

Ms. Gina Williams
Lehigh Portland Cement Company
121 N. First Street
P.O. Box 97
Mitchell, IN 47446

Re: Minor Source Modification No:
T093-10597-00002

Dear Ms. Williams:

Lehigh Portland Cement Company applied for a Part 70 operating permit on May 31, 1996, for a Portland cement manufacturing process. An application to modify the source was received on February 4, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) Two (2) natural gas-fired burners, identified as EU-11 and EU-12, which will supply heat for the raw mill system, each with heat input capacities of 20 million Btu per hour, and exhausting through the existing raw mills to existing stacks S-RMDC3 and S-RMDC4.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Bryan Sheets or extension (3-0431), or dial (317) 233-0431.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

bjs

cc: File - Lawrence County
U.S. EPA, Region V
Lawrence County Health Department
Air Compliance Section Inspector - Joe Foyst
Compliance Data Section - Jerri Curless
Administrative and Development - Janet Mobley
Technical Support and Modeling - Nancy Landau

PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR MANAGEMENT

**Lehigh Portland Cement Company
121 North First Street
Mitchell, Indiana 47446**

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

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 093-10597-00002	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary Portland cement manufacturing plant.

Responsible Official: Edward E. Epping
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: 121 North First Street, P.O. Box 97, Mitchell, Indiana 47446
Phone Number: 812-849-2191
SIC Code: 3241
County Location: Lawrence
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major Source, under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) Two (2) natural gas-fired burners, identified as EU-11 and EU-12, which will supply heat for the raw mill system, each with heat input capacities of 20 million Btu per hour, and exhausting through the existing raw mills to existing stacks S-RMDC3 and S-RMDC4.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

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

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

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

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

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

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

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

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

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

SECTION C GENERAL OPERATION CONDITIONS

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

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this approval, 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, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, 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;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP 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 Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.
- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

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

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

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

C.4 Opacity [326 IAC 5-1]

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

- (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.5 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this approval 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.

Testing Requirements [326 IAC 2-7-6(1)]

C.6 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 approval, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
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 Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM, within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval. If required by specific conditions in Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this approval. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
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 the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.8 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (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, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.9 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.10 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information 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 kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.

- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this approval;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

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

- (a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval 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, OAM, on or before the date it is due.
- (c) Unless otherwise specified in this approval, any quarterly or semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) Two (2) natural gas-fired burners, identified as EU-11 and EU-12, which will supply heat for the raw mill system, each with heat input capacities of 20 million Btu per hour, and exhausting through the existing raw mills to existing stacks S-RMDC3 and S-RMDC4.

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

D.1.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the PM emissions from the natural gas-fired burners (EU-11 and EU-12) shall be limited by the allowable PM emission rate for the raw mill process which is calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1]

The two (2) burners (EU-11 and EU-12) shall combust only natural gas. Therefore, the requirements of 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) will not apply.

D.1.3 NSPS for Portland Cement Plants [326 IAC 12] [40 CFR 60, Subpart F]

The natural gas-fired burners shall not operate at the same time as the existing 37 million Btu per hour coal-fired stoker. Therefore, there is no emissions increase for the system and the requirements of 326 IAC 12 (New Source Performance Standards) and 40 CFR Part 60, Subpart F, will not apply.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: Lehigh Portland Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: 121 North First Street, P.O. Box 97, Mitchell, Indiana 47446
Source Modification No.: T093-10597-00002

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

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 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 Management**

Technical Support Document (TSD) for a for a Minor Source Modification
to a Part 70 Operating Permit

Source Background and Description

Source Name:	Lehigh Portland Cement Company
Source Location:	121 N. First Street, Mitchell, Indiana 47446
County:	Lawrence
SIC Code:	3241
Operation Permit No.:	T093-5990-00002
Operation Permit Issuance Date:	N/A
Minor Source Modification No.:	T093-10597-00002
Permit Reviewer:	Bryan Sheets

The Office of Air Management (OAM) has reviewed a modification application from Lehigh Portland Cement Company (Lehigh) relating to the construction and operation of the following equipment:

- (1) Two (2) natural gas-fired burners, identified as EU-11 and EU-12, which will supply heat for the raw mill system, each with heat input capacities of 20 million Btu per hour, and exhausting through the existing raw mills to existing stacks S-RMDC3 and S-RMDC4.

Existing Approvals

The source applied for a Part 70 Operating Permit on May 31, 1996. The source has been operating under previous approvals including, but not limited to, the following:

- (1) OP 47-01-88-0072, issued on May 30, 1984.
- (2) OP 47-01-88-0073, issued on May 30, 1984.
- (3) OP 47-01-88-0074, issued on May 30, 1984.
- (4) OP 47-01-88-0075, issued on May 30, 1984.
- (5) OP 47-01-88-0076, issued on May 30, 1984.
- (6) OP 47-01-88-0077, issued on May 30, 1984.
- (7) OP 47-01-88-0078, issued on May 30, 1984.
- (8) OP 47-01-88-0079, issued on May 30, 1984.
- (9) OP 47-01-88-0080, issued on May 30, 1984.
- (10) OP 47-01-92-0097, issued on July 22, 1987.
- (11) OP 47-04-92-0099, issued on March 30, 1988.

- (12) CP 093-2770-00002, issued on March 3, 1993.
- (13) CP 093-4598-00002, issued on February 27, 1998.
- (14) A 093-9623-00002, issued on April 29, 1998.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 4, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations

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 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.”

Pollutant	Potential To Emit (tons/year)
PM	1.3
PM-10	1.3
SO ₂	0.1
VOC	1.0
CO	14.7
NO _x	17.5

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Hexane	0.32
Formaldehyde	0.01
All other HAPs	negligible
TOTAL	0.33

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of NO_x is equal to or greater than 10 tons per year but less than 25 tons per year. Therefore, the source is required to obtain a minor source modification subject to the provisions of 326 IAC 2-7-10.5(d).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects 1996 emission data.

Pollutant	Actual Emissions (tons/year)
PM	738.0
PM-10	670.6
SO ₂	3976.9
VOC	13.8
CO	131.6
NO _x	2228.3
HAPs	no data

County Attainment Status

The source is located in Lawrence County.

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

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Lawrence County has been designated as attainment or unclassifiable for ozone.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	1.3	1.3	0.1	1.0	14.7	17.5
Net Emissions	1.3	1.3	0.1	1.0	14.7	17.5
PSD Significant Level	25	15	40	40	100	40

This modification to an existing major stationary source is not major because the emissions increases are less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the Prevention of Significant Deterioration requirements do not apply.

Federal Rule Applicability

- (a) The natural gas-fired burners will be installed such that the new burners and the existing coal-fired stoker cannot operate at the same time which will ensure that there is not an increase in emission rate for particulate matter. Therefore, the addition of the natural gas-fired burners is a change to the raw mill system but is not considered a modification as defined in 40 CFR 60.14. Therefore, the raw mill system is still not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart F).
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 14 and 40 CFR Part 61 and 63, applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM₁₀, NO_x, SO₂ and CO. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 4-1 (Open Burning)

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.

326 IAC 5-1 (Visible Emissions Limitations)

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

- (a) Opacity shall not exceed an average of forty percent (40%) 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.

326 IAC 6-3-2 (Process Operations)

Since the natural gas-fired burners will be part of the raw mill system, the emissions from the burners will be included in the limit for the process.

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the raw mill system (S-RMDC3 and S-RMDC4) shall be limited to 53 pounds per hour based on a maximum process weight rate of 120 tons per hour. The limit was calculated using the following equation:

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

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The baghouses (RMDC3 and RMDC4) shall be in operation at all times the associated facilities are in operation, in order to comply with this limit.

326 IAC 6-4 (Fugitive Dust Emissions)

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

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitation)

All of the combustion units associated with this project will be required to use natural gas as the only fuel. Therefore, the requirements of 326 IAC 7-1.1 will not apply.

Compliance Requirements

Permits issued under 326 IAC 2-7 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, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. 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 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.

There are no compliance monitoring requirements for the natural gas-fired burners.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) The natural gas-fired burners will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations.

Conclusion

The construction and operation of the natural gas-fired burners shall be subject to the conditions of the attached proposed Minor Source Modification to a Part 70 Permit No. T093-10597-00002.

**Appendix A: Emissions Calculations
Natural Gas-Fired Raw Mill Burners**

Company Name: Lehigh Portland Cement Company
Address City IN Zip: 121 N. First Street, Mitchell, IN 47446
CP: 093-10597-00002
Plt ID: 093-00002
Reviewer: Bryan Sheets
Date: 2/12/99

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
40.0	350.4

	PM	PM10	SO2	NOx	VOC	CO	Lead
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0	0.0005
Potential Emission in tons/yr	1.3	1.3	0.1	17.5	1.0	14.7	0.0

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1 and 1.4-2, SCC #1-02-006-02

Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

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

**Appendix A: Emissions Calculations
Bituminous Coal Combustion
HAP Calculations**

**Company Name: Lehigh Portland Cement Company
Address, City IN Zip: 121 N. First Street, Mitchell, IN 47446
CP: '093-10597-00002
Plt ID: '093-00002
Reviewer: Bryan Sheets
Date: 2/12/99**

Potential Throughput
(MMCF/yr)

350.4

HAP	Emission Factor (lbs/MMCF)	Emissions	
		(lbs/yr)	(tons/yr)
2-Methylnaphthalene	2.40E-05	0.01	0.00
3-Methylchloranthrene	1.80E-06	0.00	0.00
7,12-Dimethylbenz(a)anthracene	1.60E-05	0.01	0.00
Acenaphthene	1.80E-06	0.00	0.00
Acenaphthylene	1.80E-06	0.00	0.00
Anthracene	2.40E-06	0.00	0.00
Arsenic Compounds	2.00E-04	0.07	0.00
Benz(a)anthracene	1.80E-06	0.00	0.00
Benzene	2.10E-03	0.74	0.00
Benzo(a)pyrene	1.20E-06	0.00	0.00
Benzo(b)fluoranthene	1.80E-06	0.00	0.00
Benzo(g,h,i)perylene	1.20E-06	0.00	0.00
Benzo(k)fluoranthene	1.80E-06	0.00	0.00
Beryllium Compounds	1.20E-05	0.00	0.00
Cadmium Compounds	1.10E-03	0.39	0.00
Chromium Compounds	1.40E-03	0.49	0.00
Chrysene	1.80E-06	0.00	0.00
Cobalt Compounds	8.40E-05	0.03	0.00
Dibenzo(a,h)anthracene	1.20E-06	0.00	0.00
Dichlorobenzene	1.20E-03	0.42	0.00
Fluoranthene	3.00E-06	0.00	0.00
Fluorene	2.80E-06	0.00	0.00
Formaldehyde	7.50E-02	26.28	0.01
Hexane	1.80E+00	630.72	0.32
Indeno(1,2,3-cd)pyrene	1.80E-06	0.00	0.00
Manganese Compounds	3.80E-04	0.13	0.00
Mercury Compounds	2.60E-04	0.09	0.00
Naphthalene	6.10E-04	0.21	0.00
Nickel Compounds	2.10E-03	0.74	0.00
Phenanathrene	1.70E-05	0.01	0.00
Pyrene	5.00E-06	0.00	0.00
Selenium Compounds	2.40E-05	0.01	0.00
Toluene	3.40E-03	1.19	0.00
TOTAL HAPs		661.54	0.33

METHODOLOGY

Potential Emissions (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) / 2000 lbs/ton

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