of 0.6 pounds of rod per hour, each.

(3) One (1) spot welder.

~~(e)~~**(f)** One (1) Metal Finishing Operation, identified as MF, approved for construction in 2011, consisting of the following:

(1) Five (5) grinding booths, identified as booth 1 through 5, with a maximum combined capacity of 260 pounds of metal per hour, each, using cartridge dust collectors (four for each booth) for particulate control and exhausting inside the building.

(2) Two (2) Bead Blast Booths, using class beads media, with a maximum capacity of 50 pounds of metal per hour, each.

(3) Three (3) Bead Blast Cabinets, using class beads media, with a maximum capacity of 260 pounds of metal per hour, each, using filters for particulate control and exhausting inside the building

(4) Two (2) Seat Polishers, with a maximum capacity of 260 pounds of steel per hour, using a wet collector for control, and exhausting inside the building.

~~(f)~~**(g)** One (1) Machine Shop Operation, identified as MS, approved for construction in 2011, using no controls and exhausting inside the building, and consisting of the following:

(1) Six (6) lathes with a maximum capacity of 15 pounds of steel per hour, each.

(2) Six (6) mills with a maximum capacity of 15 pounds of steel per hour, each.

(3) One (1) horizontal saw

(4) Two (2) roto-polishers using a wet process and stain steel balls (large machine) or stone media (small machine).

(5) Two (2) burr benches (vibrating machines) using a wet process with stone media.

~~(g)~~**(h)** Natural gas-fired combustion sources with heat input equal to or less than ten (10) million BTU per hour, including the following building heaters:

(1) Eleven (11) Natural Gas-fired Furnaces, rated at 0.3 MMBtu, each.

(2) Thirteen (13) Natural Gas-fired Furnaces, rated at 0.25 MMBtu, each.

(3) Six (6) Natural Gas-fired Furnaces, rated at 0.2 MMBtu, each.

~~(h)~~**(i)** One (1) Tube Bending Operation, identified as TB, approved for construction in 2011, using no controls, exhausting inside the building and consisting of the following:

(1) Three (3) saws with a maximum capacity of 23 pounds of steel per hour, each.

(2) Two (2) large (2-3 inch diameter) tube benders with a maximum capacity of 23 pounds of steel per hour, each.

(3) One (1) mill with a maximum capacity of 23 pounds of steel per hour.

~~(i)~~**(j)** One Draw Press Operation, identified as DP, approved for construction in 2011 and consisting of a combination of punch and draw presses.

~~(j)~~**(k)**	One (1) Electronic Assembly Operation, identified as EA, approved for construction in 2011, cabling, final assembly, and testing.
~~(k)~~**(l)**	One (1) Valve Assembly Operation, identified as VA, approved for construction in 2011, valve testing and final assembly.
~~(l)~~**(m)**	One (1) Tool Room consisting of various, drills, saws, lathes mills and surface grinders.
~~(m)~~**(n)**	Compressor Room E consisting of three (3) air compressors and one (1) air dryer.
~~(n)~~**(o)**	Compressor Room W consisting of two (2) air compressors and one (1) air dryer.
~~(o)~~**(p)**	VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
~~(p)~~**(q)**	Paved and unpaved roads and parking lots with public access.
~~(q)~~**(r)**	Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
~~(r)~~**(s)**	Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
~~(s)~~**(t)**	Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).

(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 2-8-4(1)]

***

(b) Upon further review, Section C.1 has been updated to reflect current permit language.

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

~~(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.~~

(1) The potential to emit any regulated pollutant, except particulate matter (PM) and greenhouse gases (GHGs), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO2 equivalent emissions (CO2e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than ~~one hundred (100)~~ **two hundred fifty (250)** tons per twelve (12) consecutive month period.

IDEM Contact

(a) Questions regarding this proposed New Source Construction and New Source Review and Federally Enforceable State Operating Permit (FESOP) can be directed to Bruce Farrar at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5401 or toll free at 1-800-451-6027 extension 4-5401.

(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's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	**Willoughby Industries, Inc.**
Source Location:	**5105 W. 78th St.**
County:	**Marion (Pike Township)**
SIC Code:	**3088 (Plastic Plumbing Fixtures), 3444 (Sheet Metal Work), 3432 (Plumbing Fixture Fittings and Trim)**
Operation Permit No.:	**F097 30378 00676**
Permit Reviewer:	**Bruce Farrar**

On March 28, 2011, the Office of Air Quality (OAQ) received an application from Willoughby Industries, Inc. related to the construction and operation of a new cast polymer plumbing fixture manufacturing plant.

County Attainment Status

The source is located in Marion County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O_3	Attainment effective November 8, 2007, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.

[1]Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005.

Basic nonattainment designation effective federally April 5, 2005, for PM2.5.

(a) Ozone Standards

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

(b) $PM_{2.5}$
Marion County has been classified as nonattainment for $PM_{2.5}$ in 70 FR 943 dated January 5, 2005. On May 8, 2008, U.S. EPA promulgated specific New Source Review rules for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

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

Fugitive Emissions

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

Background and Description of New Source Construction

The Office of Air Quality (OAQ) has reviewed an application, submitted by Willoughby Industries, Inc. on March 28, 2011, relating to the construction and operation of a new stainless steel and solid surface plumbing fixture products and accessories. Willoughby will be combining their 1610 S. Girls School Road facility (FESOP (Renewal) #097-28979-00564 issued December 21, 2010) and Morris Street Facility to the new location at 5105 W. 78th St. Even though the existing operation has been permitted in a different location, this operation is being permitted as new operation in the new location.

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

(a) One (1) Solid Surface Casting Operation, identified as Unit 01, consisting of both open molding and closed molding operations, injecting a maximum of 91.90 pounds per hour of resin, producing a maximum of 206.5 pounds of plumbing fixtures per hour, using a styrene collector and exhausting controls and exhausting outside, consisting of the following:

(1) Two (2) pot mixers used for mixing resin, filler and catalyst.

(2) One (1) pot washer using Marblewash to clean pot mixers.

(3) One (1) pot sink, using acetone to clean small parts.

(b) One (1) Solid Surface Finishing Operation (performing machining and sanding operations), identified as unit 02, approved for construction in 2011, with a combined maximum capacity of 206.5 pounds of steel per hour, each sanding booth has four (4) cartridge dust collector units operated from a single control panel for particulate control, exhausting inside the building, and consisting of the following:

(1) Three (3) sanding booths, with a combined maximum capacity of 206.5 pounds per hour, each sanding booth.

(2) One (1) panel sander, with a maximum capacity of 206.5 pounds per hour, using a cartridge dust collector system, exhausting inside the building.

(3) One (1) electric powered Post Cure Oven.

(c) One (1) Plastic Injection Molding Operation, approved for construction in 2011, processing a maximum of 21.58 pounds of plumbing fixtures per hour, with no controls, exhausting inside the building, and consisting of the following:

(1) Three (3) injection Molding Machines.

(2) Three (3) Plastic Regrind Machines.

(3) One Chiller for injection molding.

Insignificant activities consisting of the following:

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 – Parts washer used in maintenance with a remote solvent reservoir.
[326 IAC 8-3-2]

(b) One (1) Metal Cutting Operation, identified MC, approved for construction in 2011, with a total capacity of and consisting of the following:

(1) Two (2) CO2 lasers, with a maximum capacity of 114 pounds of steel per hour, using no control and exhausting inside the building.

(2) One (1) plasma cutter, with a maximum capacity of five (5) pounds of steel per hour.

(3) Two (2) turret punch press.

(4) One (1) shear.

(c) One (1) Metal Forming Operation, identified as forming, consisting four (4) press brakes approved for construction in 2011, using no controls and exhausting inside the building.

(d) One (1) Metal Welding Operation, identified as MW, approved for construction in 2011, using no controls and exhausting inside the building, consisting of the following:

(1) Two (2) robot MIG welders, with a maximum capacity of 1.73 pounds of rod per hour each.

(2) Twenty-seven (27) welding stations consisting of:

(A) Sixteen (16) manual MIG welders, with a maximum capacity of 1.8 pounds of rod per hour, each.

(B) Thirty (30) manual TIG welders, with a maximum capacity of 0.6 pounds of rod per hour, each.

(3) One (1) spot welder.

(e) One (1) Metal Finishing Operation, identified as MF, approved for construction in 2011, consisting of the following:

(1) Five (5) grinding booths, identified as booth 1 through 5, with a maximum combined capacity of 260 pounds of metal per hour, each, using cartridge dust collectors (four for each booth) for particulate control and exhausting inside the building.

(2) Two (2) Bead Blast Booths, using class beads media, with a maximum capacity of 50 pounds of metal per hour, each.

(3) Three (3) Bead Blast Cabinets, using class beads media, with a maximum capacity of 260 pounds of metal per hour, each, using filters for particulate control and exhausting inside the building

(4) Two (2) Seat Polishers, with a maximum capacity of 260 pounds of steel per hour, using a wet collector for control, and exhausting inside the building.

(f) One (1) Machine Shop Operation, identified as MS, approved for construction in 2011, using no controls and exhausting inside the building, and consisting of the following:

(1) Six (6) lathes with a maximum capacity of 15 pounds of steel per hour, each.

(2) Six (6) mills with a maximum capacity of 15 pounds of steel per hour, each.

(3) One (1) horizontal saw

(4) Two (2) roto-polishers using a wet process and stain steel balls (large machine) or stone media (small machine).

(5) Two (2) burr benches (vibrating machines) using a wet process with stone media.

(g) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million BTU per hour, including the following building heaters:

(1) Eleven (11) Natural Gas-fired Furnaces, rated at 0.3 MMBtu, each.

(2) Thirteen (13) Natural Gas-fired Furnaces, rated at 0.25 MMBtu, each.

(3) Six (6) Natural Gas-fired Furnaces, rated at 0.2 MMBtu, each.

(h) One (1) Tube Bending Operation, identified as TB, approved for construction in 2011, using no controls, exhausting inside the building and consisting of the following:

(1) Three (3) saws with a maximum capacity of 23 pounds of steel per hour, each.

(2) Two (2) large (2-3 inch diameter) tube benders with a maximum capacity of 23 pounds of steel per hour, each.

(3) One (1) mill with a maximum capacity of 23 pounds of steel per hour.

(i) One Draw Press Operation, identified as DP, approved for construction in 2011 and consisting of a combination of punch and draw presses.

(j) One (1) Electronic Assembly Operation, identified as EA, approved for construction in 2011, cabling, final assembly, and testing.

(k) One (1) Valve Assembly Operation, identified as VA, approved for construction in 2011, valve testing and final assembly.

(l) One (1) Tool Room consisting of various, drills, saws, lathes mills and surface grinders.

(m) Compressor Room E consisting of three (3) air compressors and one (1) air dryer.

(n) Compressor Room W consisting of two (2) air compressors and one (1) air dryer.

(o) VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

(p) Paved and unpaved roads and parking lots with public access.

(q) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(r) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(s) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	30.29
PM10[(1)]	30.47
PM2.5	30.47
SO_2	0.02
NO_x	3.29
VOC	32.08
CO	2.76
GHGs as CO2e	3,944

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

HAPs	Potential To Emit (tons/year)
Styrene	15.48
MMA	15.09
Hexane	0.06
Acetaldehyde	1.89E-05
Acrolein	9.45E-07
Formaldehyde	1.70E-05

Propionaldehyde	8.98E-05
TOTAL HAPs	**30.74**

(a) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of all regulated criteria pollutants are less than one hundred (100) tons per year.

(b) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of any single HAP is greater than ten (10) tons per year and the PTE of a combination of HAPs is greater than twenty-five (25) tons per year. Therefore, the source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a New Source Construction Permit (326 IAC 2-5.1-3) and a FESOP (326 IAC 2-8), because the source will limit emissions of HAPs to less than the Title V major source threshold levels.

(c) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.

PTE of the Entire Source After Issuance of the FESOP

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

	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)									
Process/ Emission Unit	PM	PM10*	PM2.5	SO_2	NOx	VOC	CO	GHG as CO2e**	Total HAPs	Worst Single HAP
Resin Mixing and Casting Operations (Unit 01)	-	-	-	-	-	24.84[1]	-	-	24.79	9.9
Solid Surface Finishing Operation (SF)	21.90	21.90	21.90	-	-	-	-	-	-	-
Closed Injection Molding Operations/three scrap regrinder machines	0.53	0.53	0.53	-	-	0.01	-	-	1.27E-04	-
Van Dorn Injection Molding Units								-		
Welding Operation	1.19	1.19	1.19					-	0.10	0.06
Laser Cutting	6.61	6.61	6.61	-	-	-	-	-	-	
Natural Gas Combustion	0.06	0.25	0.25	0.02	3.29	0.18	2.76	3,944	0.06	0.06
Total PTE of Entire Source	**30.29**	**30.47**	**30.47**	**0.02**	**3.29**	**25.06**	**2.76**	**3,944**	**<25**	**<10**
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	NA	250	250	250	250	100,000	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA	NA

	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)									
Process/ Emission Unit	PM	PM10*	PM2.5	SO_2	NOx	VOC	CO	GHG as CO2e**	Total HAPs	Worst Single HAP

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
**The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

1. The source has agreed to limit VOC emissions to 24.84 tons per year for the resin mixing and casting operation (Unit 01), in order to render the requirements of 326 IAC 8-1-6 not applicable.

(a) FESOP Status

This new source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source is less than the Title V major source threshold levels. In addition, this new source is not a major source of HAPs, as defined in 40 CFR 63.41, because the potential to emit HAPs is limited to less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of total HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

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

(1) Styrene (Single HAP)
The use of resin in the resin mixing and casting operation (Unit 01) shall be limited such that the potential to emit (PTE) of styrene shall be limited such that the combined potential to emit (PTE) of any single HAP shall not exceed 9.9 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit shall be determined based on the emission factors approved by IDEM, OAQ: "Unified Emission Factors for Open Molding of Composites", Composites Fabricators Association (CFA), July 23, 2001 and its updates. Refer to Appendix A of this TSD for the methodology.

(2) Methyl Methacrylate (MMA) (Single HAP)
The use of resin in the resin mixing and casting operation (Unit 01) shall be limited such that the potential to emit (PTE) of methyl methacrylate (MMA) shall be limited such that the combined potential to emit (PTE) of any single HAP shall not exceed 9.9 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit shall be determined based on the emission factors approved by IDEM, OAQ: "Unified Emission Factors for Open Molding of Composites", Composites Fabricators Association (CFA), July 23, 2001 and its updates. Refer to Appendix A of this TSD for the methodology.

(3) Styrene and Methyl Methacrylate (MMA) (total HAP)
The use of resin in the resin mixing and casting operation (Unit 01) shall be limited such that the potential to emit (PTE) of the combination of styrene and MMA shall be limited such that the total HAPs shall not exceed 24.79 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Refer to Appendix A of this TSD for the methodology.

Compliance with these limits, combined with the potential to emit HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of each single HAP to less than ten (10) tons per 12 consecutive month period, and total HAPs to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-

2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

(b) PSD Minor Source
This new source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit all attainment regulated pollutants are less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(c) Emission Offset Minor Source
This existing source is not a major stationary source, under Emission Offset (326 IAC 2-3), because the potential to emit all nonattainment regulated pollutants are less than 100 tons per year. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

This existing source is not a major stationary source, under 326 IAC 2-1.1-5 (Nonattainment New Source Review), because the potential to emit particulate matter with a diameter less than ten 2.5 micrometers (PM2.5), is less than 100 tons per year. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment New Source Review requirements do not apply.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) The requirements of the NSPS, 40 CFR Part 60.110b through 60.117b, Subpart Kb (326 IAC 12) are not included in the permit for the insignificant VOC storage tanks with capacity less than or equal to 1,000 gallons because the tank storage capacity is less than 75 cubic meters

(b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this permit for this source.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants Surface: Coating of Metal Cans, 40 CFR 63.3480, Subpart KKKK (4K), (326 IAC 20-86) are not included, because this source is does not produce metal cans.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63.3880, Subpart MMMM (4M), (326 IAC 20-86) are not included, because this source is does not surface coat metal parts.

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants Surface Coating of Metal Furniture, 40 CFR 63.4880, Subpart RRRR (4R), (326 IAC 20-78) are not included, because this source is does not produce metal furniture.

(f) The requirements of the National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil, 40 CFR 63.5080, Subpart SSSS (4S), (326 IAC 20-64) are not included, because this source is does not produce metal coil.

(g) The requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAPs) for Boat Manufacturing, 40 CFR 63.5683, Subpart VVVV (4V) (326 IAC 20-48) are not included in this permit because this source does not manufacture boats.

(h) The requirements of the National Emission Standards for Hazardous Air Pollutants for Reinforced Plastic Composites Production, 40 CFR 63.5785, Subpart WWWW (4W) (326 IAC 20-56) are not included in this permit because this source has accepted federally enforceable limits on the

amount of hazardous air pollutants (HAPs) emitted, such that the potential to emit of any single HAP is limited to less than 10 tons per year and the potential to emit of any combination of HAPs is limited to less than 25 tons per year.

(i) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, (40 CFR 63.11169, Subpart HHHHHH (6H)), are not included, because the source does not perform paint stripping using paint strippers that contain methylene chloride (MeCl), performs autobody refinishing operations, or has spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd).

(j) The requirements of the National Emission Standards for Hazardous Air Pollutants for Area Source Standards for Nine Metal Fabrication and Finishing Source Categories (40 CFR 63, Subpart XXXXXX (6X)), are not included, because this source's SIC is not listed.

(k) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 20 and 40 CFR Part 61, 63) included in this permit for this source.

State Rule Applicability Determination

The following state rules are applicable to the source:

(a) 326 IAC 2-8-4 (FESOP)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(c) 326 IAC 2-3 (Emission Offset)
Emission Offset and Nonattainment New Source Review applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The unlimited potential to emit of HAPs from the new units is greater than ten (10) tons per year for any single HAP and/or greater than twenty-five (25) tons per year of a combination of HAPs. However, the source shall limit the potential to emit of HAPs from the new units to less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the source is not subject to the requirements of 326 IAC 2-4.1. See PTE of the Entire Source After Issuance of the FESOP Section above.

(e) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

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

(1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

Resin Mixing And Casting Operation (Unit 01)

(h) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3) (Particulate Emission Limitations for Manufacturing Processes), the source is not subject to 326 IAC 6-3-2, because 326 IAC 6.5-1-2 applies.

(i) 326 IAC 6.5 PM (Limitations Except Lake County)
This source is subject to 326 IAC 6.5 because it is located in Marion County, its PM PTE (or limited PM PTE) is equal to or greater than 100 tons/year or actual emissions are greater than 10 tons/year. However, this source is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. Therefore, 326 IAC 6.5-1-2(a) applies. PM emissions shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

(j) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The unlimited VOC potential emissions from the Resin Mixing And Casting Operation is greater than twenty-five (25) tons per year. However, the source shall limit the VOC potential emissions from the Resin Mixing And Casting Operation to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

In order to render the requirements of 326 IAC 8-1-6 not applicable, the Resin Mixing And Casting Operation shall be limited as follows:

The use of resins and solvents in the resin mixing and casting operation (Unit 01) shall be limited such that the potential to emit (PTE) of VOC shall be limited to 24.84 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits shall limit the potential to emit VOC from the Resin Mixing And Casting Operation to less than twenty-five (25) tons per 12 consecutive month period and shall render 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

(k) There are no other 326 IAC 8 Rules that are applicable to the unit.

Solid Surface Finishing Operation (Unit 02)

(l) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3) (Particulate Emission Limitations for Manufacturing Processes), the source is not subject to 326 IAC 6-3-2, because 326 IAC 6.5-1-2 applies.

(m) 326 IAC 6.5 PM (Limitations Except Lake County)
This source is subject to 326 IAC 6.5 because it is located in Marion County, its PM PTE (or limited PM PTE) is equal to or greater than 100 tons/year or actual emissions are greater than 10 tons/year. However, this source is not one of the sources specifically listed in 326 IAC 6.5-2

through 326 IAC 6.5-10. Therefore, 326 IAC 6.5-1-2(a) applies. PM emissions shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

The cartridge dust collector shall be in operation at all times the finishing operation is in operation, in order to comply with this limit.

(n) There are no other 326 IAC 8 Rules that are applicable to the unit.

Degreasing Operations

(o) 326 IAC 8-3-2 (Cold Cleaner Operations)
The degreasing operation, an insignificant activity, is subject to this rule because it is a cold cleaner degreaser constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(1) Equip the cleaner with a cover;

(2) Equip the cleaner with a facility for draining cleaned parts;

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

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

(5) Provide a permanent, conspicuous label summarizing the operation requirements;

(6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

(p) 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)
This rule applies to cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990. The degreasing operation at this source does have a remote solvent reservoir and is not subject to this rule.

Metal Cutting Operation

(q) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3) (Particulate Emission Limitations for Manufacturing Processes), the source is not subject to 326 IAC 6-3-2, because 326 IAC 6.5-1-2 applies.

(r) 326 IAC 6.5 PM (Limitations Except Lake County)
This source is subject to 326 IAC 6.5 because it is located in Marion County, its PM PTE (or limited PM PTE) is equal to or greater than 100 tons/year or actual emissions are greater than 10 tons/year. However, this source is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. Therefore, 326 IAC 6.5-1-2(a) applies. PM emissions shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

Metal Welding Operation

(s) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3) (Particulate Emission Limitations for Manufacturing Processes), the source is not subject to 326 IAC 6-3-2, because 326 IAC 6.5-1-2 applies.

(t) 326 IAC 6.5 PM (Limitations Except Lake County)
This source is subject to 326 IAC 6.5 because it is located in Marion County, its PM PTE (or limited PM PTE) is equal to or greater than 100 tons/year or actual emissions are greater than 10 tons/year. However, this source is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. Therefore, 326 IAC 6.5-1-2(a) applies. PM emissions shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

Natural Gas Combustion

(u) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3) (Particulate Emission Limitations for Manufacturing Processes), the source is not subject to 326 IAC 6-3-2, because 326 IAC 6.5-1-2 applies.

(v) 326 IAC 6.5 PM (Limitations Except Lake County)
This source is subject to 326 IAC 6.5 because it is located in Marion County, its PM PTE (or limited PM PTE) is equal to or greater than 100 tons/year or actual emissions are greater than 10 tons/year. However, this source is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. Therefore, 326 IAC 6.5-1-2(a) applies. PM emissions shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

Compliance Determination, Monitoring and Testing Requirements

(a) There is no applicable compliance monitoring requirements. The resin mixing and casting operation (Unit 01) comply with 326 IAC 2-8 and 326 IAC 8-1-6 limits through record keeping and reporting requirements.

(b) There are no applicable testing requirements.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on March 28, 2011.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Construction and New Source Review and FESOP No. 097-30378-00676. The staff recommends to the Commissioner that this New Source Construction and New Source Review and FESOP be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Bruce Farrar at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5401 or toll free at 1-800-451-6027 extension 4-5401.

(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's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

Appendix A: Emission Calculations
Summary of Emissions

Company Name: Willoughby Industries, Inc.
Address City IN Zip: 5105 W. 78th St., Indianapolis, Indiana 46268
Permit Number: 097-30378-00676
Reviewer: Bruce Farrar
Date: March 28, 2011

Unlimited Potential to Emit (tons/year)										
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	CO2e	Total HAPs	Worst Single HAP
Resin Mixing and Casting Operations (Unit 01)	-	-	-	-	-	31.89	-	-	30.57	15.48
Solid Surface Finishing Operation (SF)	21.90	21.90	21.90	-	-	-	-		-	-
Closed Injection Molding Operations/three scrap regrinder machines	0.53	0.53	0.53	-	-	0.01	-	-	1.27E-04	-
Welding Operation	1.19	1.19	1.19					-	0.10	0.06
Laser Cutting	6.61	6.61	6.61	-	-	-	-	-	-	
Natural Gas Combustion	0.06	0.25	0.25	0.02	3.29	0.18	2.76	3944	0.06	0.06
TOTAL:	**30.29**	**30.47**	**30.47**	**0.02**	**3.29**	**32.08**	**2.76**	**3944**	**30.74**	**15.48**

Limited Potential to Emit (tons/year)										
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	CO2e	Total HAPs	Worst Single HAP
Resin Mixing and Casting Operations (Unit 01)						24.87		-	24.79	9.9
Solid Surface Finishing Operation (SF)	21.90	21.90	21.90	-	-	-	-		-	-
Closed Injection Molding Operations/three scrap regrinder machines	0.53	0.53	0.53	-	-	0.01	-	-	1.27E-04	-
Welding Operation	1.19	1.19	1.19	0.00	0.00	0.00	0.00	-	0.10	0.06
Laser Cutting	6.61	6.61	6.61	-	-	-	-	-	-	
Natural Gas Combustion	0.06	0.25	0.25	0.02	3.29	0.18	2.76	3944	0.06	0.06
TOTAL:	**30.29**	**30.47**	**30.47**	**.0.02**	**0.00**	**25.06**	**24.88**	**3944**	**<25**	**<10**

Total emissions based on 8,760 hours/year

Appendix A: Emissions Calculations
Reinforced Plastics and Composites
Open Molding Operations*
Resin Mixing and Casting (Unit 01)

Company Name: **Willoughby Industries, Inc.**
Address City IN Zip: **5105 W. 78th St., Indianapolis, Indiana 46268**
Permit Number: **097-30378-00676**
Reviewer: **Bruce Farrar**
Date: **March 28, 2011**

Emission Unit ID	Material (Resin or Gel Name)	UEF > 50 Styrene (lbs styrene/lbs resin)	UEF > 20 MMA (lbs MMA/lbs resin)	Weight % Monomer (as styrene) or VOC	Weight % MMA	CFA EF Constant	Percent VOC Emitted (%)	Maximum usage (lbs/hour)	Maximum Usage (lbs/month)	Potential VOC** &HAP (as styrene) (tons per month)	Potential VOC** &HAP (as styrene) (tons per year)	Potential VOC** &HAP (as MMA) (tons per month)	Potential VOC** &HAP (as MMA) (tons per year)	Total VOC emissions (tons/yr)
01	Resin	0.157	0.75	35.0%	5.0%	0.0165		91.90	67087.00	1.29	15.48	1.26	15.09	30.57
01	Catalyst	n/a		100.0%		n/a	2.0%	1	730.00	0.0073	0.09	n/a	n/a	0.09
01	mold release			99.0%		n/a	100.0%	0.07	51.10	0.0253	0.30	n/a	n/a	0.30
01	pigments	n/a		1.0%		n/a	100.0%	0.50	365.00	0.0018	0.02	n/a	n/a	0.02
01	pot-cleaner			100.0%		n/a	25.0%	0.83	605.90	0.0757	0.91	n/a	n/a	0.91
									Total Potential to Emit:	1.40	16.80	1.26	15.09	31.89

* Although this source only performs open molding 20% of the time and closed molding 80% of the time, the emission factors for open molding operations were used to represent the worst case emissions if only open molding was performed.

** Catalyst, mold release, pigments and pot-cleaner are VOC only (i.e., no HAP as styrene).

METHODOLOGY

For the resin, which can be used as a gel coat per the MSDS (but is not in this case), it contains both styrene monomer and methyl methacrylate (MMA) monomer.

Use the emission factors based on the type of application from "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association (July 23, 2001) to calculate resin emissions.

UEF: The United Emission Factor is the emission factor for the resin styrene or MMA content determined using the 7/2001 UEF Table.

Maximum usage pounds per month = maximum usage lbs/hour x 8760 / 12 months per year

Resin - Potential VOC & HAP (as styrene) tons per month = [UEF Emission Factor (lb styrene/lb resin) x UEF MMA (lbs MMA/lbs resin) - Constant of 0.0165 (CFA EF) x max. usage (lbs/month) / 2000 lbs

Catalyst, mold release, pigments & pot cleaner - Potential VOC & HAP as styrene (tons per month) = weight % monomer x % VOC emitted * max. usage (lbs/month) / 2000 (lb/ton)

Potential VOC & HAP (as styrene tons/year) = potential VOC & HAP (as styrene tons/month) x 12 (months/year)

Potential VOC & HAP (tons/month) = (UEF MMA (lbs MMS/lbs resin) x Weight % Monomer * max usage lb/month) / 2,000 (lb/ton)

Potential VOC & HAP as MMA = potential VOC & HAP (as MMA tons/month) x 12 months/year

Total VOC emissions(tons/year) = potential VOC & HAP (as styrene tons/year) + potential VOC & HAP as MMA

HAP Emissions = maximum usage (lbs/hour) x weight % of HAP x 4.38

Emission Unit ID	Material (Resin or Gel Name)	Density (Lb/Gal)	Maximum usage (lbs/hour)	Weight% Xylene	Weight% Cumene	Xylene Emissions (tons/yr)	Cumene Emissions (tons/yr)	Total HAP Emissions (tons/yr)
01	Catalyst	8.35	1	0.0%	0.0%	0.00	0.00	0.00
01	mold release	6.34	0.01	5.0%	2.0%	2.3E-03	9.0E-04	3.2E-03
01	pigments	17.36	0.50	0.0%	0.0%	0.00	0.00	0.00
01	pot-cleaner	8.86	0.83	0.0%	0.0%	0.00	0.00	0.00
						2.3E-03	**9.0E-04**	**0.0032**

15.48	HAP as Styrene tpy
15.09	HAP as MMA tpy
30.57	TOTAL HAPs

MEK had previously been included as a HAP but has been delisted.

Appendix A: Emissions Calculations
Reinforced Plastics and Composites
Solid Surface Finishing Operation (SF)

Company Name: **Willoughby Industries, Inc.**
Address City IN Zip: **5105 W. 78th St., Indianapolis, Indiana 46268**
Permit Number: **097-30378-00676**
Reviewer: **Bruce Farrar**
Date: **March 28, 2011**

Fixtures were weighed before finishing (machining and sanding) and then weighed afterwards to determine the amount of material that was removed in the finishing processes. From that and the maximum production rates, the average hourly rate of total PM generated was determined to be 5.0 lbs/hour. (1)

5 lbs/hr x 8,760 hrs/yr / 2,000 lbs/ton = **21.9** tons/yr uncontrolled potential emissions (PM is assumed equal to PM10)

The published dust collector equipment specifications were used for the control efficiency calculation -- “99.9% effective on particles as small as 1 micron.” The capture efficiency of 99% was a number given for typical efficiency for the sanding booth design that is going to be used (3 walls and a ceiling with dust collectors mounted in the rear of the booth).

Appendix A: Emissions Calculations
Potential to Emit from the Van Dorn Injection Molding Units
Processing Polypropylene with a 505 ^{o}F Melt Temperature

Company Name: Willoughby Industries, Inc.
Address City IN Zip: 5105 W. 78th St., Indianapolis, Indiana 46268
Permit Number: 097-30378-00676
Reviewer: Bruce Farrar
Date: March 28, 2011

			PM			VOC		
VanDorn Machine #	Resin Type	Max Throughput Rate (lbs resin/hr)	[1] Emission Factor (lbs/10^6 lbs)	Emissions (lbs/hr)	Emissions (tons/yr)	[1] Emission Factor (lbs/10^6 lbs)	Emissions (lbs/hr)	Emissions (tons/yr)
IS	PP	21.58	34.5	7.45E-04	3.26E-03	80.3	0.00	0.01
	Totals	**21.58**		**7.45E-04**	**3.26E-03**		**0.00**	**0.01**

Methodology

Emissions (lbs/hr) = Max Throughput Rate (lbs resin/hr) * Emission Factor (lbs/10^6 lbs) /1000000
Emissions (tons/yr) = Emissions (lbs/hr) * 8760 (hrs/yr) / 2000 (lbs/ton)

Notes

[1] Emission factors for PM & VOC from Polypropylene molding were taken from a technical paper, volume 49 in January 1999, published by the Journal of Air and Waste Management Association titled "Development of Emission Factors for Polypropylene Processing". A melt temperature of 505 ^{o}F and reactor impact copolymer was used as the emission factor. The worst case emission factor was used for all machines that process polypropylene along with other plastics.

[2] Polypropylene emission factors were the worst case emission factors for this machine and were used in lieu of the emission factors for PVC from the technical paper, "Process

[a] No emission factors from the Journal of Vinyl & Additive Technology were used. The emissions from PVC were reviewed and were determined to lower than the PP emission factors, therefore the PP emission factors were used.

[3] Polypropylene emission factors were the worst case emission factors for this machine and were used in lieu of the emission factors for TPE from the technical paper, "Development of Emission Factors for Polyethylene Processing" from volume 46 of the Journal of Air and Waste Management Association.

[4] The polypropylene emission factor for PM was this worst case emission factor for this machine. The emission factor for VOC emissions come from the technical paper, "Sampling and Analysis of Volatile Organic Compounds Evolved During Thermal Processing of Acrylonitrile Butadiene Styrene Composite Resins", from volume 45 of the Journal of Air and Waste Management Association.

[5] Emission factors for PM & VOC from Nylon processing were the worst case emission factors and were used in lieu of the emission factors for polypropylene molding. The emission factors come from the technical paper, "Development of Emission Factors for Polyamide Processing", from Volume 51 of the Journal of Air and Waste Management Association. The source uses two types of nylon, PA-66 and EPDM Toughened PA-66, and the worst case emission factor for each nylon were used.

Appendix A: Emissions Calculations
Potential to Emit Hazardous Air Pollutants (HAPs) from the Injection Molding Machines

Company Name: Willoughby Industries, Inc.
Address City IN Zip: 5105 W. 78th St., Indianapolis, Indiana 46268
Permit Number: 097-30378-00676
Reviewer: Bruce Farrar
Date: March 28, 2011

HAP Emission Factors from Processing Polypropylene

HAP Constituent	CAS #	[1] Emission Factor (lbs/10^6 lbs)
Acetaldehyde	75-07-0	0.2
Acrolein	107-02-8	0.01
Formaldehyde	50-00-0	0.18
Propionaldehyde	123-38-6	0.95

HAP Emission Factors from Processing Nylon

HAP Constituent	CAS #	[2] Emission Factor (lbs/10^6 lbs)
Styrene	100-42-5	0.32

HAP Emission Factors from Processing ABS

HAP Constituent	CAS #	[3] Emission Factor (lbs/10^6 lbs)
Styrene	100-42-5	130

Dorel Machine #	Resin Type	Max Throughput Rate (lbs resin/hr)	Acetaldehyde Emissions (tons/yr)	Acrolein Emissions (tons/hr)	Formaldehyde Emissions (tons/yr)	Propionaldehyde Emissions (tons/yr)	Styrene Emissions (tons/yr)
IS	PP	21.58	1.89E-05	9.45E-07	1.70E-05	8.98E-05	NA
		Totals	1.89E-05	9.45E-07	1.70E-05	8.98E-05	NA

Methodology
HAPs Emissions (tons/yr) = (Max Throughput Rate (lbs resin/hr) * Emission Factor (lbs/106 lbs) /1000000) * 8760 (hrs/yr) / 2000 (lbs/ton)
Notes

[1] Emission factors for HAPs from Polypropylene molding were taken from a technical paper, volume 49 in January 1999, published by the Journal of Air and Waste Management Association titled "Development of Emission Factors for Polypropylene Processing". A melt temperature of 505 oF and reactor impact copolymer was used as the emission factor.

[2] Emission factors for HAPs from Nylon were taken from the technical paper, "Development of Emission Factors for Polyamide Processing", from Volume 51 of the Journal of Air and Waste Management Association. The source uses two types of nylon, PA-66 and EPDM Toughened PA-66, and the worst case emission factor for each nylon were used.

[3] Emission factors for HAPs from Nylon were taken from the technical paper, "Sampling and Analysis of Volatile Organic Compounds Evolved During Thermal Processing of Acrylonitrile Butadiene Styrene Composite Resins" from Volume 45 of the Journal of Air and Waste Management Association.

Appendix A: Emissions Calculations
Potential to Emit PM from the Closed Injection Molding Operation,
Including three (3) scrap regrinder machines

Company Name: Willoughby Industries, Inc.
Address City IN Zip: 5105 W. 78th St., Indianapolis, Indiana 46268
Permit Number: 097-30378-00676
Reviewer: Bruce Farrar
Date: March 28, 2011

Maximum Hourly Injection Molding Machine Resin Throughput (lbs/hr)	91.90
Facility Wide Scrap (%) (2)	20.0%
Maximum Hourly Scrap Throughput (lbs/hr)	18.38
Grinding Emission Factor for PM (lbs/ton) (1)	1.30E+01
Control Efficiency of Cyclone and Bagfilter system	97.0%
Potential Hourly Uncontrolled PM Emissions (lbs/hr)	0.12
Potential Hourly Controlled PM Emissions (lbs/hr)	0.004
Potential Annual Uncontrolled PM Emissions (tons/yr)	0.52
Potential Annual Controlled PM Emissions (tons/yr) α	0.02

Methodology

Maximum Hourly Scrap Throughput (lbs/hr) = Maximum Hourly Resin Throughput (lbs/hr) * Facility Wide Scrap (%)

Potential Hourly Uncontrolled PM Emissions (lbs/hr) = Maximum Hourly Scrap Throughput (lbs/hr) * Grinding Emission Factor for PM (lbs/ton) / 2000 (lbs/ton)

Potential Hourly Controlled PM Emissions (lbs/hr) = Potential Hourly Uncontrolled Emissions (lbs/hour) x (1-Control Efficiency of Cyclone and Filter)

Potential Annual Uncontrolled PM Emissions (tons/yr) = Potential Hourly PM Emissions (lbs/hr) * 8760 (hrs/yr) / 2000 (lbs/ton)

Potential Annual Controlled PM Emissions (tons/yr) = Potential Annual Uncontrolled PM Emissions (tons/yr) * (1-Control Efficiency of Cyclone and Filter)

Notes

(1) No AP-42 emission factors exist for the grinding of thermoplastics. Therefore, the EPA Webfire emission factor for Fiberglass Resin Products - Plastics Machining: Drilling/Sanding/Sawing/etc. (SCC 30800701), has been used.

(2) This is based on the evaluation of the source on their injection molding process.

Appendix A: Emission Calculations Summary
Laser Cutting

Company Name: **Willoughby Industries, Inc.**
Address City IN Zip: **5105 W. 78th St., Indianapolis, Indiana 46268**
Permit Number: **097-30378-00676**
Reviewer: **Bruce Farrar**
Date: **March 28, 2011**

Laser Cutting

1,000,000 lbs/year) * (8760 hrs/year) * 15 lbs PM/1000 lbs metal) * 0.1 * (1 ton/2000 lbs) * 2 lasers = 6.61

Methodology

To determine emissions from the machine the annual throughput was scaled up to 8760 hours per year, and assumed that 10% of the throughput was cut. An emission factor of 15.7 pounds of PM per 1,000 pounds metal throughput was used for the calculations.
Tons per year = 1,000,000 x 4.21 x 15.7/1000 x .10/2000

* Based on a 2006 evaluation of the source by their consultant, it was determined 10% of the throughput is cut and the emission factor of 15.7 lbs/1000 lbs. of metal was used. CDS did not verify the emission factor.

Appendix A: Emissions Calculations
Welding and Thermal Cutting

Company Name: **Willoughby Industries, Inc.**
Address City IN Zip: **5105 W. 78th St., Indianapolis, Indiana 46268**
Permit Number: **097-30378-00676**
Reviewer: **Bruce Farrar**
Date: **March 28, 2011**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
WELDING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Metal Inert Gas (MIG)(carbon steel)	16	1.8		0.0055	0.0005			0.158	0.014	0.000	0	0.014
Tungsten Inert Gas (TIG)(carbon steel)	30	0.6		0.0055	0.0005			0.099	0.009	0.000	0	0.009
	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
FLAME CUTTING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Plasma**	1	0.375	150	0.0039				0.013	0.000	0.000	0.000	0.000
EMISSION TOTALS												
Potential Emissions lbs/hr								0.27				0.02
Potential Emissions lbs/day								6.49				0.56
Potential Emissions tons/year								1.19				0.10

METHODOLOGY

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

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculting the emissions.

Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick

Plasma cutting emissions, lb/hr: (# of stations)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

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

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

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

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

Company Name: **Willoughby Industries, Inc.**
Address City IN Zip: **5105 W. 78th St., Indianapolis, Indiana 46268**
Permit Number: **097-30378-00676**
Reviewer: **Bruce Farrar**
Date: **March 28, 2011**

Heat Input MMBtu/hr	Potential MMCF/yr	Unit Description
3.3	28.91	11 Natural Gas fired Furnaces, rated at 0..3 MMBtu, each
3	26.28	13 Natural Gas fired Furnaces, rated at 0..25 MMBtu, each
1.2	10.51	6 Natural Gas fired Furnaces, rated at 0.2 MMBtu, each
7.5	65.7	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.06	0.25	0.02	3.29	0.18	2.76

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See next page for HAPs emissions calculations.

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

Company Name: **Willoughby Industries, Inc.**
Address City IN Zip: **5105 W. 78th St., Indianapolis, Indiana 46268**
Permit Number: **097-30378-00676**
Reviewer: **Bruce Farrar**
Date: **March 28, 2011**

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	6.899E-05	3.942E-05	2.464E-03	5.913E-02	1.117E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.643E-05	3.614E-05	4.599E-05	1.248E-05	6.899E-05

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See Page 11 for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions
Company Name: Willoughby Industries, Inc.
Address City IN Zip: 5105 W. 78th St., Indianapolis, Indiana 46268
Permit Number: 097-30378-00676
Reviewer: Bruce Farrar
Date: March 28, 2011

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	3,942	0.1	0.0
Summed Potential Emissions in tons/yr	3,942		
CO2e Total in tons/yr	3,944		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: David Schwartzkopf
Willoughby Industries Inc.,
2210 W Morris St
Indianapolis, IN 46221

DATE: August 24, 2011

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
New Source FESOP
097 - 30378 - 00676

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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August 24, 2011

TO: Pike Branch Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: **Willoughby Industries Inc.**
Permit Number: **097 - 30378 - 00676**

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 11/30/07

Mail Code 61-53

IDEM Staff	LPOGOST 8/24/2011 Willoughby Industries Inc 097 - 30378 - 00676 final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Type of Mail: **CERTIFICATE OF MAILING ONLY**	
	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		David Schwartzkopf Willoughby Industries Inc 2210 W Morris St Indianapolis IN 46221 (Source CAATS) Via confirmed delivery									
2		Marion County Health Department 3838 N, Rural St Indianapolis IN 46205-2930 *(Health Department)*									
3		Mrs. Sandra Lee Watson 7834 E 100 S Marion IN 46953 *(Affected Party)*									
4		Indianapolis City Council and Mayors Office 200 East Washington Street, Room E Indianapolis IN 46204 *(Local Official)*									
5		Marion County Commissioners 200 E. Washington St. City County Bldg., Suite 801 Indianapolis IN 46204 *(Local Official)*									
6		Pike Branch Library 6525 Zionsville Road Indianapolis IN 46268 *(Library)*									
7		Matt Mosier Office of Sustainability 2700 South Belmont Ave. Administration Bldg. Indianapolis IN 46221 *(Local Official)*									
8		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 *(Affected Party)*									
9		Duke Realty Limited Partnership PO Box 40509 Indianapolis IN 46240 *(Affected Party)*									
10		Prime Source Food Svc Equipment 7826 Allison Ave Indianapolis IN 46268 *(Affected Party)*									
11		Aerogrow Intl or Current Occupant 5102 W 76th St Indianapolis IN 46268 *(Affected Party)*									
12		Earnest Machines or Current Occupant 5130 W 76th St Indianapolis IN 46268 *(Affected Party)*									
13		Earnest Machine 5139 W 76th St Indianapolis IN 46268 (Affected Party)									
14		JIT Services 5150 W 76th St Indianapolis IN 46268 *(Affected Party)*									
15		A Arnold Moving 5220 W 76th St Indianapolis IN 46268 *(Affected Party)*									

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

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	LPOGOST 8/24/2011 Willoughby Industries Inc 30378 (draft/final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		In Vie or Current Occupant 5240 W 76th St Indianapolis IN 46268 (Affected Party)									
2		Olinger Distributing or Current occupant 5242 W 76th St Indianapolis IN 46268 *(Affected Party)*									
3		Schneker Stinnes Logistics 5250 W 76th St Indianapolis IN 46268 *(Affected Party)*									
4		Olinger Distributing Co 5337 W 78th St Indianapolis IN 46268 *(Affected Party)*									
5		Current Occupant 5302 W 78th St Indianapolis IN 46268 *(Affected Party)*									
6		American Metal Supply Co 5332 W 78th St Indianapolis IN 46268 *(Affected Party)*									
7		Professional Service industries 5362 W 78th St Indianapolis IN 46268 *(Affected Party)*									
8		BTMS (Baker & Taylor Marketing Services) 5045 W 79th St Indianapolis IN 46268 *(Affected Party)*									
9		Alfa Laval 7601 Winton Dr Indianapolis IN 46268 *(Affected Party)*									
10		Current Occupant 7669 Winton Dr Indianapolis IN 46268 *(Affected Party)*									
11		Golden Ventures / Blue Ribbon Products 7687 Winton Dr Indianapolis IN 46268 *(Affected Party)*									
12		Keebler Co 7735 Winton Dr Indianapolis IN 46268 *(Affected Party)*									
13		Dartmouth Investments LLC 9114 Grinnell St Indianapolis IN 46268-1231 (Affected Party)									
14		Donann Investments LLC 9114 Grinnell St Indianapolis IN 46240 *(Affected Party)*									
15		PCO Park 100-140, Pinchal & Co LLC 440 Post Oak PW, Ste 2350 Houston TX 77027 *(Affected Party)*									

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