



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

December 29, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Unifix USA Inc. a Subsidiary of New NGC, Inc. d/b/a/ National Gypsum / 165-20326-00081

FROM: Paul Dubenetzky
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, Room 1049, 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 9/16/03



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**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR QUALITY**

**Unifix USA, Inc., a Subsidiary of New NGC, Inc. d/b/a National Gypsum
Company
75 Ivy Lane
Clinton, IN 47842**

(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.

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. ***This permit also addresses new source review requirements and is intended to fulfill the new source review procedures and permit revision requirements pursuant to 326 IAC 2-8-11.1, applicable to those conditions.***

Operation Permit No.: F165-20326-00081	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 29, 2004 Expiration Date: December 29, 2009

SECTION A	SOURCE SUMMARY	4
A.1	General Information [326 IAC 2-8-3(b)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c) (3)]	
A.3	Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c) (3) (I)]	
A.4	FESOP Applicability [326 IAC 2-8-2]	
A.5	Prior Permits Superseded [326 IAC 2-1.1-9.5]	
SECTION B	GENERAL CONDITIONS.....	6
B.1	Permit No Defense [IC 13]	
B.2	Definitions [326 IAC 2-8-1]	
B.3	Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]	
B.4	Enforceability [326 IAC 2-8-6]	
B.5	Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]	
B.6	Severability [326 IAC 2-8-4(4)]	
B.7	Property Rights or Exclusive Privilege [326 IAC 2-8-4(5) (D)]	
B.8	Duty to Provide Information [326 IAC 2-8-4(5) (E)]	
B.9	Compliance Order Issuance [326 IAC 2-8-5(b)]	
B.10	Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]	
B.11	Annual Compliance Certification [326 IAC 2-8-5(a)(1)]	
B.12	Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]	
B.13	Emergency Provisions [326 IAC 2-8-12]	
B.14	Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]	
B.15	Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]	
B.16	Permit Renewal [326 IAC 2-8-3(h)]	
B.17	Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]	
B.18	Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]	
B.19	Permit Revision Requirement [326 IAC 2-8-11.1]	
B.20	Inspection and Entry [326 IAC 2-8-5(a)(2)][IC13-14-2-2][IC 13-17-3-2][IC13-30-3-1]	
B.21	Transfer of Ownership or Operational Control [326 IAC 2-8-10]	
B.22	Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)] [326 IAC 2-8-16] [326 IAC 2-1.1-7]	
B.23	Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314]	
SECTION C	SOURCE OPERATION CONDITIONS.....	15
	Emission Limitations and Standards [326 IAC 2-8-4(1)]	
C.1	Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]	
C.2	Overall Source Limit [326 IAC 2-8]	
C.3	Opacity [326 IAC 5-1]	
C.4	Open Burning [326 IAC 4-1][IC 13-17-9]	
C.5	Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]	
C.6	Fugitive Dust Emissions [326 IAC 6-4]	
C.7	Operation of Equipment [326 IAC 2-8-5(a)(4)]	
C.8	Stack Height [326 IAC 1-7]	
C.9	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61 Subpart M]	
	Testing Requirements [326 IAC 2-8-4(3)]	
C.10	Performance Testing [326 IAC 3-6]	
	Compliance Requirements [326 IAC 2-1.1-11]	
C.11	Compliance Requirements [326 IAC 2-1.1-11]	
	Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]	

Permit Reviewer: Jenny Acker

- C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.12 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
- C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]
[326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]
- C.17 Compliance Response Plan -Preparation, Implementation, Records, and Reports
[326 IAC 2-8-4][326 IAC 2-8-5]
- C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]

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

- C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

- C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS..... 23

General Construction Conditions

- D.1.1 Permit No Defense

Effective Date of the Permit

- D.1.2 Effective Date of the Permit [326 IAC 13-15-5-3]
- D.1.3 Modification to Construction Conditions [326 IAC 2]

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

- D.1.4 Particulate [326 IAC 6-3-2]
- D.1.5 PM₁₀ FESOP Limit [326 IAC 2-8]
- D.1.6 Particulate [326 IAC 6-3-2(d)]
- D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.1.8 Particulate Matter

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.1.9 Monitoring
- D.1.10 Parametric Monitoring
- D.1.11 Baghouse Inspections
- D.1.12 Broken or Failed Bag Detection

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

- D.1.13 Record Keeping Requirements
- D.1.14 Reporting Requirements

SECTION D.2 FACILITY OPERATION CONDITIONS..... 28

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

- D.2.1 Particulate [326 IAC 6-2-4]

Certification Form 29

Emergency Occurrence Form..... 30

Quarterly Deviation and Compliance Monitoring Report Form 32

SECTION A

SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary Concrete Backerboard Plant, producing concrete backerboard.

Authorized individual:	General Manager
Source Address:	Unifix USA, Inc., a Subsidiary of New NGC, Inc. d/b/a National Gypsum, 75 Ivy Lane, Clinton, IN 47842
Mailing Address:	2001 Rexford Road, Charlotte, NC 28211
General Source Phone:	765-832-2472
SIC Code:	3272
Source Location Status:	Vermillion
Source Status:	Attainment for all criteria pollutants Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD, Section 112 of the Clean Air Act.

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

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

- (a) Three (3) Portland Cement Storage Silos, identified as U1, U2, and U3, to be constructed in 2005 with a combined maximum capacity of 11,400 lbs/hr; each equipped with one (1) of three (3) baghouses for particulate control identified as CE1, CE2 and CE3; and each exhausting to one (1) of three (3) stacks identified as S1, S2, and S3.
- (b) One (1) Fly Ash Storage Silo, identified as U4, to be constructed in 2005 with a maximum capacity of 5,700 lbs/hr, equipped with one (1) baghouse for particulate control identified as CE4, and exhausting to one (1) stack identified as S4.
- (c) Two (2) Aluminate Storage Silos, identified as U5 and U6, to be constructed in 2005 with a combined maximum capacity of 1,760 lbs/hour, each equipped with one (1) of two (2) baghouses for particulate control identified as CE5 and CE6, each exhausting to one (1) of two (2) stacks identified as S5 and S6.
- (d) One (1) Portland Cement Bin, identified as U7, to be constructed in 2005 with a maximum capacity of 11,400 lbs/hr, equipped with a baghouse for particulate control identified as CE7, exhausting to a stack identified as S7.
- (e) One (1) Fly Ash Bin, identified as U8, to be constructed in 2005 with a maximum capacity of 5,700 lbs/hr, equipped with a baghouse for particulate control identified as CE8, exhausting to a stack identified as S8.
- (f) One (1) Aluminate Bin, identified as U9, to be constructed in 2005 with maximum capacity of 1,760 lbs/hr, equipped with a baghouse for particulate control identified as CE9, exhausting to a stack identified as S9.

- (g) One (1) Wet End Operations Unit consisting of conveying and mixing, identified as U10, to be constructed in 2005 with a maximum capacity of 21,000 lbs of board per hour, equipped with a baghouse for particulate control identified as CE10, exhausting to sand room.
- (h) One Board Sawing Unit, identified as U11, to be constructed in 2005 with a maximum capacity of 52 square foot of board sawn per hour, equipped with a baghouse for particulate control identified as CE11, exhausting to either stack identified as S10 or into the building.
- (i) One (1) Polystyrene Expansion System, identified as U12, to be constructed in 2005 with a maximum capacity of 160 lbs/hr, exhausting to a stack identified as S11.
- (j) One (1) Indoor Sand Storage and Handling System, identified as U13, to be constructed in 2005 with a maximum capacity of 14,860 lbs/hr.

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

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

- (a) Natural gas-fired combustion sources with maximum capacity of heat input equal to or less than ten million (10,000,000) British thermal units per hour.
 - (1) One (1) natural gas-fired boiler, identified as Boiler #1, to be constructed in 2005.
 - (2) Eleven (11) natural gas-fired space heaters, identified as Large Space Heaters.
 - (3) Five (5) natural gas-fired space heaters, identified as Small Space Heaters
 - (4) One (1) natural gas-fired water heater, identified as Water Heater.

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

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

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

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

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

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

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

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

B.3 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]

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

B.4 Enforceability [326 IAC 2-8-6]

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

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

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

B.6 Severability [326 IAC 2-8-4(4)]

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

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

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

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

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days (this time

frame is determined on a case by case basis but no more than ninety (90) days) after issuance of this permit, 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 Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (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 or potential to emit. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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.13 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;

- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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

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

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
 - (g) Operations may continue during an emergency only if the following conditions are met:

- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.

- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.16 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "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, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) 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.
 - (2) If IDEM, OAQ upon receiving a timely and complete 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.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the

deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

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

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

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

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

- (b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.19 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-17-3-2][IC13-30-3-1]

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

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

B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4320 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314]

Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

- (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) 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 Overall Source Limit [326 IAC 2-8]

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

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable.
 - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
 - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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

- (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(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

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 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 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 mater or sulfur dioxide is emitted

C.9 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
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

C.10 Performance Testing [326 IAC 3-6]

-
- (a) 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 test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "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 the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.13 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.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.

- (b) Whenever a condition in this permit requires the measurement of a flow, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.
- (c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.
- (d) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3] (Check applicability)

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within 180 days from the date on which this source commences operation).

The ERP does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4]
[326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or
 - (2) If none of the reasonable response steps listed in the Compliance Response is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.

- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, 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) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) 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 the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

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

C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported.

This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) 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 the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

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

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- a) Three (3) Portland Cement Storage Silos, identified as U1, U2, and U3, to be constructed in 2005 with a combined maximum capacity of 11,400 lbs/hr; each equipped with one (1) of three (3) baghouses for particulate control identified as CE1, CE2 and CE3; and each exhausting to one (1) of three (3) stacks identified as S1, S2, and S3.
- b) One (1) Fly Ash Storage Silo, identified as U4, to be constructed in 2005 with a maximum capacity of 5,700 lbs/hr, equipped with one (1) baghouse for particulate control identified as CE4, and exhausting to one (1) stack identified as S4.
- c) Two (2) Aluminate Storage Silos, identified as U5 and U6, to be constructed in 2005 with a combined maximum capacity of 1,760 lbs/hour, each equipped with one (1) of two (2) baghouses for particulate control identified as CE5 and CE6, each exhausting to one (1) of two (2) stacks identified as S5 and S6.
- d) One (1) Portland Cement Bin, identified as U7, to be constructed in 2005 with a maximum capacity of 11,400 lbs/hr, equipped with a baghouse for particulate control identified as CE7, exhausting to a stack identified as S7.
- e) One (1) Fly Ash Bin, identified as U8, to be constructed in 2005 with a maximum capacity of 5,700 lbs/hr, equipped with a baghouse for particulate control identified as CE8, exhausting to a stack identified as S8.
- f) One (1) Aluminate Bin, identified as U9, to be constructed in 2005 with maximum capacity of 1,760 lbs/hr, equipped with a baghouse for particulate control identified as CE9, exhausting to a stack identified as S9.
- g) One (1) Wet End Operations Unit consisting of conveying and mixing, identified as U10, to be constructed in 2005 with a maximum capacity of 21,000 lbs of board per hour, equipped with a baghouse for particulate control identified as CE10, exhausting to sandroom.
- h) One Board Sawing Unit, identified as U11, to be constructed in 2005 with a maximum capacity of 52 square foot of board sawn per hour, equipped with a baghouse for particulate control identified as CE11, exhausting to either stack identified as S10 or into the building.
- i) One (1) Polystyrene Expansion System, identified as U12, to be constructed in 2005 with a maximum capacity of 160 lbs/hr, exhausting to a stack identified as S11.
- k) One (1) Indoor Sand Storage and Handling System, identified as U13, to be constructed in 2005 with a maximum capacity of 14,860 lbs/hr.

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

General Construction Conditions

D.1.1 Permit No Defense

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22

through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

D.1.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.1.3 Modification to Construction Conditions [326 IAC 2]

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.

Operation Conditions

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

D.1.4 Particulate [326 IAC 6-3-2]

Pursuant to, 326 IAC 6-3-2 (Process Operations) the particulate emissions from the source shall not exceed the pound per hour emission rate established as E in the following formula:

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

$$E = 4.10 P^{0.67} \quad \text{where: } E = \text{rate of emission in pounds per hour; and} \\
P = \text{process weight rate in tons per hour}$$

The emissions rate E has been established for the units as follows:

Unit	Process Weight Rate (tons/hour)	PM Emission Limit (lbs/hr)
Portland Cement Storage Silo #1 (U1)	1.9	6.3
Portland Cement Storage Silo #2 (U2)	1.9	6.3
Portland Cement Storage Silo #3 (U3)	1.9	6.3
Fly Ash Storage Silo (U4)	2.9	8.3
Aluminate Storage Silo #1 (U5)	.44	2.4
Aluminate Storage Silo #2 (U6)	.44	2.4
Portland Cement Bin (U7)	5.7	13.2
Fly Ash Bin (U8)	2.8	8.3
Aluminate Bin (U9)	0.88	3.8
Wet End Operations (U10)	10.5	19.8
Board Sawing Operations (U11)	10.5	19.8
Sand Storage Room (U13)	7.43	15.87

Compliance with 326 IAC 6-3-2 limits renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.5 PM₁₀ FESOP Limit [326 IAC 2-8]

Pursuant to 326 IAC 2-8 the source has chosen to limit PM10 emissions to below 100 tons per year. Therefore, 326 IAC 2-7 (Part 70 Permit Program) will not be applicable

The source will be in compliance with this PM10 limit by limiting the controlled units to less than a total of 23.02 tons of PM10 per twelve (12) consecutive month period. The controlled units shall be limited as follows:

Unit	PM10 (pounds per hour)	PM10 Limit (tons per year)
Portland Cement Storage Silo #1 (U1)	0.47	2.06
Portland Cement Storage Silo #2 (U2)	0.47	2.06
Portland Cement Storage Silo #3 (U3)	0.47	2.06
Fly Ash Storage Silo (U4)	0.47	2.06
Aluminate Storage Silo #1 (U5)	0.47	2.06
Aluminate Storage Silo #2 (U6)	0.47	2.06
Portland Cement Bin (U7)	0.47	2.06
Fly Ash Bin (U8)	0.47	2.06
Aluminate Bin (U9)	0.47	2.06
Wet End Operations (U10)	0.57	2.52
Board Sawing Operations (U11)	0.43	1.88
Sand Storage Room (U13)	0.02	0.07
Total	5.26	23.02

D.1.6 Particulate

Pursuant to, and in order to comply with Conditions D.1.4, and D.1.5, particulate from the storage, conveying and manufacturing processes shall be controlled by baghouses and the Permittee shall operate the control device in accordance with manufacturer’s specifications.

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.8 Particulate Matter (PM)

There are no specific testing requirements applicable to these units.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.9 Monitoring

- (a) Once per shift emission notations of the facility stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down.
- (c) In the case of batch or discontinuous, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is and employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C – Compliance Response Plan – Failure to Take Responsible Steps, shall be considered a violation of this permit.

D.1.10 Parametric Monitoring

Permittee shall record the total static pressure drop across the baghouse used in conjunction with the concrete backerboard manufacturing process, at least once per shift when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.11 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the concrete backerboard manufacturing process when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.1.12 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.1.13 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.9, the Permittee shall maintain records of once per shift visible emission notations of the facility stack exhaust
- (b) To document compliance with Condition D.1.10, the Permittee shall maintain the following:
 - (1) Once per shift records of the total static pressure drop during normal operation when venting to the atmosphere.
 - (2) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.1.11, the Permittee shall maintain records of the results of the inspections required under Conditions D.1.11 and the dates the vents are redirected.

D.1.14 Reporting Requirements

There are no specific reporting regulations applicable to these units

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(a) Natural gas-fired combustion sources with maximum capacity of heat input equal to or less than ten million (10,000,000) British thermal units per hour.

- (1) One (1) natural gas-fired boiler, identified as Boiler #1, to be constructed in 2005.
- (2) Eleven (11) natural gas-fired space heaters, identified as Large Space Heaters.
- (3) Five (5) natural gas-fired space heaters, identified as Small Space Heaters
- (4) One (1) natural gas-fired water heater, identified as Water Heater.

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

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

D.2.1 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the 3.188 MMBtu per hour heat input boiler shall be limited to 0.6 pounds per million Btu heat input.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION

Source Name: Unifix, USA Inc., a Subsidiary of New NGC Inc., d/b/a National Gypsum Company
Source Address: 75 Ivy Lane, Clinton, Indiana 47842
Mailing Address: 2001 Rexford Road, Charlotte, NC 28211
FESOP No.: F165-20326-00081

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Unifix, USA Inc., a Subsidiary of New NGC Inc., d/b/a National Gypsum Company
Source Address: 75 Ivy Lane, Clinton, Indiana 47842
Mailing Address: 2001 Rexford Road, Charlotte, NC 28211
FESOP No.: F165-20326-00081

This form consists of 2 pages

Page 1 of 2

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

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

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

Permit Reviewer: Jenny Acker

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

Page 2 of 2

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

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Unifix, USA Inc., a Subsidiary of New NGC Inc., d/b/a National Gypsum Company
Source Address: 75 Ivy Lane, Clinton, Indiana 47842
Mailing Address: 2001 Rexford Road, Charlotte, NC 28211
FESOP No.: F165-20326-00081

Months: _____ to _____ Year: _____

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked ANo deviations occurred this reporting period@.</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit
(FESOP)

Source Background and Description

Source Name:	Unifix, USA, Inc. a Subsidiary of New NGC, Inc. d/b/a National Gypsum Company
Source Location:	75 Ivy Lane, Clinton, IN 47842
County:	Vermillion
SIC Code:	3272
Operation Permit No.:	165-20326-00081
Permit Reviewer:	Jenny Acker

The Office of Air Quality (OAQ) has reviewed a FESOP application from Unifix, USA, Inc. a Subsidiary of New NGC, Inc. d/b/a National Gypsum Company relating to the operation of a concrete backerboard plant.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process

New Emission Units and Pollution Control Equipment Receiving Advanced Source Construction Approval

This application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-8-4(11):

- (a) Three (3) Portland Cement Storage Silos, identified as U1, U2, and U3, to be constructed in 2005 with a combined maximum capacity of 11,400 lbs/hr; each equipped with one (1) of three (3) baghouses for particulate control identified as CE1, CE2 and CE3; and each exhausting to one (1) of three (3) stacks identified as S1, S2, and S3.
- (b) One (1) Fly Ash Storage Silo, identified as U4, to be constructed in 2005 with a maximum capacity of 5,700 lbs/hr, equipped with one (1) baghouse for particulate control identified as CE4, and exhausting to one (1) stack identified as S4.
- (c) Two (2) Aluminate Storage Silos, identified as U5 and U6, to be constructed in 2005 with a combined maximum capacity of 1,760 lbs/hour, each equipped with one (1) of two (2) baghouses for particulate control identified as CE5 and CE6, each exhausting to one (1) of two (2) stacks identified as S5 and S6.
- (d) One (1) Portland Cement Bin, identified as U7, to be constructed in 2005 with a maximum capacity of 11,400 lbs/hr, equipped with a baghouse for particulate control identified as CE7, exhausting to a stack identified as S7.

- (e) One (1) Fly Ash Bin, identified as U8, to be constructed in 2005 with a maximum capacity of 5,700 lbs/hr, equipped with a baghouse for particulate control identified as CE8, exhausting to a stack identified as S8.
- (f) One (1) Aluminate Bin, identified as U9, to be constructed in 2005 with maximum capacity of 1,760 lbs/hr, equipped with a baghouse for particulate control identified as CE9, exhausting to a stack identified as S9.
- (g) One (1) Wet End Operations Unit consisting of conveying and mixing, identified as U10, to be constructed in 2005 with a maximum capacity of 21,000 lbs of board per hour, equipped with a baghouse for particulate control identified as CE10, exhausting to sandroom.
- (h) One Board Sawing Unit, identified as U11, to be constructed in 2005 with a maximum capacity of 52 square foot of board sawn per hour, equipped with a baghouse for particulate control identified as CE11, exhausting to either stack identified as S10 or into the building.
- (i) One (1) Polystyrene Expansion System, identified as U12, to be constructed in 2005 with a maximum capacity of 160 lbs/hr, exhausting to a stack identified as S11.
- (j) One (1) Indoor Sand Storage and Handling System, identified as U13, to be constructed in 2005 with a maximum capacity of 14,860 lbs/hr.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with maximum capacity of heat input equal to or less than ten million (10,000,000) British thermal units per hour.
 - (1) One (1) natural gas-fired boiler, identified as Boiler #1, to be constructed in 2005.
 - (2) Eleven (11) natural gas-fired space heaters, identified as Large Space Heaters.
 - (3) Five (5) natural gas-fired space heaters, identified as Small Space Heaters
 - (4) One (1) natural gas-fired water heater, identified as Water Heater.

Recommendation

The staff recommends to the Commissioner that the FESOP 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 administratively complete FESOP application for the purposes of this review was received on November 3, 2004.

There was no notice of completeness letter mailed to the source.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document pages 1 through 4.

Potential to Emit

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

Pollutant	Potential to Emit (tons/yr)
PM	2296
PM-10	2296
SO ₂	0.023
VOC	24.71
CO	3.21
NO _x	3.82

HAPs	Potential to Emit (tons/yr)
Benzene	8.031 E-05
Dichlorobenzene	4.589 E-05
Formaldehyde	2.868 E-03
Hexane	6.88 E-02
Toulene	1.300E-4
Lead	1.912 E-05
Cadmium	4.207 E-05
Chromium	5.354 E-05
Manganese	1.453 E-05
Nickle	8.031 E-05
Total	7.217 E-02

The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.

Potential to Emit After Issuance

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

Process/emission unit	Potential To Emit After Issuance (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Portland Cement Storage Silo #1 / U1	2.06	2.06	neg	neg	neg	neg	neg
Portland Cement Storage Silo #2 / U2	2.06	2.06	neg	neg	neg	neg	neg
Portland Cement Storage Silo #3 / U3	2.06	2.06	neg	neg	neg	neg	neg
Fly Ash Storage Silo / U4	2.06	2.06	neg	neg	neg	neg	neg
Aluminate Storage Silo #1 / U5	2.06	2.06	neg	neg	neg	neg	neg
Aluminate Storage Silo #2 / U6	2.06	2.06	neg 0	neg	neg	neg	neg
Portland Cement Bin / U7	2.06	2.06	neg	neg	neg	neg	neg
Fly Ash Bin / U8	2.06	2.06	neg	neg	neg	neg	neg
Aluminate Bin / U9	2.06	2.06	neg	neg	neg	neg	neg
Conveying/Mixing / U10	2.52	2.52	neg	neg	neg	neg	neg
Board Sawing / U11	1.88	2.52	neg	neg	neg	neg	neg
Polystyrene System / U12	neg	neg	neg	24.50	neg	neg	neg
Sand Storage Room / U13	0.07	0.07	neg	neg	neg	neg	neg
Insignificant Activities	0.07	0.29	neg	0.21	3.21	3.82	neg
Total Emissions	23.10	23.31	neg	24.71	3.21	3.82	neg

The following citation requires the air pollution control equipment, baghouses, be operational. The manufacturer cites 99% efficiency. This will limit the PM and PM10 emissions as described in the table above. The PTE was calculated at maximum flow and for a time period of 8760 hours per year. Therefore, no additional limitations on operating time or process parameters will be required.

- (a) Pursuant to 326 IAC 2-8-5, all air pollution control equipment listed in the permit and used to comply with an applicable requirement shall be operated at all times times that the emission units vented to the control equipment are in operation.
- (b) Pursuant to 326 IAC 2-8, PM10 will be emitted at levels less than 100 tpy
- (c) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), PM will be emitted at levels less than 250 tpy.

County Attainment Status

The source is located in Vermillion County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vermillion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Vermillion County has been classified as attainment or unclassifiable for PM10, SO₂, NO₂ Ozone, CO, Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

PSD, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	23.10
PM10	23.31
SO ₂	0
VOC	24.71
CO	0
NO _x	0
Single HAP	neg
Combination HAPs	neg

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This FESOP limit will limit PM10 Emissions to below one hundred (100) tons per year. The source has also chosen to limit PM emissions to below two hundred and fifty (250) tons per year. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration) will not be applicable.

The source will be in compliance with this PM limit using the baghouses at all times during process operations.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of the Clinton Cement Backerboard Plant will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Vermillion County and the potential to emit PM10, SO₂, and NO_x are less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-8 (FESOP)

Pursuant to 326 IAC 2-8 the source has chosen to limit PM10 emissions to below 100 tons per year. Therefore, 326 IAC 2-7 (Part 70 Permit Program) will not be applicable

The source will be in compliance with this PM10 limit by limiting the controlled units to less than a total of 22.96 tons of PM10 per twelve (12) consecutive month period. The controlled units shall be limited as follows:

Unit	PM10 Limit (lb/hr)	PM10 Limit (tons per year)
Portland Cement Storage Silo #1 (U1)	0.47	2.06
Portland Cement Storage Silo #2 (U2)	0.47	2.06
Portland Cement Storage Silo #3 (U3)	0.47	2.06
Fly Ash Storage Silo (U4)	0.47	2.06
Aluminate Storage Silo #1 (U5)	0.47	2.06
Aluminate Storage Silo #2 (U6)	0.47	2.06
Portland Cement Bin (U7)	0.47	2.06
Fly Ash Bin (U8)	0.47	2.06
Aluminate Bin (U9)	0.47	2.06
Wet End Operations (U10)	0.57	2.52
Board Sawing Operations (U11)	0.43	1.88
Sand Storage Room (U13)	0.02	0.07
Total	5.26	23.02

326 IAC 5-1 (Opacity Limitations)

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

- (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 no overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to, 326 IAC 6-3-2 (Process Operations) the particulate emissions from the source shall not exceed the pound per hour emission rate established as E in the following formula:

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

$$E = 4.10 P^{0.67} \quad \text{where: } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The emissions rate E has been established for the units as follows:

Unit	Process Weight Rate (tons/hour)	PM Emission Limit (lbs/hr)
Portland Cement Storage Silo #1 (U1)	1.9	6.3
Portland Cement Storage Silo #2 (U2)	1.9	6.3
Portland Cement Storage Silo #3 (U3)	1.9	6.3
Fly Ash Storage Silo (U4)	2.9	8.3
Aluminate Storage Silo #1 (U5)	.44	2.4
Aluminate Storage Silo #2 (U6)	.44	2.4
Portland Cement Bin (U7)	5.7	13.2
Fly Ash Bin (U8)	2.8	8.3
Aluminate Bin (U9)	0.88	3.8
Wet End Operations (U10)	10.5	19.8
Board Sawing Operations (U11)	10.5	19.8
Sand Storage Room (U13)	7.43	15.87

The baghouses shall be in operation at all times the above facilities are in operation, in order to comply with this limit.

State Rule Applicability – Insignificant Activites

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the 3.188 (3.188) mmBtu per hour heat input boiler shall be limited to (0.806) pounds per mmBtu heat input.

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

where: Pt = Pounds of PM emitted per million Btu per hour (mmBtu/hr) Heat input
 Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.

Pursuant to 326 IAC 6-2-4, for Q less than ten (10) million Btu/hr, Pt shall not exceed 0.6 lb/mmBtu. The source will be in compliance with this PM limit by limiting the boiler emission to less than 0.6 lb per mmBtu heat input.

Testing Requirements

There are no specific testing requirements applicable to these units.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

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

The Storage Silos, Bins, Wet End Operations Unit, and Board Sawing Unit have applicable compliance monitoring conditions as specified below:

(a) Monitoring

- (1) Once per shift emission notations of the facility stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (2) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down.
- (3) In the case of batch or discontinuous, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (4) A trained employee is and employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (5) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C – Compliance Response Plan – Failure to Take Responsible Steps, shall be considered a violation of this permit.

(b) Parametric Monitoring

Permittee shall record the total static pressure drop across the baghouse used in conjunction with the concrete backerboard manufacturing process, at least once per shift when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 and 6.0

inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(c) Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the concrete backerboard manufacturing process when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

The baghouse must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-2 (Prevention of Significant Deterioration), and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this Concrete Backerboard Plant shall be subject to the conditions of the FESOP 165-20326-00081.

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

Addendum to the
Technical Support Document for Federally Enforceable State Operating Permit
(FESOP) Renewal

Unifix USA, Inc., a Subsidiary of New NGC, Inc. d/b/a National Gypsum Company
75 Ivy Lane
Clinton, IN 47842

F-165-20326, Plt ID-165-00081

On November 27, 2004, the Office of Air Quality (OAQ) had a notice published in the Daily Clintonian in Clinton, Indiana, stating that Unifix USA, Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a concrete backerboard facility with control. The notice also stated that OAQ proposed to issue a permit 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.

Upon further review, IDEM OAQ has determined that the following revision to Condition D.2.1 was necessary to clarify the particulate limit on the natural gas fired boiler (new text is bolded, deleted text has strikeout):

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the 3.188 ~~(3.188)~~ MMBtu per hour heat input boiler shall be limited to **0.6** ~~(0.806)~~ pounds per million Btu heat input.

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

where: **Pt = Pounds of PM emitted per million Btu per hour (mmBtu/hr) Heat input**
~~Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.~~

~~Pursuant to 326 IAC 6-2-4, for Q less than ten (10) million Btu/hr, Pt shall not exceed 0.6 lb/mmBtu. The source will be in compliance with this PM limit by limiting the boiler emissions to less than 0.6 lb per mmBtu heat input.~~

**Appendix A: Emissions Calculations
PM and PM10 Emission Calculation**

Company Name: Unifix USA, Inc., a Subsidiary of New NGC, Inc. d/b/a National Gypsum Company
Address City IN Zip: Clinton Backerboard Plant, 75 Ivy Lane, Clinton IN, 47842
Permit Number: 20236
Pit ID: 165-20326-00081
Reviewer: Jenny Acker
Date: 11/5/2004

Emission Unit / Description	Annual Operating Hours	Operating Flow Rate (scfm)	Outlet Grain Loading (g/dscf)	Controlled Potential PM & PM-10 Emissions (lb/hr)	Annual Material Stored (tons)	Controlled Potential PM & PM-10 Emissions (tpy)	Potential PM & PM-10 Emissions (lb/hr)	Potential PM & PM-10 Emissions (tpy)
U1 / Portland Cement Silo 1	8760	2747	0.02	0.47		2.06	47.09	206.26
U2 / Portland Cement Silo 2	8760	2747	0.02	0.47	50000	2.06	47.09	206.26
U3 / Portland Cement Silo 3	8760	2747	0.02	0.47		2.06	47.09	206.26
U4 / Fly Ash Silo	8760	2747	0.02	0.47	25000	2.06	47.09	206.26
U5 / Aluminate Silo #1	8760	2747	0.02	0.47		2.06	47.09	206.26
U6 / Aluminate Silo #2	8760	2747	0.02	0.47	7800	2.06	47.09	206.26
U7 / Portland Cement Bin	8760	2747	0.02	0.47	50000	2.06	47.09	206.26
U8 / Fly Ash Bin	8760	2747	0.02	0.47	25000	2.06	47.09	206.26
U9 / Aluminate Bin	8760	2747	0.02	0.47	7800	2.06	47.09	206.26

Emission Unit / Description	Annual Operating Hours	Operating Flow Rate (scfm)	Outlet Grain Loading (g/dscf)	Controlled Potential PM & PM-10 Emissions (lb/hr)	Annual Material Mixed (tons)	Controlled Potential PM & PM-10 Emissions (tpy)	Potential PM & PM-10 Emissions (lb/hr)	Potential PM & PM-10 Emissions (tpy)
U10 / Conveying/Mixing	8760	3350	0.02	0.57	88200	2.52	57.43	251.54

Emission Unit / Description	Annual Operating Hours	Operating Flow Rate (scfm)	Outlet Grain Loading (g/dscf)	Controlled Potential PM & PM-10 Emissions (lb/hr)	Annual Material Sawn (sq. ft)	Controlled Potential PM & PM-10 Emissions (tpy)	Potential PM & PM-10 Emissions (lb/hr)	Potential PM & PM-10 Emissions (tpy)
U11 / Board Sawing	8760	2500	0.02	0.43	450000	1.88	42.86	187.71

Emission Unit / Description	Annual Operating Hours	Operating Flow Rate (lb/hr)	¹ Emission Factor	Potential PM & PM-10 Emissions (lb/hr)	Annual Material Stored (tons)	Potential PM & PM-10 Emissions (tpy)
U13 / Sand Storage Room	8760	14,860	0.0021	0.016	65087	0.07

Total Potential PM Emissions	Controlled Potential PM Emissions (lb/hr)	Controlled Potential PM Emissions (tpy)
	5.26	23.02

PM-10 Emissions are equivalent to PM emissions

Methodology

Controlled Potential PM & PM-10 Emissions (lb/hr) = Operating Flow Rate (scfm) * Grain Loading (g/dscf) * lb/7000 Grain * 60 min/hr

Controlled Potential PM & PM-10 Emissions (tpy) = Controlled Potential PM & PM-10 Emissions (lb/hr) * ton/2000 lbs * 8760 hrs/yr

Potential PM & PM-10 Emissions (lb/hr) = Controlled Potential PM & PM-10 Emissions (lb/hr) / (1-efficiency), where control efficiency is equal to or greater than 99%

Potential PM & PM-10 Emissions (tpy) = Controlled Potential PM & PM-10 Emissions (lb/hr) / (1-efficiency), where the control efficiency is equal to or greater than 99%

¹Emission Factors from AP 42, Chapter 11.12 Table 11.12-2, SCC #3-05-011-05,22,24

**Appendix A: Emissions Calculations
VOC (Pentane) Emission Calculation**

Company Name: Unifix USA, Inc., a Subsidiary of New NGC, Inc. d/b/a National Gypsum Company
Address City IN Zip: Clinton Backerboard Plant, 75 Ivy Lane, Clinton IN, 47842
Permit Number: 20236
Plt ID: 165-20326-00081
Reviewer: Jenny Acker
Date: 11/5/2004

Emission Unit / Description	Annual Operating Hours	Annual Material Used (tons)	Polystyrene Pentane Content (% by weight)	Potential Pentane Emissions (lb/hr)	Potential Pentane Emissions (tpy)
U12 / Polystyrene Expansion System	8760	700	3.5	5.59	24.50

Total Potential VOC Emissions	Potential VOC Emissions (lb/hr)	Potential VOC Emissions (tpy)
	5.59	24.50

Methodology

Potential Pentane Emissions (lb/hr) = Annual Materials Used (tons) * Polystyrene Pentane Content (% weight) * 2000 lbs/ton / 8760 hr/yr
 Potential Pentane Emissions (tpy) = Annual Materials Used (tons) * Pentane (% by weight)

PM-10 Emissions are equivalent to PM emissions

Controlled Potential PM & PM-10 Emissions (lb/hr) = Operating Flow Rate (scfm) * Grain Loading (g/dscf) * lb/7000 Grain * 60 min/hr
 Controlled Potential PM & PM-10 Emissions (tpy) = Controlled Potential PM & PM-10 Emissions (lb/hr) * ton/2000 lbs * 8760 hrs/yr
 Potential PM & PM-10 Emissions (lb/hr) = Controlled Potential PM & PM-10 Emissions (lb/hr) / (1-efficiency), where control efficiency is equal to or greater than 99%
 Potential PM & PM-10 Emissions (tpy) = Controlled Potential PM & PM-10 Emissions (lb/hr) / (1-efficiency), where the control efficiency is equal to or greater than 99%

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR <100
Insignificant Activities
Emissions**

Company Name: Unifix USA, Inc., a Subsidiary of New NGC, Inc. d/b/a National Gypsum Comp
Address City IN Zip: Clinton Backerboard Plant, 75 Ivy Lane, Clinton IN, 47842
Permit Number: 20236
Plt ID: 165-20326-00081
Reviewer: Jenny Acker
Date: 11/5/2004

Heat Input Capacity	MMBtu/hr	Potential Throughput	MMCF/yr
Boiler	3.2		26.6
Large Space Heaters	5.3		44.1
Small Space Heaters	0.5		4.2
Water Heater	0.2		1.7

Emission Factor in lb/MMCF	Pollutant				
	PM*	PM10*	SO2	NOx	VOC
	1.9	7.6	0.6	100.0 **see below	5.5
Potential Emission in tons/yr					
Boiler	0.025	0.101	0.008	1.330	0.073
Large Space Heaters	0.042	0.167	0.013	2.203	0.121
Small Space Heaters	0.004	0.016	0.001	0.209	0.011
Water Heater	0.002	0.006	0.001	0.083	0.005
Total Potential Emission (tpy)	0.073	0.291	0.023	3.824	0.210

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

**Emission Factors for NOx: Small Boilers, Uncontrolled = 100

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,050,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,050 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, 1-01-006-04 (AP-42 Supplement D 3/98)

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

See page 2 for HAPs emissions calculations.

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR <100
Insignificant Activities
Emissions**

Company Name: Unifix USA, Inc., a Subsidiary of New NGC, Inc. d/b/a National Gypsum Company
Address City IN Zip: Clinton Backerboard Plant, 75 Ivy Lane, Clinton IN, 47842
Permit Number: 20236
Plt ID: 165-20326-00081
Reviewer: Jenny Acker
Date: 11/5/2004

Heat Input Capacity	MMBtu/hr	Potential Throughput	MMCF/yr
Boiler	3.2		26.6
Large Space Heaters	5.3		44.1
Small Space Heaters	0.5		4.2
Water Heater	0.2		1.7

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr						
Boiler	0.025	0.101	0.008	1.330	0.073	1.117
Large Space Heaters	0.042	0.167	0.013	2.203	0.121	1.850
Small Space Heaters	0.004	0.016	0.001	0.209	0.011	0.175
Water Heater	0.002	0.006	0.001	0.083	0.005	0.070
Total Potential Emission (tpy)	0.073	0.291	0.023	3.824	0.210	3.212

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

**Emission Factors for NOx: Small Boilers, Uncontrolled = 100

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,050,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,050 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, 1-01-006-04

(AP-42 Supplement D 3/98)

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

See page 2 for HAPs emissions calculations.

updated 4/99

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR <100
Insignificant Activities
HAPs Emissions**

Company Name: Unifix USA, Inc., a Subsidiary of New NGC, Inc. d/b/a National Gypsum Company
Address City IN Zip: Clinton Backerboard Plant, 75 Ivy Lane, Clinton IN, 47842
Permit Number: 20236
Plt ID: 165-20326-00081
Reviewer: Jenny Acker
Date: 38296

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr					
Boiler	2.79E-05	1.60E-05	9.97E-04	2.39E-02	4.52E-05
Large Space Heaters	4.63E-05	2.64E-05	1.65E-03	3.96E-02	7.49E-05
Small Space Heaters	4.38E-06	2.50E-06	1.56E-04	3.75E-03	7.09E-06
Water Heater	1.75E-06	1.00E-06	6.26E-05	1.50E-03	2.84E-06
Total Potential Emission (tpy)	8.031E-05	4.589E-05	2.868E-03	6.884E-02	1.300E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr					
Boiler	6.65E-06	1.46E-05	1.86E-05	5.05E-06	2.79E-05
Large Space Heaters	1.10E-05	2.42E-05	3.08E-05	8.37E-06	4.63E-05
Small Space Heaters	1.04E-06	2.29E-06	2.92E-06	7.93E-07	4.38E-06
Water Heater	4.17E-07	9.18E-07	1.17E-06	3.17E-07	1.75E-06
Total Potential Emission (tpy)	1.912E-05	4.207E-05	5.354E-05	1.453E-05	8.031E-05

Summary Potential Emissions HAPs (tpy)	
HAPs - Organics	7.196E-02
HAPs - Metals	2.096E-04
Total Potential Emissions HAPs	7.217E-02

Methodology is the same as page 1.

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