INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant

DATE: December 30, 2013

RE: Coreslab Structures, Inc. / 097-33424-00542

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.dot 6/13/13

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Minor Source Operating Permit Renewal
OFFICE OF AIR QUALITY

Coreslab Structures (Indianapolis), Inc.
1030 S. Kitley Avenue
Indianapolis, Indiana 46203

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

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

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

Operation Permit No.: M097-33424-00542	
Issued by: Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 30.2013 Expiration Date: December 30, 2023

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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 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

The Permittee owns and operates a stationary pre-cast concrete structure plant.

Source Address:	1030 S. Kitley Avenue, Indianapolis, Indiana 46203
General Source Phone Number:	(317) 353-2118
SIC Code:	3272 (Concrete Products)
County Location:	Marion Wayne Township
Source Location Status:	Nonattainment for SO_2 standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories Greenhouse Gases (GHGs) are less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) concrete batching operation, identified as CBO-1, constructed in 2007, with a maximum production capacity of 94 tons per hour of concrete, consisting of the following equipment:

(1) Two (2) raw material (aggregate) receiving hoppers, identified as H-1 and H-2, constructed in 2007, with a throughput capacity of 30 tons per hour each (they can only operate one at a time since there is only one conveyor).

(2) Raw material storage, consisting of the following:

(A) Six (6) storage bins, identified as B-1, B-2, B-3, B-4, B-5 and B-6, constructed in 2007, with a capacity of 50 tons each.

(B) Two (2) storage bins, identified as B-7 and B-8, constructed in 2007, with a capacity of 25 tons each.

(3) Two (2) Aggregate Conveyors, one for transferring aggregate from the receiving hoppers to the storage bins, identified as RC-1, and one for transferring aggregate from storage to the mixer, identified as LC-1, both constructed in 2007, with a throughput capacity of 300 tons per hour each, covered to reduce particulate emissions.

(4) Cement storage silos, as follows:

(A) Two (2) storage silos, identified as CS-1 and CS-2, with a storage

capacity of 700 barrels each (132 tons), each controlled by an integral baghouse, identified as BH-1 and BH-2.

(B) One (1) storage silo, identified as CS-3, with a storage capacity of 270 barrels (51 tons), controlled by an integral baghouse, identified as BH-3.

(5) Two (2) concrete mixing drums, identified as M-1 and M-2, with a combined throughput capacity of 94 tons per hour of concrete (they can only operate one at a time since there is only one conveyor), with particulate emissions from each controlled by a separate fabric filter baghouse, identified BH-4 and BH-5.

(b) Combustion related activities, including the following:

(1) Four (4) propane-fired heaters, each with a heat input capacity of 0.4 MMBtu/hour.

(2) Four (4) portable kerosene-fired heaters, each with a heat input capacity of 0.150 MMBtu/hour, and two (2) portable kerosene-fired heaters, each with a heat input capacity of 0.055 MMBtu/hour, with all six (6) units firing fuel containing less than five-tenths percent (0.5%) sulfur by weight.

(3) Natural gas-fired heating units, as follows:

Emission Unit Description/Location	Number of Units	Unit Heat Input Capacity (MMBtu/hr)	Total (MMBtu/hr)
Main plant heaters	18	0.1000	1.80
Weld shop heaters	4	0.1500	0.60
Batch plant heaters	2	0.1700	0.34
Aggregate heater	1	1.0000	1.00
Storage bldg heaters	2	0.0625	0.13

(4) Two (2) natural gas-fired hot water boilers, each with a maximum heat input capacity of 1.40 MMBtu/hour.

(c) Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000) Btu/hour, except where total capacity of equipment operated by one stationary source exceeds two million (2,000,000) Btu/hour.

(d) Fuel dispensing activities, including the following:

(1) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

(2) A petroleum fuel, other than gasoline, dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less.

(e) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs less than twelve thousand (12,000) gallons.

(2) Vessels storing the following:

(i) Hydraulic oils.

(ii) Lubricating oils.

(f) The following equipment related to manufacturing activities not resulting in the emission of HAPs:

(1) Cutting torches.

(2) Welding equipment.

(g) Repair activities, including the following:

(1) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(h) One (1) sandblasting operation, identified as SB-1, using Starblast (manufactured by DuPont Titanium Technologies) as media and utilizing one (1) 3/8" nozzle at a maximum pressure of 100 psig, with emissions considered fugitive.

(i) Paved and unpaved roads.

(j) One (1) open-top parts washer with no conveyor, identified as PW-1, using sixty (60) gallons/year of mineral spirits as a cleaner, constructed in 2008, and exhausting indoors.

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, M097-33424-00542, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

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

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

B.4 Enforceability

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

B.5 Severability

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

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

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

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

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

(a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

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

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

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

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

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

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

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

The Permittee shall implement the PMPs.

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

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

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

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

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

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

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.

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

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

(a) All terms and conditions of permits established prior to M097-33424-00542 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

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

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

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

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

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

Request for renewal shall be submitted to:

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

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

(1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

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

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

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

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

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

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

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

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

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

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

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

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

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

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

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

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

(a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.

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

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

C.7 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 plan submitted on April 25, 2008. The plan is included as Attachment A.

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.

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

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

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

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

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.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.

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

Compliance Requirements [326 IAC 2-1.1-11]

C.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 2-6.1-5(a)(2)]

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

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

C.12 Instrument Specifications [326 IAC 2-1.1-11]

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

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

Corrective Actions and Response Steps

C.13 Response to Excursions or Exceedances

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

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

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

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

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

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

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

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

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

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

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

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

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

C.15 Malfunctions Report [326 IAC 1-6-2]

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

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]

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

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

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

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

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

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) concrete batching operation, identified as CBO-1, constructed in 2007, with a maximum production capacity of 94 tons per hour of concrete, consisting of the following equipment:

(1) Two (2) raw material (aggregate) receiving hoppers, identified as H-1 and H-2, constructed in 2007, with a throughput capacity of 30 tons per hour each (they can only operate one at a time since there is only one conveyor).

(2) Raw material storage, consisting of the following:

(A) Six (6) storage bins, identified as B-1, B-2, B-3, B-4, B-5 and B-6, constructed in 2007, with a capacity of 50 tons each.

(B) Two (2) storage bins, identified as B-7 and B-8, constructed in 2007, with a capacity of 25 tons each.

(3) Two (2) Aggregate Conveyors, one for transferring aggregate from the receiving hoppers to the storage bins, identified as RC-1, and one for transferring aggregate from storage to the mixer, identified as LC-1, both constructed in 2007, with a throughput capacity of 300 tons per hour each, covered to reduce particulate emissions.

(4) Cement storage silos, as follows:

(A) Two (2) storage silos, identified as CS-1 and CS-2, with a storage capacity of 700 barrels each (132 tons), each controlled by an integral baghouse, identified as BH-1 and BH-2.

(B) One (1) storage silo, identified as CS-3, with a storage capacity of 270 barrels (51 tons), controlled by an integral baghouse, identified as BH-3.

(5) Two (2) concrete mixing drums, identified as M-1 and M-2, with a combined throughput capacity of 94 tons per hour of concrete (they can only operate one at a time since there is only one conveyor), with particulate emissions from each controlled by a separate fabric filter baghouse, identified BH-4 and BH-5.

(b) Combustion related activities, including the following:

(1) Four (4) propane-fired heaters, each with a heat input capacity of 0.4 MMBtu/hour.

(2) Four (4) portable kerosene-fired heaters, each with a heat input capacity of 0.150 MMBtu/hour, and two (2) portable kerosene-fired heaters, each with a heat input capacity of 0.055 MMBtu/hour, with all six (6) units firing fuel containing less than five-tenths percent (0.5%) sulfur by weight.

(3) Natural gas-fired heating units, as follows:

Emission Unit Description/Location	Number of Units	Unit Heat Input Capacity (MMBtu/hr)	Total (MMBtu/hr)
Main plant heaters	18	0.1000	1.80
Weld shop heaters	4	0.1500	0.60
Batch plant heaters	2	0.1700	0.34
Aggregate heater	1	1.0000	1.00
Storage bldg heaters	2	0.0625	0.13

(4) Two (2) natural gas-fired hot water boilers, each with a maximum heat input capacity of 1.40 MMBtu/hour.

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

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

D.1.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), particulate (PM) emissions from the concrete batching operation (CBO-1), which includes the raw material (aggregate) receiving hoppers, the raw material storage bins, aggregate conveyors, cement storage silos and the concrete mixing drums; and the four (4) propane-fired heaters, two (2) natural gas-fired boilers, four (4) kerosene-fired heaters, and the natural gas-fired heaters, shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.1.2 Particulate Matter Limitations [326 IAC 6.5-1-1]

(a) The baghouses (BH-1, BH-2 and BH-3) shall be in operation at all times that the cement storage silos (CS-1, CS-2 and CS-3) are in operation.

(b) The baghouses (BH-4 and BH-5) shall be in operation at all times that the concrete mixing drums (M-1 and M2) are in operation.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the associated control devices.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(i) One (1) open-top parts washer with no conveyor, identified as PW-1, using sixty (60) gallons/year of mineral spirits as a cleaner, constructed in 2008, and exhausting indoors.

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

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

D.2.1 VOC [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), for cold cleaning degreasers without remote solvent reservoirs located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph Counties:

(a) The Permittee shall ensure the following control equipment and operating requirements are met:

(1) Equip the degreaser with a cover.

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

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

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

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

(6) Store waste solvent only in closed containers.

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

(b) The Permittee shall ensure the following additional control equipment and operating requirements are met:

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

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

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

(C) A refrigerated chiller.

(D) Carbon adsorption.

(E) An alternative system of demonstrated equivalent or better control as those outlined in (b)(1)(A) through (D) of this condition that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

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

(3) If used, solvent spray:

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

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

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

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

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

Company Name:	Coreslab Structures (Indianapolis), Inc.
Address:	1030 S. Kitley Avenue
City:	Indianapolis, Indiana 46203
Phone #:	(317) 353-2118
MSOP #:	M097-33424-00542

I hereby certify that Coreslab Structures (Indianapolis), Inc. is : ☐ still in operation. ☐ no longer in operation.

I hereby certify that Coreslab Structures (Indianapolis), Inc. is : ☐ in compliance with the requirements of MSOP M097-33424-00542. ☐ not in compliance with the requirements of MSOP M097-33424-00542.

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

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

Noncompliance:

MALFUNCTION REPORT

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

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

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

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

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

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

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

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

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

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

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____
_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____
_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

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

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____
*SEE PAGE 2

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

326 IAC 1-6-1 Applicability of rule

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

326 IAC 1-2-39 "Malfunction" definition

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

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

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

_____
_____

ATTACHMENT A
to Minor Source Operating Permit
M097-33424-00542

Fugitive Dust Plan

CORESLAB STRUCTURES (INDIANAPOLIS) INC.

326 IAC 6-5-5 Contents of Control Plans
Authority: IC 13-1-1-4; IC 13-7-7
Affected: IC 13-1-1

Sec. 5. (a) The fugitive particulate matter emission control plan shall be in writing and shall include, at a minimum, the following information:

(1) Name and address of the source:
Coreslab Structures (Indianapolis), Inc.
1030 S. Kitley Ave.
Indianapolis, IN 46203

(2) Name and address of the owner or operator responsible for the execution of the control plan:
Tim Meckes
1030 S. Kitley Ave.
Indianapolis, IN 46203

(3) Identification of all processes, operations, and areas which have the potential to emit fugitive particulate matter in accordance with 326 IAC 6-5-4:
- Batch Plant
- Portable Sand Blasting Operation
- Yard Roads

(4) A map of the source showing aggregate pile areas, access areas around the aggregate pile, unpaved roads, paved roads, parking lots and location of conveyor and transfer points, etc.
- Map Enclosed

(5) The number and mix of vehicular activity occurring on paved roads, unpaved roads, and parking lots:
- Eighty trips daily with semi-tractor and trailer
- Forty trips daily with forklifts and pick up trucks
- Forty trips daily with concrete trucks
- Ten trips daily with dump trucks
- All of the above occur over an area covering approximately 10 acres

(6) Type and quantity of material handled:
- No. 2 & No. 9 Limestone
- Riversand
- Various types of aggregate
- Bulk cement

(7) Equipment used to maintain aggregate piles:

- Front end loader
- Dump trucks

(8) A description of the measures to be implemented to control fugitive particulate matter emissions resulting from emission points identified in subdivision (3):

- Concrete trucks and/or water truck will spread water over driveway areas periodically throughout the day
- Sweep paved roads and parking lot when necessary

(9) A specification of the dust suppressant material, such as oil or chemical including the estimated frequency of application rates and concentrations:

- Water will be spread on yard and drive lanes up to three times a day, depending on conditions.

(10) A specification of the particulate matter collection equipment used as a fugitive particulate matter emission control measure:

- See Attached

(11) A schedule of compliance with the provisions of the control plan. Such schedule shall specify the amount of time the source requires to award any necessary contracts, commence and complete construction, installation, or modification of the fugitive particulate matter emission control measures:

- All measures in place – (bag houses on when mixing, conveyors covered, bulk of sand and aggregate stored inside)

(12) Other relevant data that may be requested by the commissioner, to evaluate the effectiveness of the control plan:

- See attached logs

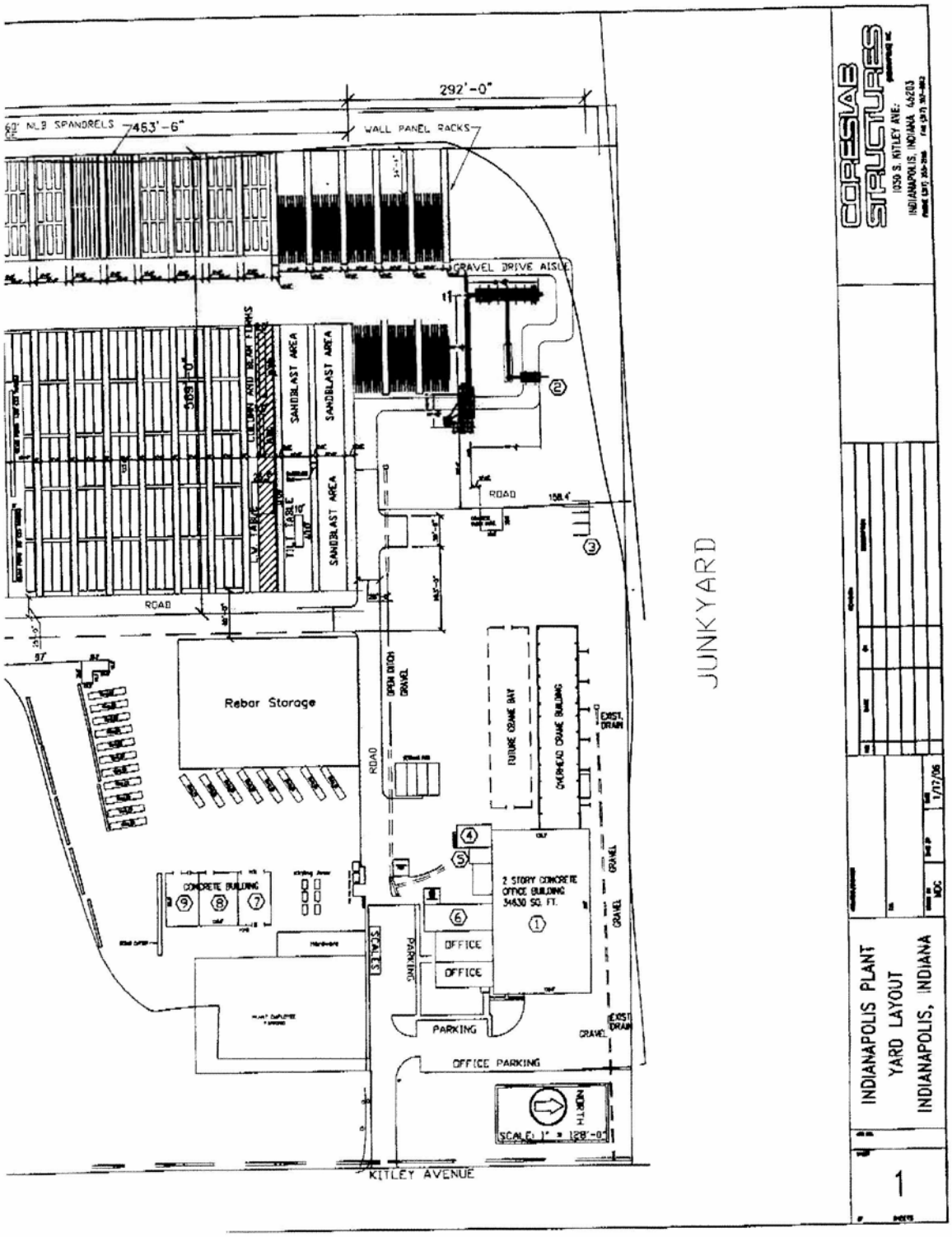
CORESLAB STRUCTURES (INDIANAPOLIS) INC.

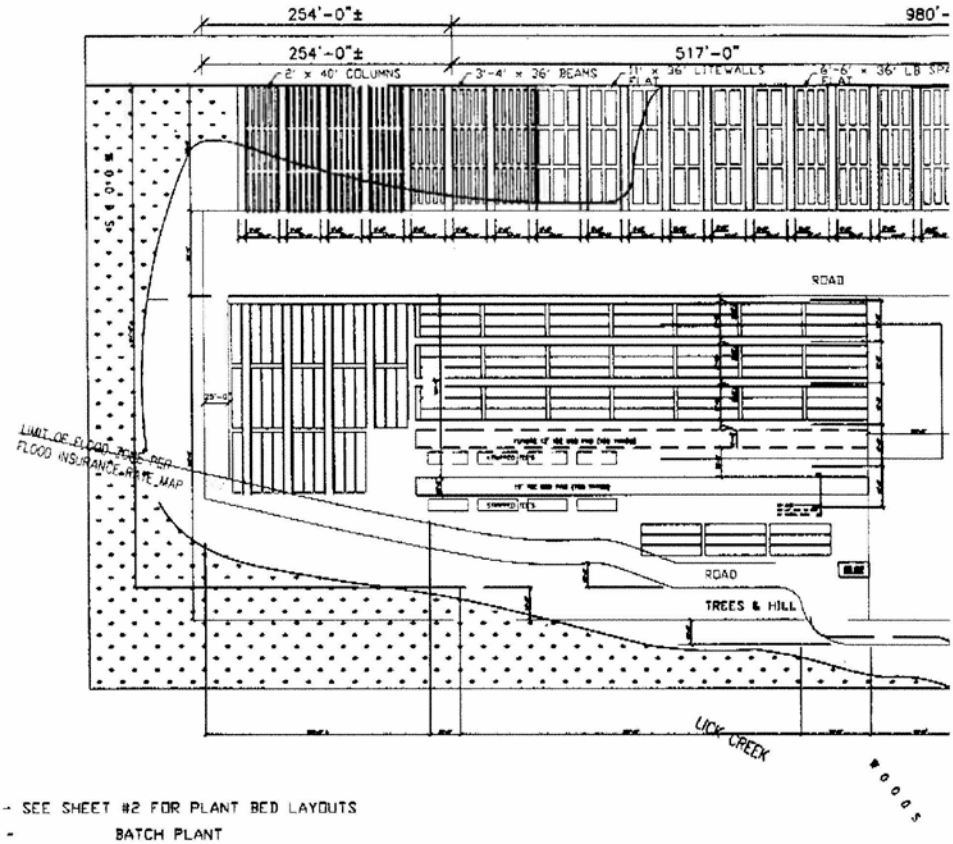
2008 Dust Control Log

MONTH OF _____

DATE	TIME	SIGNATURE

Note: As part of our Source Specific Operating Agreement Coreslab Structures (Indianapolis) Inc. is required to control fugitive particulate matter (PM) emissions from all aggregate storage piles, unpaved roadways and aggregate transfer processes of this source shall be controlled by applying water on an as needed basis.


292'-0"
453'-6"
WALL PANEL RACKS
GRAVEL DRIVE AISLE
SANDBLAST AREA
SANDBLAST AREA
SANDBLAST AREA
ROAD
ROAD
Rebar Storage
OPEN DITCH GRAVEL
FUTURE CRANE BAY
OVERHEAD CRANE BUILDING
EXIST. DRAIN
CONCRETE BUILDING
2 STORY CONCRETE OFFICE BUILDING 34630 SQ. FT.
OFFICE
OFFICE
PARKING
OFFICE PARKING
GRAVEL
JUNKYARD
SCALE: 1" = 128'-0"
KITLEY AVENUE
CORESLAB STRUCTURES
1050 S. KITLEY AVE.
INDIANAPOLIS, INDIANA 46203
INDIANAPOLIS PLANT
YARD LAYOUT
INDIANAPOLIS, INDIANA
1/17/06
1



1 - SEE SHEET #2 FOR PLANT BED LAYOUTS
2 - BATCH PLANT
3 - AGGREGATE STORAGE AREA
4 - PLANT LOCKERS AND LUNCH AREA
5 - Q.C. LAB
6 - WELDING SHOP
7 - MAINTENANCE BAY
8 - SHOP MATERIAL STORAGE BAY
9 - PROPOSED WELD SHOP - SEE SHEET #3 FOR LAYOUT

APPROXIMATELY 38 ACRES

CORESLAB STRUCTURES (INDIANAPOLIS) INC.

1/17/06

K:\DRAFTING\INDIANAPOLIS FORM DRAWINGS\PLANT & YARD DRAWINGS\CURRENT YARD LAYOUT.DWG

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	**Coreslab Structures (Indianapolis), Inc.**
Source Location:	**1030 S. Kitley Avenue, Indianapolis, Indiana 46203**
County:	**Marion**
SIC Code:	**3272 (Concrete Products)**
Permit Renewal No.:	**M097-33424-00542**
Permit Reviewer:	**Joshua Levering**

On November 21, 2013, the Office of Air Quality (OAQ) had a notice published in The Indianapolis Star & News, Indianapolis, Indiana, stating that Coreslab Structures, Inc. had applied for a Minor Source Operating Permit Renewal for the operation of a stationary pre-cast concrete structure plant. The notice also stated that the OAQ proposed to issue a Minor Source Operating Permit Renewal 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.

Comments and Responses

On November 20, 2013, Qaiser Baig submitted comments to IDEM, OAQ on the draft Minor Source Operating Permit Renewal.

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

Comment 1:

On page 4 of 23 of the Technical Support Document: The cold cleaner installation would be exempt under 326 IAC 2-1.1-3, either by the low vapor pressure of the cleaning solvent or the small amount of potential VOC emissions (less than one ton per year). Therefore, it should not be represented as an unpermitted emission unit or referred to the Compliance Section for appropriate action.

Response to Comment 1:

Emission units with the potential to emit (PTE) less than the levels specified at 326 IAC 2-1.1-3(e)(1) are exempt from the permit revision requirements under 326 IAC 2-6.1-6. Pursuant to 326 IAC 2-6.1-4(a)(2)(C), the source is required to provide a description of the emissions units that comprise the source as part of the operating permit application. Therefore, the source was required to inform IDEM of the installation of any emissions units under the provisions of 326 IAC 2-1.1-3(e)(1) that occurred prior to issuance of the MSOP No. M097-24975-00542 issued on November 13, 2008. The source has stated that the following unit was installed prior to November 13, 2008.

(j) One (1) open-top parts washer with no conveyor, identified as PW-1, using sixty (60) gallons/year of mineral spirits as a cleaner, constructed in 2008, and exhausting indoors.

No changes were made as a result of this comment.

IDEM Contact

(a) Questions regarding this proposed Minor Source Operating Permit Renewal can be directed to Joshua Levering 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) 234-6543 or toll free at 1-800-451-6027 extension 4-6543.

(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 Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	Coreslab Structures (Indianapolis), Inc.
Source Location:	1030 S. Kitley Avenue, Indianapolis, Indiana 46203
County:	Marion
SIC Code:	3272 (Concrete Products)
Permit Renewal No.:	M097-33424-00542
Permit Reviewer:	Joshua Levering

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Coreslab Structures (Indianapolis), Inc. relating to the operation of a stationary pre-cast concrete structure plant. On July 12, 2013, Coreslab Structures (Indianapolis), Inc. submitted an application to the OAQ requesting to renew its operating permit. Coreslab Structures (Indianapolis), Inc. was issued its MSOP (M097-24975-00542) on November 13, 2008.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

(a) One (1) concrete batching operation, identified as CBO-1, constructed in 2007, with a maximum production capacity of 94 tons per hour of concrete, consisting of the following equipment:

(1) Two (2) raw material (aggregate) receiving hoppers, identified as H-1 and H-2, constructed in 2007, with a throughput capacity of 30 tons per hour each (they can only operate one at a time since there is only one conveyor).

(2) Raw material storage, consisting of the following:

(A) Six (6) storage bins, identified as B-1, B-2, B-3, B-4, B-5 and B-6, constructed in 2007, with a capacity of 50 tons each.

(B) Two (2) storage bins, identified as B-7 and B-8, constructed in 2007, with a capacity of 25 tons each.

(3) Two (2) Aggregate Conveyors, one for transferring aggregate from the receiving hoppers to the storage bins, identified as RC-1, and one for transferring aggregate from storage to the mixer, identified as LC-1, both constructed in 2007, with a throughput capacity of 300 tons per hour each, covered to reduce particulate emissions.

(4) Cement storage silos, as follows:

(A) Two (2) storage silos, identified as CS-1 and CS-2, with a storage capacity of 700 barrels each (132 tons), each controlled by an integral baghouse, identified as BH-1 and BH-2.

(B) One (1) storage silo, identified as CS-3, with a storage capacity of 270 barrels (51 tons), controlled by an integral baghouse, identified as BH-3.

(5) Two (2) concrete mixing drums, identified as M-1 and M-2, with a combined throughput capacity of 94 tons per hour of concrete (they can only operate one at a time since there is only one conveyor), with particulate emissions from each controlled by a separate fabric filter baghouse, identified BH-4 and BH-5.

(b) Combustion related activities, including the following:

(1) Four (4) propane-fired heaters, each with a heat input capacity of 0.4 MMBtu/hour.

(2) Four (4) portable kerosene-fired heaters, each with a heat input capacity of 0.150 MMBtu/hour, and two (2) portable kerosene-fired heaters, each with a heat input capacity of 0.055 MMBtu/hour, with all six (6) units firing fuel containing less than five-tenths percent (0.5%) sulfur by weight.

(3) Natural gas-fired heating units, as follows:

Emission Unit Description/Location	Number of Units	Unit Heat Input Capacity (MMBtu/hr)	Total (MMBtu/hr)
Main plant heaters	18	0.1000	1.80
Weld shop heaters	4	0.1500	0.60
Batch plant heaters	2	0.1700	0.34
Aggregate heater	1	1.0000	1.00
Storage bldg heaters	2	0.0625	0.13

(4) Two (2) natural gas-fired hot water boilers, each with a maximum heat input capacity of 1.40 MMBtu/hour.

(c) Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000) Btu/hour, except where total capacity of equipment operated by one stationary source exceeds two million (2,000,000) Btu/hour.

(d) Fuel dispensing activities, including the following:

(1) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

(2) A petroleum fuel, other than gasoline, dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less.

(e) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs less than twelve thousand (12,000) gallons.

(2) Vessels storing the following:

(i) Hydraulic oils.

(ii) Lubricating oils.

(f) The following equipment related to manufacturing activities not resulting in the emission of HAPs:

(1) Cutting torches.

(2) Welding equipment.

(g) Repair activities, including the following:

(1) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(h) One (1) sandblasting operation, identified as SB-1, using Starblast (manufactured by DuPont Titanium Technologies) as media and utilizing one (1) 3/8" nozzle at a maximum pressure of 100 psig, with emissions considered fugitive.

(i) Paved and unpaved roads.

Emission Units and Pollution Control Equipment Constructed and Operated without a Permit

The source also consists of the following emission unit that may be operating without a permit:

(j) One (1) open-top parts washer with no conveyor, identified as PW-1, using sixty (60) gallons/year of mineral spirits as a cleaner, constructed in 2008, and exhausting indoors.

The source has confirmed that this emission unit was installed in 2008 prior to the issuance of MSOP No. 097-24975-00542.

Emission Units and Pollution Control Equipment Removed From the Source

No emission units were removed from the source.

Existing Approvals

The source was issued MSOP No. 097-24975-00542 on November 13, 2008. There have been no subsequent approvals issued.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Air Pollution Control Justification as an Integral Part of the Process

On June 27, 2007, the Permittee submitted information requesting that the cement storage silo baghouses, identified as BH-1, BH-2, and BH-3, be considered integral to the process for the cement storage silos, identified as CS-1, CS-2, and CS-3. IDEM, OAQ evaluated the justifications and agreed that the cement storage silo baghouses will be considered integral to the process. This evaluation and approval was discussed in MSOP, No. 097-24975-00542, issued on November 13, 2008, and is provided below:

The Permittee has submitted the following information to justify why the cement storage silo baghouses, identified as BH-1, BH-2 and BH-3, should be considered an integral part of the cement storage silos, identified as Emission Unit CS-1, CS-2 and CS-3:

Each of the cement storage silos are equipped with a baghouse that controls emissions from the pressure relief vent on the storage silo. The dust collected by the baghouse is recovered, returned to the silo for use, and has a net cost of $119/ton. The recovered value of the product is estimated at $11,876 per silo per year. The cost of each baghouse is $3,750. Therefore, the installation of the baghouses provides an overwhelming net economic benefit for particulate control.

The potential to emit from the cement storage silos (EU CS-1, CS-2 and CS-3) is calculated after baghouse emission control because the baghouse is integral to the process.

IDEM, OAQ has evaluated the information submitted and agrees that the cement storage silo baghouses should be considered an integral part of the cement storage silos. This determination is based on the fact that there is an overwhelming net economic benefit for particulate control. Therefore, the permitting level will be determined using the potential to emit after the cement storage silo baghouse. Operating conditions in the proposed permit will specify that this cement storage silo baghouse shall operate at all times when the cement storage silo is in operation.

Enforcement Issue

IDEM is aware that equipment may be operating prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled “Emission Units and Pollution Control Equipment Constructed and Operated without a Permit."

(a) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Marion County (Wayne Township).

Pollutant	Designation
SO_2	Non-attainment effective October 4, 2013, for the Center, Perry, and Wayne Twp. The remainder of Marion County is unclassifiable or attainment effective.
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.

Pollutant	Designation
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. Unclassifiable or attainment effective federally July 11, 2013, for PM2.5.	

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

(b) $PM_{2.5}$
Marion County has been classified as attainment for $PM_{2.5}$. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct $PM_{2.5,}$ $SO_{2,}$ and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) SO_2
U.S. EPA, in the Federal Register Notice 78 FR 47191 dated August 5, 2013, has designated Marion County Wayne Township as nonattainment for SO_2. Therefore, SO_2 emissions were reviewed pursuant to the requirements of Emission Offset, 326 IAC 2-3.

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

Fugitive Emissions

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

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.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM*	--
PM_{10}	95.00
$PM_{2.5}$	46.96
SO_2	4.14
VOC	5.08
CO	11.41
NO_x	42.93
GHGs as CO_2e	6,353.43
Single HAP	0.18 (Manganese)
Total HAP	0.52

*Particulate Matter (PM) emissions are not counted in Part 70 Determination applicability.

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

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all regulated pollutants, excluding GHGs, is less than 100 tons per year. However, PM_{10} and $PM_{2.5}$ is equal to or greater than twenty-five (25) tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHGs is less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source will be issued an MSOP Renewal.

Federal Rule Applicability

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

NSPS

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

NESHAP

(a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers and

Process Heaters, Subpart DDDDD are not included in the permit for the boilers because pursuant to 40 CFR 63.7480, these boilers are not located at a major source of HAPs.

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources, Subpart JJJJJJ are not included in the permit for the boilers because pursuant to 40 CFR 63.11195(f), these boilers are hot water heaters.

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

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)
This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

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

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 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.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Coreslab Structures (Indianapolis) Inc. is subject to the requirements of 326 IAC 6-4 because the concrete batching operation and sandblasting operation have the potential to emit fugitive particulate emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
Coreslab Structures (Indianapolis) Inc. is subject to the requirements of 326 IAC 6-5, because the concrete batching operation and sandblasting operation have potential fugitive particulate emissions greater than 25 tons per year. Pursuant to 326 IAC 6-5, fugitive particulate matter emissions shall be controlled according to the Fugitive Dust Control Plan, submitted on April 25, 2008, which is included as Attachment A to the permit.

State Rule Applicability – Individual Facilities

Concrete Batching Operation (CBO-1)

326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County) applies to sources that have potential to emit greater than one hundred (100) tons per year of particulate and actual emissions greater than ten (10) tons per year and are not otherwise limited by 326 IAC 6.5-1-2(b) through (g) or 326 IAC 6.5-6. Therefore the requirements of 326 IAC 6.5-1-2(a) apply to the Concrete Batching Operations, which includes the raw material (aggregate) receiving hoppers, the raw material storage bins, aggregate conveyors, cement storage silos and the concrete mixing drums. Particulate emissions from each of these facilities shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust.

Sandblasting Operation (SB-1)

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Some of the pre-cast concrete parts that are manufactured at this facility are sandblasted to add texture to some of the surfaces. Since these pre-cast concrete parts are large and very heavy and require specialized equipment to move, the source claims it is not possible to sandblast these parts inside an enclosure for particulate control. Since this operation cannot be feasibly enclosed, emissions are considered fugitive. Therefore, 326 IAC 6.5 and 326 IAC 6-3-2 do not apply and particulate emissions shall be limited by 326 IAC 6-5.

Boilers

326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-1(g), if any limitation established by this rule is inconsistent with a limitation contained in a facility's construction or operation permit as issued pursuant to 326 IAC 2 concerning permit review regulations, then the limitations contained in the source's current permits prevail. Therefore, the boilers will be subject to 326 IAC 6.5 (Particulate Matter Limitations Except Lake County).

Heaters and Boilers

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-2, the Particulate emissions from the four (4) propane-fired heaters, two (2) natural gas-fired boilers, four (4) kerosene-fired heaters, and the natural gas-fired heaters shall not exceed three hundredth (0.03) grains per dry standard cubic foot of exhaust.

Parts Washer

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

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

(1) Equip the degreaser with a cover.

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

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

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

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

(6) Store waste solvent only in closed containers.

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

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

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

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

(B) A water cover when solvent used is insoluble in, and heavier than, water.
(C) A refrigerated chiller.
(D) Carbon adsorption.
(E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

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

(3) If used, solvent spray:
(A) must be a solid, fluid stream; and
(B) shall be applied at a pressure that does not cause excessive splashing.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T145-28774-00011. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

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

The Permittee owns and operates a stationary pre-cast concrete structure plant.

Source Address:	1030 S. Kitley Avenue, Indianapolis, Indiana 46203
~~Mailing Address:~~	~~1030 S. Kitley Avenue, Indianapolis, IN 46203~~
General Source Phone Number:	317-353-2118
SIC Code:	3272 **(Concrete Products)**
County Location:	Marion
Source Location Status:	**Nonattainment for SO_2 standard** ~~Nonattainment for PM2.5 standard~~ Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Nonattainment NSR Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories **Greenhouse Gases (GHGs) are less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.**

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) concrete batching operation, identified as ~~Emission Unit~~ CBO-1, constructed in 2007, with a maximum production capacity of 94 tons per hour of concrete, consisting of the following equipment:

(1) Two (2) raw material (aggregate) receiving hoppers, identified as ~~Emission Unit~~ H-1 and ~~Emission Unit~~ H-2, constructed in 2007, with a throughput capacity of 30 tons per hour each (they can only operate one at a time since there is only one conveyor).

(2) Raw material storage, consisting of the following:

(A) Six (6) storage bins, identified as ~~Emission Unit~~ B-1, B-2, B-3, B-4, B-5 and B-6, constructed in 2007, with a capacity of 50 tons each.

(B) Two (2) storage bins, identified as ~~Emission Unit~~ B-7 and B-8, constructed in 2007, with a capacity of 25 tons each.

(3) Two (2) Aggregate Conveyors, one for transferring aggregate from the receiving hoppers to the storage bins, identified as ~~Emission Unit~~ RC-1, and one for transferring aggregate from storage to the mixer, identified as ~~Emission Unit~~ LC-1, both constructed in 2007, with a throughput capacity of 300 tons per hour each, covered to reduce particulate emissions.

(4) Cement storage silos, as follows:

(A) Two (2) storage silos, identified as ~~Emission Unit~~ CS-1 and CS-2, with a storage capacity of 700 barrels each (132 tons), each controlled by an integral baghouse, identified as BH-1 and BH-2.

(B) One (1) storage silo, identified as ~~Emission Unit~~ CS-3, with a storage capacity of 270 barrels (51 tons), controlled by an integral baghouse, identified as BH-3.

(5) Two (2) concrete mixing drums, identified as ~~Emission Unit~~ M-1 and M-2, with a combined throughput capacity of 94 tons per hour of concrete (they can only operate one at a time since there is only one conveyor), with particulate emissions from each controlled by a separate fabric filter baghouse, identified BH-4 and BH-5.

(b) Combustion related activities, including the following:

~~(1) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.~~

~~(2) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths percent (0.5%) sulfur by weight.~~

(1) Four (4) propane-fired heaters, each with a heat input capacity of 0.4 MMBtu/hour.

(2) Four (4) portable kerosene-fired heaters, each with a heat input capacity of 0.150 MMBtu/hour, and two (2) portable kerosene-fired heaters, each with a heat input capacity of 0.055 MMBtu/hour, with all six (6) units firing fuel containing less than five-tenths percent (0.5%) sulfur by weight.

(3) Natural gas-fired heating units, as follows:

Emission Unit Description/Location	Number of Units	Unit Heat Input Capacity (MMBtu/hr)	Total (MMBtu/hr)
Main plant heaters	**18**	**0.1000**	**1.80**
Weld shop heaters	**4**	**0.1500**	**0.60**
Batch plant heaters	**2**	**0.1700**	**0.34**
Aggregate heater	**1**	**1.0000**	**1.00**
Storage bldg heaters	**2**	**0.0625**	**0.13**

(4) Two (2) natural gas-fired hot water boilers, each with a maximum heat input capacity of 1.40 MMBtu/hour.

***

(i) Paved and unpaved roads.

(j) One (1) open-top parts washer with no conveyor, identified as PW-1, using sixty (60) gallons/year of mineral spirits as a cleaner, constructed in 2008, and exhausting indoors.

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

(a) This permit, M097-~~24975~~**33424**-00542, is issued for a fixed term of ~~five (5)~~**ten (10)** years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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B.~~4~~**3** Term of Conditions [326 IAC 2-1.1-9.5]

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B.~~5~~**4** Enforceability

~~(a)~~ 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 ~~and OES~~, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

~~(b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by OES.~~

B.~~6~~**5** Severability

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B.~~7~~**6** Property Rights or Exclusive Privilege

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B.~~8~~**7** Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ ~~and OES~~, within a reasonable time, any information that IDEM, OAQ ~~and OES~~ 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. ~~The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~ Upon request, the Permittee shall also furnish to IDEM, OAQ ~~and OES~~ copies of records required to be kept by this permit.

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~~B.9 Certification~~

~~(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.~~

~~(b) One (1) certification shall be included, using the attached Certification Form, 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.~~10~~**8** Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

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

~~and~~

~~Indianapolis Office of Environmental Services~~
~~Air Quality Management Section~~
~~2700 South Belmont Avenue~~
~~Indianapolis Indiana 46221-2097~~

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

B.~~11~~**9** Preventive Maintenance Plan [326 IAC 1-6-3]

(a) ~~If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:~~
A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

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

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

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

The Permittee shall implement the PMPs.

~~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 Branch, Office of Air Quality~~

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

~~and~~

~~Indianapolis Office of Environmental Services~~
~~Air Quality Management Section~~
~~2700 South Belmont Avenue~~
~~Indianapolis Indiana 46221-2097~~

~~The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

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

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

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

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

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

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

The Permittee shall implement the PMPs.

(~~b~~**c**) A copy of the PMPs shall be submitted to IDEM, OAQ ~~and OES~~ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ ~~and OES~~. IDEM, OAQ ~~and OES~~ 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~~. or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

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

B.~~12~~**10** Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M097-~~24975~~**33424**-00542 and issued pursuant to permitting programs approved into the state implementation plan have been either:

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B.~~13~~**11** Termination of Right to Operate [326 IAC 2-6.1-7(a)]

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B.~~14~~**12** Permit Renewal [326 IAC 2-6.1-7]

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

Request for renewal shall be submitted to:

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

~~and~~

~~Indianapolis Office of Environmental Services~~
~~Air Quality Management Section~~
~~2700 South Belmont Avenue~~
~~Indianapolis Indiana 46221-2097~~

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

(1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and

(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 ~~and OES~~ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ ~~and OES~~ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified**, pursuant to 326 IAC 2-6.1-4(b),** in writing by IDEM, OAQ ~~and OES~~ any additional information identified as being needed to process the application.

B.~~15~~**13** Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

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

Indiana Department of Environmental Management
~~Permits Branch~~**Permit Administration and Support Section**, Office of Air Quality
100 North Senate Avenue

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

~~and~~

~~Indianapolis Office of Environmental Services~~
~~Air Quality Management Section~~
~~2700 South Belmont Avenue~~
~~Indianapolis Indiana 46221-2097~~

~~Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

***

B.~~16~~**14** Source Modification Requirement

***

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

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

***

B.~~18~~**16** Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

~~and~~

~~Indianapolis Office of Environmental Services~~
~~Air Quality Management Section~~
~~2700 South Belmont Avenue~~
~~Indianapolis Indiana 46221-2097~~

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

***

B.~~19~~**17** Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees ~~to IDEM, OAQ and OES within~~ **due no later than** thirty (30) calendar days of receipt of a bill~~ing.~~ **from IDEM, OAQ.**

***

B.20**18** Credible Evidence [326 IAC 1-1-6]

***

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

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

C.1**2** Permit Revocation [326 IAC 2-1.1-9]

***

C.2**3** Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of thirty**forty** percent (30**40**%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

***

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

***

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. **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**6** Fugitive Dust Emissions [326 IAC 6-4]

***

C.6**7** 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 plan submitted on April 25, 2008. The plan is included as 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.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

***

(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
Asbestos Section**Compliance and Enforcement Branch**, Office of Air Quality
100 North Senate Avenue
MC 61-5**2****3** IGCN 1003
Indianapolis, Indiana 46204-2251

and

Indianapolis Office of Environmental Services

~~Air Quality Management Section~~
~~2700 South Belmont Avenue~~
~~Indianapolis Indiana 46221-2097~~

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 by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

***

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

(a) ~~Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.~~

~~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 ~~Data Section~~**and Enforcement Branch**, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

~~and~~

~~Indianapolis Office of Environmental Services~~
~~Air Quality Management Section~~
~~2700 South Belmont Avenue~~
~~Indianapolis Indiana 46221-2097~~

no later than thirty-five (35) days prior to the intended test date. ~~The protocol submitted by the Permittee does not require certification 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 certification 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 ~~and OES~~ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ ~~and OES~~ 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.

***

~~C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]~~

~~Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.~~

C.13**2** Instrument Specifications [326 IAC 2-1.1-11]

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

***

C.14**3** Response to Excursions or Exceedances

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

(a) ~~t~~**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 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:** ~~and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are 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.** ~~within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.~~

***

(e) The Permittee shall **record the reasonable response steps taken.** ~~maintain the following records:~~

~~(1) monitoring data;~~

~~(2) monitor performance data, if applicable; and~~

~~(3) corrective actions taken.~~

C.1~~5~~**4** Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall ~~take appropriate response actions~~ **submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test**. ~~The Permittee shall submit a description of these response actions to IDEM, OAQ and OES, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.~~

(b) A retest to demonstrate compliance shall be performed ~~within one hundred twenty (120)~~ **no later than one hundred eighty (180)** days **after the date of the test.** ~~of receipt of the original test results.~~ Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred ~~twenty~~**eighty** (1~~2~~**8**0) 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 the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

***

C.1~~6~~**5** Malfunctions Report [326 IAC 1-6-2]

***

C.1~~7~~**6** General Record Keeping Requirements [326 IAC 2-6.1-5]

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

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required**, the Permittee** shall be ~~implemented~~**allowed up to** ~~within~~ 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.1~~8~~**7** General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

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

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

~~and~~

~~Indianapolis Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097~~

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

~~(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

(d) ~~The first report shall cover the period commencing on the date of issuance of this permit 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.

***

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) concrete batching operation, identified as ~~Emission Unit~~ CBO-1, constructed in 2007, with a maximum production capacity of 94 tons per hour of concrete, consisting of the following equipment:

(1) Two (2) raw material (aggregate) receiving hoppers, identified as ~~Emission Unit~~ H-1 and ~~Emission Unit~~ H-2, constructed in 2007, with a throughput capacity of 30 tons per hour each (they can only operate one at a time since there is only one conveyor).

(2) Raw material storage, consisting of the following:

(A) Six (6) storage bins, identified as ~~Emission Unit~~ B-1, B-2, B-3, B-4, B-5 and B-6, constructed in 2007, with a capacity of 50 tons each.

(B) Two (2) storage bins, identified as ~~Emission Unit~~ B-7 and B-8, constructed in 2007, with a capacity of 25 tons each.

(3) Two (2) Aggregate Conveyors, one for transferring aggregate from the receiving hoppers to the storage bins, identified as ~~Emission Unit~~ RC-1, and one for transferring aggregate from storage to the mixer, identified as ~~Emission Unit~~ LC-1, both constructed in 2007, with a throughput capacity of 300 tons per hour each, covered to reduce particulate emissions.

(4) Cement receiving, transfer and storage operations, as follows:

(A) Two (2) storage silos, identified as ~~Emission Unit~~ CS-1 and CS-2, with a storage capacity of 700 barrels each (132 tons), each controlled by an integral baghouse, identified as BH-1 and BH-2.

(B) One (1) storage silo, identified as ~~Emission Unit~~ CS-3, with a storage capacity of 270 barrels (51 tons), controlled by an integral baghouse, identified as BH-3.

(5) Two (2) concrete mixing drums, identified as ~~Emission Unit~~ M-1 and M-2, with a combined throughput capacity of 94 tons per hour of concrete (they can only operate one at a time since there is only one conveyor), with particulate emissions from each

controlled by a separate fabric filter baghouse, identified BH-4 and BH-5.

(b) Combustion related activities, including the following:

(1) Four (4) propane-fired heaters, each with a heat input capacity of 0.4 MMBtu/hour.

(2) Four (4) portable kerosene-fired heaters, each with a heat input capacity of 0.150 MMBtu/hour, and two (2) portable kerosene-fired heaters, each with a heat input capacity of 0.055 MMBtu/hour, with all six (6) units firing fuel containing less than five-tenths percent (0.5%) sulfur by weight.

(3) Natural gas-fired heating units, as follows:

Emission Unit Description/Location	Number of Units	Unit Heat Input Capacity (MMBtu/hr)	Total (MMBtu/hr)
Main plant heaters	18	0.1000	1.80
Weld shop heaters	4	0.1500	0.60
Batch plant heaters	2	0.1700	0.34
Aggregate heater	1	1.0000	1.00
Storage bldg heaters	2	0.0625	0.13

(4) Two (2) natural gas-fired hot water boilers, each with a maximum heat input capacity of 1.40 MMBtu/hour.

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

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

D.1.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), particulate (PM) emissions from the concrete batching operation (CBO-1), which includes the raw material (aggregate) receiving hoppers, the raw material storage bins, aggregate conveyors, cement storage silos and the concrete mixing drums**; and the four (4) propane-fired heaters, two (2) natural gas-fired boilers, four (4) kerosene-fired heaters, and the natural gas-fired heaters**, shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.1.2 Particulate Matter Limitations [**326 IAC 6.5-1-1]**

(a) The baghouses (BH-1, BH-2 and BH-3) shall be in operation at all times that the cement storage silos (Emission Unit CS-1, CS-2 and CS-3) are in operation.

(b) The baghouses (BH-4 and BH-5) shall be in operation at all times that the concrete mixing drums (M-1 and M2) are in operation.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the associated control devices.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(i) One (1) open-top parts washer with no conveyor, identified as PW-1, using sixty (60) gallons/year of mineral spirits as a cleaner, constructed in 2008, and exhausting indoors.

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

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

D.2.1 VOC [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), for cold cleaning degreasers without remote solvent reservoirs located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph Counties:

(a) The Permittee shall ensure the following control equipment and operating requirements are met:

(1) Equip the degreaser with a cover.

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

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

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

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

(6) Store waste solvent only in closed containers.

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

(b) The Permittee shall ensure the following additional control equipment and operating requirements are met:

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

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

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

(C) A refrigerated chiller.

(D) Carbon adsorption.

(E) An alternative system of demonstrated equivalent or better control as those outlined in (b)(1)(A) through (D) of this condition that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.

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

(3) If used, solvent spray:

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

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

***

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal be approved. This recommendation is based on the following facts and conditions:

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 July 12, 2013.

Conclusion

The operation of this stationary pre-cast concrete structure plant shall be subject to the conditions of the attached MSOP Renewal No. 097-33424-00542.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Joshua Levering 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) 234-6543 or toll free at 1-800-451-6027 extension 4-6543.

(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.idem.in.gov

Appendix A: Emissions Calculations
Summary

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

	Potential to Emit (Tons/year) - MSOP Applicability										
Emission Unit	***PM (tons/yr)**	**PM10 (tons/yr)**	**PM2.5 (tons/yr)**	**SO2 (tons/yr)**	**NOx (tons/yr)**	**VOC (tons/yr)**	**CO (tons/yr)**	**GHG (TPY)**	**Total HAP (tons/yr)**	**Single HAP (tons/yr) [Worst Case]**	
Concrete Batching	--	57.76	12.61	--	--	--	--	--	--	--	--
Sandblasting Operations	--	28.54	28.54	--	--	--	--	--	--	--	--
Propane Heaters	--	0.05	0.05	0.01	1.00	0.08	0.57	979.07	--	--	--
Kerosene Heaters	--	0.03	0.03	1.58	0.44	0.01	0.11	477.58	0.19	0.19	Formaldehyde
Natural Gas Heaters & Boilers	--	0.22	0.22	0.02	2.86	0.16	2.40	3,455.34	0.05	0.05	Hexane
Welding and Cutting Operations	--	2.25	2.25	--	--	--	--	--	0.19	0.18	Manganese
Parts Washer	--	--	--	--	--	0.85	--	--	--	--	--
Storage Tanks**	--	--	--	--	--	0.84	--	--	0.05	0.02	Xylene
ICE less than 2 MMBtu/hour	--	2.72	2.72	2.54	38.63	3.15	8.32	1,441.45	0.03	0.01	Formaldehyde
Roads	--	3.43	0.55	--	--	--	--	--	--	--	--
Total	**--**	**95.00**	**46.96**	**4.14**	**42.93**	**5.08**	**11.41**	**6,353.43**	**0.52**	**0.18**	**Manganese**

*Particulate Matter (PM) emissions are not counted in Part 70 Determination Applicability.
**Values are calculated using TANKS (Version 4.0.9d)

	Potential to Emit (Tons/year) - PSD and EO										
Emission Unit	***PM (tons/yr)**	**PM10 (tons/yr)**	**PM2.5 (tons/yr)**	**SO2 (tons/yr)**	**NOx (tons/yr)**	**VOC (tons/yr)**	**CO (tons/yr)**	**GHG (TPY)**	**Total HAP (tons/yr)**	**Single HAP (tons/yr) [Worst Case]**	
Concrete Batching	240.57	57.76	12.61	--	--	--	--	--	--	--	--
Propane Heaters	0.02	0.05	0.05	0.01	1.00	0.08	0.57	979.07	--	--	--
Kerosene Heaters	0.04	0.03	0.03	1.58	0.44	0.01	0.11	477.58	0.19	4.66E-05	Selenium
Natural Gas Heaters & Boilers	0.05	0.22	0.22	0.02	2.86	0.16	2.40	3,455.34	0.05	0.05	Hexane
Welding and Cutting Operations	2.25	2.25	2.25	--	--	--	--	--	0.19	0.18	Manganese
Parts Washer	--	--	--	--	--	0.85	--	--	--	--	--
Storage Tanks**	--	--	--	--	--	0.84	--	--	0.05	0.02	Xylene
ICE less than 2 MMBtu/hour	2.72	2.72	2.72	2.54	38.63	3.15	8.32	1,441.45	0.03	0.01	Formaldehyde
Total	**245.65**	**63.02**	**17.87**	**4.14**	**42.93**	**5.08**	**11.41**	**6,353.43**	**0.52**	**0.18**	**Manganese**
Sandblasting Operation*	40.77	28.54	28.54	--	--	--	--	--	--	--	--
Roads	--	3.43	0.55	--	--	--	--	--	--	--	--

* Since this type of operation is not 1 of the 28 listed source categories and there is no applicable NSPS that was in effect prior to 8/7/80, fugitives are not counted toward PSD applicability.
**Values are calculated using TANKS (Version 4.0.9d)

Emissions Calculations
Unrestricted PTE - Concrete Batching Operations

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

Emission Units (Unit IDs)	Throughput (ton/hr)	Emission Factors (lb/ton)			Emissions (ton/year)			Emission Factor Source
		PM	PM10	PM-2.5	PM	PM10	PM-2.5	
Aggregate Receiving (H-1 & H-2)	60	0.0069	0.0033	0.0033	1.81	0.87	0.87	AP-42 Ch.11.12-2
Aggregate Conveyors to Storage (RC-1) and Storage Bins (B-1 through B-8)	300	0.0021	0.00099	0.00099	2.76	1.30	1.30	AP-42 Ch.11.12-2
Aggregate Conveyors to Mixers (LC-1)	300	0.0021	0.00099	0.00099	2.76	1.30	1.30	AP-42 Ch.11.12-2
Cement Receiving, Transfer and Storage Silos (CS-1, CS-2 & CS-3)*	20	0.73	0.47	0.47	3.20	2.06	2.06	AP-42 Ch.11.12-2
Two (2) Concrete Mixing Drums (M-1 & M-2)**	94	0.559	0.127	0.017	230.04	52.23	7.08	AP-42 Ch.11.12-2
				TOTALS	240.6	57.8	12.6	

METHODOLOGY

Ton/yr = Throughput (ton/hr) * EF (lb/ton) * 8760 hr/yr * ton/2000 lbs

*PTE of the Cement Storage Silos (CS-1, 2 & 3) is calculated after baghouse emission control because the baghouse is integral to the process.
Baghouse has a rated efficiency of 95%, based on manufacturer's specifications provided by the source.

**Emission Factors for the Concrete Mixing Drums were calculated using the AP-42 Equation 11.12-1, with Parameters from Table 11.12-4 for Uncontrolled PM, PM10, and PM2.5.
See equation, parameters, and explanation below:

$$E = k(0.0032)[U^a/M^b]+c$$

Where: U = Wind speed at the material drop point, miles per hour (mph)
M = Minimum moisture (% by weight) of cement and cement supplements
NOTES: Average wind speed for Indiana = 12mph
Average moisture content typically vary from 0.4 to 0.55; a conservative estimate of 0.28 was used in this calculation.

	Table 11.12-4. Equation Parameters for Central Mix Operations				
	Parameter Category	k	a	b	c
Uncontrolled	Total PM	5.9	0.6	1.3	0.12
	PM10	1.92	0.4	1.3	0.04
	PM2.5	0.38	0.4	1.3	0

	Emission Factor Parameters		
	E	U	M
Uncontrolled PM	0.559	12	0.28
Uncontrolled PM10	0.127	12	0.28
Uncontrolled PM2.5	0.017	12	0.28

Emissions Calculations
Fugitive Sandblasting Operations

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

Table 1 - Emission Factors for Abrasives

	Emission Factor	
Abrasive	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Table 2-Density of Abrasives (lb/ft3)

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Star-Blast	128
Steel	487

Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)
Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

	Nozzle Pressure (psig)							
Internal diameter, in	30	40	50	60	70	80	90	100
1/8	28	35	42	49	55	63	70	77
3/16	65	80	94	107	122	135	149	165
1/4	109	138	168	195	221	255	280	309
5/16	205	247	292	354	377	420	462	507
3/8	285	355	417	477	540	600	657	720
7/16	385	472	560	645	755	820	905	940
1/2	503	615	725	835	945	1050	1160	1265
5/8	820	990	1170	1336	1510	1680	1850	2030
3/4	1140	1420	1670	1915	2160	2400	2630	2880
1	2030	2460	2900	3340	3780	4200	4640	5060

Calculations

Adjusting Flow Rates for Different Abrasives and Nozzle Diameters

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)

FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (ID1) From Table 3 =	720
D = Density of abrasive (lb/ft3) From Table 2 =	128
D1 = Density of sand (lb/ft3) =	99
ID = Actual nozzle internal diameter (in) =	0.375
ID1 = Nozzle internal diameter (in) from Table 3 =	0.375
Flow Rate (FR) (lb/hr) =	930.9 per nozzle

Uncontrolled Emission (E, lb/hr)

EF - emission factor (lb PM / lb abrasive) From Table 1 =	0.010
FR = Flow Rate (lb/hr) =	930.9
w = fraction of time of wet blasting =	0%
N = number of nozzles =	1

Uncontrolled PM Emissions =	**9.31**	**lb/hr**
PM =	**40.77**	**ton/yr**
PM10 / PM-2.5 =	**28.54**	**ton/yr**

METHODOLOGY
Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. 1, Section 3 "Abrasive Blasting" (1991 edition)
Ton/yr = lb/hr X 8760 hr/yr X ton/2000 lbs
Flow Rate (FR) (lb/hr) = FR1 x (ID/ID1)2 x (D/D1)
E = EF x FR x (1 - w/200) x N

Appendix A: Emission Calculations
Portable Propane Heaters
(Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

Four (4) propane heaters - each with a heat input capacity of 0.4 MMBtu/hr

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur Content =	1.00 grains/100ft^3
1.60	153.18		

	Pollutant						
	PM*	PM10*	direct PM2.5**	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.2	0.7	0.7	0.10	13.0	1.0	7.5
				(0.10S)		**TOC value	
Potential Emission in tons/yr	0.02	0.05	0.05	0.01	1.00	0.08	0.57

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

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

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

Methodology

1 gallon of LPG has a heating value of 94,000 Btu
1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)
(Source - AP-42 (Supplement B 10/96) page 1.5-1)

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

Emission Factors are from AP42 (7/08), Table 1.5-1 (SCC #1-02-010-02)
Propane Emission Factors shown.
Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton
NOTE: HAP emissions have not been calculated as HAP emission factors are not available in AP-42, Chapter 1.5

See next page for Greenhouse Gas calculations.

Appendix A: Emission Calculations
Portable Propane Heaters
(Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)
Greenhouse Gas

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/kgal	12,500	0.2	0.9
Potential Emission in tons/yr	957	0.0	0.1
Summed Potential Emissions in tons/yr	957		
CO2e Total in tons/yr	979		

Methodology

The CO2 Emission Factor for Propane is 12500. The CO2 Emission Factor for Butane is 14300.
Emission Factors are from AP 42 (7/08), Table 1.5-1 (SCC #1-02-010-02)
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/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 ton/yr x N2O GWP (310).

Emissions Calculations
Commercial/Institutional/Residential Combustors (<100 mmBtu/hr)
Portable Kerosene Heaters
Criteria Pollutant and Carbon Dioxide Emissions

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

Four (4) kerosene heaters @150,000 Btu/hr each and two (2) heaters @55,000 Btu/hr each

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
0.71	44.4	0.5

	Pollutant								
	PM*	PM10	PM2.5	SO2**	NO_X	VOC***	CO	CO2	CH4
Emission Factor in lb/kgal	2.0	1.3	1.3	71	20.0	0.34	5	21,500	0.475
Potential Emission in tons/yr	0.04	0.03	0.03	1.58	0.44	0.01	0.11	477.6	0.01

METHODOLOGY
1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, 1.3-3 and 1.3-12 (SCC 1-03-005-01-01/02/03) Supplement E 9/98 (see errata file)
*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.
**SO2 emision factor = 142S, where S = sulfur weight %.
***VOC emission factor = Non-methane total organic carbon emission factor.
Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton.

HAPs Emissions

HAPs - Metals

Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05	**TOTAL (ton/year)**
Potential Emission in tons/yr	1.24E-05	9.33E-06	9.33E-06	9.33E-06	2.80E-05	9.33E-06	1.87E-05	9.33E-06	4.66E-05	0.19

HAPs - Organics

Emission Factor in lb/mmBtu	POM 0.0013	Formaldehyde 0.061
Potential Emission in tons/yr	0.004	0.19

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr/2,000 lb/ton

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

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

Emission Unit Description/Location	Number of Units	Unit Heat Input Capacity (MMBtu/hr)	Totals (MMBtu/hr)
Main plant heaters	18	0.1000	1.80
Weld shop heaters	4	0.1500	0.60
Batch plant heaters	2	0.1700	0.34
Aggregate heater	1	1.0000	1.00
Storage bldg heaters	2	0.0625	0.13
Hot water boilers	2	1.4000	2.80
		TOTAL (MMBtu/hr) =	6.67

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
6.67	1020	57.2

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.05	0.22	0.22	0.02	2.86	0.16	2.40

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	6.010E-05	3.434E-05	2.147E-03	5.152E-02	9.731E-05	**5.385E-02**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.431E-05	3.148E-05	4.007E-05	1.088E-05	6.010E-05	**1.568E-04**
					Total HAPs	**5.401E-02**
					Worst HAP	**5.152E-02**

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Greenhouse Gas Calculations

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	3,434	0.1	0.1
Summed Potential Emissions in tons/yr	3,435		
CO2e Total in tons/yr	3,455		

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.
Global 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 ton/yr x N2O GWP (310).

Appendix A: Emissions Calculations
Welding and Thermal Cutting

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

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	
Submerged Arc	0			0.036	0.011			0.000	0.000	0.000	0	0.000
Metal Inert Gas (MIG)(carbon steel)	4	20.73		0.0055	0.0005			0.456	0.041	0.000	0	0.041
Stick (E7018 electrode)	1	2.073		0.0211	0.0009			0.044	0.002	0.000	0	0.002
Tungsten Inert Gas (TIG)(carbon steel)	0			0.0055	0.0005			0.000	0.000	0.000	0	0.000
Oxyacetylene(carbon steel)	0			0.0055	0.0005			0.000	0.000	0.000	0	0.000
	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	
Oxyacetylene	0			0.1622	0.0005	0.0001	0.0003	0.000	0.000	0.000	0.000	0.000
Oxymethane	0			0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.000
Plasma**	1	0.375	150	0.0039				0.013	0.000	0.000	0.000	0.000
EMISSION TOTALS												
Potential Emissions lbs/hr								0.51				0.04
Potential Emissions lbs/day								12.31				1.04
Potential Emissions tons/year								2.25				0.19

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
Small Parts Washer

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

One (1) small open-top parts washer with no conveyor, using mineral spirits as a cleaner.

Uncontrolled Potential Emissions

lb/gal	% VOC	gal/year	Actual Hours of operation	Potential gal/year*	lb/ton	VOC (ton/year)
6.7	100	60	2080	252.69	2000	0.85

*The Source provided actual annual usage of 60 gal/yr for an 8 hour shift per work day, the value was then divided by 2080 hours, and then multiplied by 8760 to give an annual potential gal/year.

Methodology:
pounds/gallon of Mineral Spirits * % of VOC * gallons used per year * 2,000 pounds/ton = tons of VOC emitted per year

The solvent has a maximum density of 6.7 lb/gal.
The solvent used in the degreaser contains 100% VOC.
Utilized MSDS for Crystal Clear 142+ Mineral Spirits as supplied by the source agent.
NOTE: In order for the degreaser to qualify as an insignificant activity under the listing in 326 IAC 2-7-1(21)(J)(vi)(DD), the source shall use solvents "the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months".

Appendix A: Emission Calculations
Fuel Storage Tanks and Fuel Transfer and Dispensing
Volatile Organic Compound (VOC)

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

Volatile Organic Compound (VOC) Emissions From Storage Tanks (Working and Breathing Losses) Using US EPA TANKS Version 4.09 program*

VOC emissions from storage tanks were determined by using US EPA TANKS Version 4.09 program.

Storage Tank ID	Product Stored	Tank Type	Tank Color/Shade	Tank Dimensions	Maximum Liquid Volume (gallons)	Turnovers per year	Product Throughput (gallons/yr)	VOC Working Losses (lbs/yr)	VOC Breathing Losses (lbs/yr)	Total VOC Losses (lbs/yr)	VOC Working Losses (tons/yr)	VOC Breathing Losses (tons/yr)	Total VOC Losses (tons/yr)
DieselTank	Diesel Fuel	AST/ Horizontal	White	4' x 12'	1,000	40.00	**40,000**	0.6	0.16	0.76	3.00E-04	8.00E-05	3.80E-04
KeroTank	Kerosene	AST/ Horizontal	White	3' x 6'	300	1.00	**300**	0.01	0.06	0.06	5.00E-06	3.00E-05	3.00E-05
GasTank	Gasoline	AST/ Horizontal	White	3' x 10'	550	27.27	**15,000**	156.29	189.36	345.64	0.078	0.095	0.173
-	Used oil	AST/ Horizontal	White	3' x 10'	550			negl.	negl.	negl.	negl.	negl.	negl.
-	Motor oil	AST/ Horizontal	White	3' x 6'	275			negl.	negl.	negl.	negl.	negl.	negl.
-	Hydraulic oil	AST/ Horizontal	White	3' x 6'	275			negl.	negl.	negl.	negl.	negl.	negl.
negl. = negligible									**Totals**	**346.46**			**0.173**

Gasoline Fuel Transfer and Dispensing Operation
To calculate evaporative emissions from the gasoline dispensing fuel transfer and dispensing operation emission factors from AP-42 Chapter 5.2 Transportation And Marketing Of

Diesel + Kerosene Throughput =	110.4	gallons/day
Diesel + Kerosene Throughput =	40.30	kgal/yr
Gasoline Throughput =	41.1	gallons/day
Gasoline Throughput =	15.00	kgal/yr

Emission Source	Emission Factor (lb/kgal of throughput)*	PTE of VOC (tons/yr)
Filling storage tank (splash filling)	11.50	0.32
Tank breathing and emptying**	1.00	0.03
Vehicle refueling (displaced losses - uncontrolled)	11.00	0.30
Spillage	0.70	0.02
	Total	**0.67**

Methodology
*Emission Factors from AP-42 Chapter 5.2 Transportation And Marketing Of Petroleum Liquids (dated 6/08), Table 5.2-7
**Includes any vapor loss between underground tank and gas pump
The gasoline throughput was provided by the source.
Gasoline Throughput (kgal/yr) = [Gasoline Throughput (gallons/day)] * [365 days/yr] * [kgal/1000 gal]
PTE of VOC (tons/yr) = [Gasoline Throughput (kgal/yr)] * [Emission Factor (lb/kgal)] * [ton/2000 lb]
PTE of HAP (tons/yr) = [HAP Content of Gasoline (% by weight)] * [PTE of VOC (tons/yr)]

Abbreviations
VOC = Volatile Organic Compounds
PTE = Potential to Emit
HAP = Hazardous Air Pollutant

See next page for HAPs emissions.

Appendix A: Emission Calculations
Fuel Storage Tanks and Fuel Transfer and Dispensing
Hazardous Air Pollutants (HAPs)

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

Product Stored	Storage Tanks	Total PTE of VOC (tons/yr)	PTE of Total HAPs (tons/yr)	PTE of Worst Single HAP (tons/yr)	Worst Single HAP	PTE of Hexane (tons/yr)	
Gasoline	1	0.173	4.5E-02	1.6E-02	Xylenes	-	-
Kerosene	1	3.00E-05	9.8E-08	9.3E-08	Naphthalene	-	-
Diesel	1	3.80E-04	4.9E-06	1.9E-06	Xylenes	-	-
Oil	3	negl.	negl.	negl.	negl.	-	-
		Totals	**0.045**	**0.016**			

Hazardous Air Pollutant (HAP) Content (% by weight) For Various Petroleum Mixtures*

Volatile Organic HAP	CAS#	Hazardous Air Pollutant (HAP) Content (% by weight)* For Various Petroleum Mixtures			
		Gasoline	Kerosene	Diesel (#2) Fuel Oil	No. 6 Fuel Oil
1,3-Butadiene	106-99-0	3.70E-5%			
2,2,4-Trimethylpentane	540-84-1	2.40%			
Acenaphthene	83-32-9		4.70E-5%		
Acenaphthylene	208-96-8		4.50E-5%		
Anthracene	120-12-7		1.20E-6%	5.80E-5%	5.00E-5%
Benzene	71-43-2	1.90%		2.90E-4%	
Benzo(a)anthracene	56-55-3			9.60E-7%	5.50E-4%
Benzo(a)pyrene	50-32-8			2.20E-6%	4.40E-5%
Benzo(g,h,i)perylene	191-24-2			1.20E-7%	
Biphenyl	92-52-4			6.30E-4%	
Chrysene	218-01-9			4.50E-7%	6.90E-4%
Ethylbenzene	100-41-4	1.70%		0.07%	
Fluoranthene	206-44-0		7.10E-6%	5.90E-5%	2.40E-4%
Fluorene	86-73-7		4.20E-5%	8.60E-4%	
Indeno(1,2,3-cd)pyrene	193-39-5			1.60E-7%	1.00E-4%
Methyl-tert-butylether	1634-04-4	0.33%			
Naphthalene	91-20-3	0.25%	0.31%	0.26%	4.20E-5%
n-Hexane	110-54-3	2.40%			
Phenanthrene	85-01-8		8.60E-6%	8.80E-4%	2.10E-4%
Pyrene	129-00-0		2.40E-6%	4.60E-5%	2.30E-5%
Toluene	108-88-3	8.10%		0.18%	
Total Xylenes	1330-20-7	9.00%		0.50%	
Total Organic HAPs		**26.08%**	**0.33%**	**1.29%**	**0.19%**
Worst Single HAP		**9.00% Xylenes**	**0.31% Naphthalene**	**0.50% Xylenes**	**0.07% Chrysene**

Methodology
**Source: Petroleum Liquids. Potter, T.L. and K.E. Simmons. 1998. Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 2. Composition of Petroleum Mixtures.
PTE of Total HAPs (tons/yr) = [Total HAP Content of Petroleum Mixture (% by weight)] * [PTE of VOC (tons/yr)]
PTE of Worst Single HAP (tons/yr) = [Worst Single HAP Content of Petroleum Mixture (% by weight)] * [PTE of VOC (tons/yr)]

Abbreviations
VOC = Volatile Organic Compounds
PTE = Potential to Emit
HAP = Hazardous Air Pollutant

Appendix A: Emission Calculations
Insignificant Activities
Reciprocating Internal Combustion Engines - Diesel Fuel
Maximum Input Rate (<= 2.0 MMBtu/hr)

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity (MMBtu/hr)	2.0
Maximum Hours Operated per Year	8760
Potential Throughput (MMBtu/yr)	17,520

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.31	0.31	0.31	0.29	4.41	0.36	0.95
Potential Emission in tons/yr	2.72	2.72	2.72	2.54	38.63	3.15	8.32

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

Hazardous Air Pollutants (HAPs)

	Pollutant							
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/MMBtu	9.33E-04	4.09E-04	2.85E-04	3.91E-05	1.18E-03	7.67E-04	9.25E-05	1.68E-04
Potential Emission in tons/yr	8.17E-03	3.58E-03	2.50E-03	3.43E-04	1.03E-02	6.72E-03	8.10E-04	1.47E-03

Potential Emission of Total HAPs (tons/yr)	**3.39E-02**

Green House Gas Emissions (GHG)

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/MMBtu	1.64E+02	6.61E-03	1.32E-03
Potential Emission in tons/yr	1.44E+03	5.79E-02	1.16E-02

Summed Potential Emissions in tons/yr	**1.44E+03**
CO2e Total in tons/yr	**1.44E+03**

Methodology
Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2
CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Potential Throughput (MMBtu/yr) = [Heat Input Capacity (MMBtu/hr)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [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 ton/yr x N2O GWP (310).

Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

Unpaved Roads at Industrial Site
The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Raw materials (entering plant) (one-way trip)	40.0	1.0	40.0	40.0	1600.0	300	0.057	2.3	829.5
Raw materials (leaving plant) (one-way trip)	40.0	1.0	40.0	20.0	800.0	300	0.057	2.3	829.5
Product (leaving plant) (one-way trip)	40.0	1.0	40.0	40.0	1600.0	300	0.057	2.3	829.5
Product (entering plant) (one-way trip)	40.0	1.0	40.0	20.0	800.0	300	0.057	2.3	829.5
		Totals	**160.0**		**4800.0**			**9.1**	**3318.2**

Average Vehicle Weight Per Trip = 30.0 tons/trip
Average Miles Per Trip = 0.06 miles/trip

Unmitigated Emission Factor, Ef = k*[(s/12)^a]*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Sand/Gravel Processing Plant)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	30.0	30.0	30.0	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365] (Equation 2 from AP-42 13.2.2)
Mitigated Emission Factor, Eext = E * [(365 - P)/365]
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	7.27	1.85	0.19	lb/mile
Mitigated Emission Factor, Eext =	4.78	1.22	0.12	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Raw materials (entering plant) (one-way trip)	3.02	0.77	0.08	1.98	0.51	0.05	0.99	0.25	0.03
Raw materials (leaving plant) (one-way trip)	3.02	0.77	0.08	1.98	0.51	0.05	0.99	0.25	0.03
Product (leaving plant) (one-way trip)	3.02	0.77	0.08	1.98	0.51	0.05	0.99	0.25	0.03
Product (entering plant) (one-way trip)	3.02	0.77	0.08	1.98	0.51	0.05	0.99	0.25	0.03
Totals	**12.06**	**3.07**	**0.31**	**7.93**	**2.02**	**0.20**	**3.97**	**1.01**	**0.10**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PTE = Potential to Emit

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Coreslab Structures (Indianapolis), Inc.
Address City IN Zip: 1030 S. Kitley Avenue, Indianapolis, IN 46203
Permit Number: M097-33424-00542
Reviewer: Joshua Levering
Date: Oct-13

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

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Raw materials (entering plant) (one-way trip)	40.0	1.0	40.0	40.0	1600.0	500	0.095	3.8	1382.6
Raw materials (leaving plant) (one-way trip)	40.0	1.0	40.0	20.0	800.0	500	0.095	3.8	1382.6
Product (leaving plant) (one-way trip)	40.0	1.0	40.0	40.0	1600.0	500	0.095	3.8	1382.6
Product (entering plant) (one-way trip)	40.0	1.0	40.0	20.0	800.0	500	0.095	3.8	1382.6
		Totals	**160.0**		**4800.0**			**15.2**	**5530.3**

Average Vehicle Weight Per Trip = 30.0 tons/trip
Average Miles Per Trip = 0.09 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	30.0	30.0	30.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	2.793	0.559	0.1371	lb/mile
Mitigated Emission Factor, Eext =	2.554	0.511	0.1254	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Raw materials (entering plant) (one-way trip)	1.93	0.39	0.09	1.77	0.35	0.09	0.88	0.18	0.04
Raw materials (leaving plant) (one-way trip)	1.93	0.39	0.09	1.77	0.35	0.09	0.88	0.18	0.04
Product (leaving plant) (one-way trip)	1.93	0.39	0.09	1.77	0.35	0.09	0.88	0.18	0.04
Product (entering plant) (one-way trip)	1.93	0.39	0.09	1.77	0.35	0.09	0.88	0.18	0.04
Totals	**7.72**	**1.54**	**0.38**	**7.06**	**1.41**	**0.35**	**3.53**	**0.71**	**0.17**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Governor

Thomas W. Easterly
Commissioner

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

TO: Matt Ballain
Coreslab Structures, Inc.
1030 S. Kitley Ave.
Indianapolis, IN 46203

DATE: December 30, 2013

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

SUBJECT: Final Decision
MSOP Renewal
097-33424-00542

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:
Qaiser Baig, Cornerstone Environmental, Inc.
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.

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

December 30, 2013

TO: Irvington Branch Library

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

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

Applicant Name: Coreslab Structures, Inc.
Permit Number: 097-33424-00542

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	AWELLS 12/30/2013 Coreslab Structures (Indianapolis) Inc. 097-33424-00542 Final		
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**

AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING

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1		Qaiser Baig Cornerstone Environmental 880 Lennox Ct. Zionsville IN 46077 (Consultant)									
2		Matt Ballain Coreslab Structures (Indianapolis) Inc. 1030 S Kitley Ave Indianapolis IN 46203 *(Source CAATS) confirmed delivery*									
3		Marion County Health Department 3838 N, Rural St Indianapolis IN 46205-2930 *(Health Department)*									
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		Matt Mosier Office of Sustainability City-County Bldg/200 E Washington St. Rm# 2460 Indianapolis IN 46204 *(Local Official)*									
7		Irvington Branch Library 5625 E. Washington Street Indianapolis IN 46219 *(Library)*									
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