CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT

ESSROC Cement Corporation
Highway 31
Speed, Indiana 47172

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP-019-9349-00008	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). 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

The Permittee owns and operates a portland cement manufacturing plant

Responsible Official:	David DeMille
Source Address:	Highway 31, Speed, Indiana 47172
Mailing Address:	Highway 31, Speed, Indiana 47172
SIC Code:	3241
County Location:	Clark (outside Jeffersonvile Township)
County Status:	Nonattainment for ozone, Attainment for other criteria pollutants
Source Status:	Major Source, Part 70 Permit Program Major Source, under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary

This construction permit is for a roller press system for the existing 2D Finish Grinding System. This roller press system replaces the roller crusher system, has a maximum cement production of 120 tons per hour, and consists of the following emission units:

(a) three (3) belt conveyors (ID# 39, 49, and 53);

(b) one (1) bucket elevator (ID# 41);

(c) one (1) roller press (ID# 45); and

(d) modification of existing conveyor (ID# 9).

Emission units 39, 49, 53, 41, and 45 are attached to a baghouse 261 and exhaust through a stack (ID# 93). Emission unit 9 is attached to baghouse 262 and exhaust through a stack (ID# 94).

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

SECTION B GENERAL CONSTRUCTION AND OPERATION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

Construction Conditions [326 IAC 2-1-3.4]

B.1 General Construction Conditions

(a) The data and information supplied with the application shall be considered part of this

permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).

(b) 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.

B.2 Effective Date of the Permit [IC13-15-5-3]

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

B.3 Revocation of Permits [326 IAC 2-1-9(b)]

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

B.4 Permit Review Rules [326 IAC 2]

Notwithstanding Operation Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.5 First Time Operation Permit [326 IAC 2-1-4]

This document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(b) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

(c) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).

(d) The Permittee has submitted its Part 70 permit on June 3, 1996 for the existing source. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Operation Conditions

B.6 General Operation Conditions

(a) The data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).

(b) The Permittee shall 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 (IC13-17) and the rules promulgated thereunder.

B.7. Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days prior to start up, 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 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) The Preventive Maintenance Plans shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.8 Transfer of Permit [326 IAC 2-1-6]

Pursuant to 326 IAC 2-1-6 (Transfer of Permits):

(a) In the event that ownership of this portland cement manufacturing plant is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.

(b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.

(c) The OAM shall reserve the right to issue a new permit.

B.9 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

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

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

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to

reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

B.10 Availability of Permit [326 IAC 2-1-3(I)

Pursuant to 326 IAC 2-1-3(I), the Permittee shall maintain the applicable permit on the premises of the source and shall make this permit available for inspection by the IDEM, or other public official having jurisdiction.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitation and Standards

C.1 Opacity Limitations [326 IAC 5-1-2]

Pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:

(a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.

(b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

C.2 Fugitive Dust Emissions [326 IAC 6-4]

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

C.3 Operation of Equipment

All air pollution control equipment listed in this permit shall be in placed or operated at all times that the emission units vented to the control equipment are in operation, as described in Section D of this permit.

Testing Requirements

C.4 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 methods approved by the IDEM, OAM.

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 Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days before 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.

Compliance Monitoring Requirements

C.5 Compliance Monitoring

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment upon startup. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notify:

Indiana Department of Environmental Management
Compliance Data Section, 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 inability to meet this date.

C.6 Malfunction Condition [326 IAC 1-6-2]

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

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

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

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

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

C.7 Maintenance of Monitoring Equipment

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary

monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.8 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the requirements of this permit shall be performed, according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.9 Pressure Gauge Specifications

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 meet the specifications contained in the approved site-specific Preventive Maintenance Plan.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate 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 permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

Record Keeping and Reporting Requirements

C.11 Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that meets the requirements of 326 IAC 2-6 (Emission Reporting). This annual statement must be received by April 15 of each year and must comply with the minimum requirements 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). The annual statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The annual emission statement 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, OAM, on or before the date it is due.

C.12 Monitoring Data Availability

(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 permit shall be performed at all times the air pollution emitting equipment listed in section D.1 of this permit is operating.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the air pollution emitting equipment 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 permit.

(c) If the air pollution emitting equipment is operating but the associated air pollution control equipment monitoring parameter is outside the required range specified in the approved site-specific Preventive Maintenance Plan or visible emissions are observed at the stack exhausts, as determined via 40 CFR Part 60, Appendix A, Method 22, and if these conditions are not caused by a malfunction as defined in 326 IAC 1-2-39, additional observations and sampling should be taken with a record made of the nature of the condition. An excursion from a monitoring parameter does not constitute a violation of this permit, but failure to take corrective actions is considered a violation.

(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. Failure to make the required observations, sampling, maintenance procedures, or record keeping is a violation of this permit.

C.13 General Record Keeping Requirements

(a) Records of all required monitoring data and support information shall be retained for a period of two (2) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location and available within one (1) hour upon verbal request of an IDEM, OAM, representative. 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 permit;

(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.

(d) All record keeping requirements not already legally required shall be implemented upon start up.

SECTION D.1 FACILITY CONDITIONS

Roller Press System with a maximum cement production of 120 tons per hour and consisting of the following emission units:

(a) three (3) belt conveyors (ID# 39, 49, and 53);

(b) one (1) bucket elevator (ID# 41);

(c) one (1) roller press (ID# 45); and

(d) modification of existing conveyor (ID# 9).

Emission units 39, 49, 53, 41, and 45 are attached to a baghouse 261 and exhaust through a stack (ID# 93). Emission unit 9 is attached to baghouse 262 and exhaust through a stack (ID# 94).

Emissions Limitation and Standards

D.1.1 Particulate Matter (PM) [326 IAC 2-2] [326 IAC 6-3-2]

PM emissions from the roller press system shall not exceed 5.5 pounds per hour. Compliance with this limit shall render 326 IAC 2-2 (PSD Rules) not applicable. Compliance with this limit shall also satisfy the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Process Operations).

D.1.2 Particulate Matter less than 10 microns (PM-10) [326 IAC 2-2]

PM-10 emissions from the roller press system shall not exceed 3.2 pounds per hour. Compliance with this limit shall render 326 IAC 2-2 (PSD Rules) not applicable.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-1-4(f)]

Pursuant to 326 IAC 2-1-3 (Construction and Operating Permit Requirements) compliance stack tests shall be performed on the Roller Press System for PM and PM-10 (filterable portion only) within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. These tests shall be performed to determine compliance with the PM and PM-10 limits specified in Conditions D.1.1 and D.1.2, respectively. These tests shall be performed according to 326 IAC 3-2.1 (Source Sampling Procedures) utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner.

Compliance Monitoring Requirements

D.1.4 Visible Emission Determinations [40 CFR Part 60, Appendix A, Method 22]

(a) Presence of visible emissions shall be determined at the baghouse stack during normal daylight operations. A trained observer shall determine whether visible emissions are present or not using 40 CFR Part 60, Appendix A, Method 22 (copy enclosed).

(b) A trained observer is someone who is trained and knowledgeable regarding the effects on the visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor). This training shall be obtained from written materials found in Citations 1 and 2 of Bibliography or from the lecture portion of the Method 9 certification course.

(c) The Preventive Maintenance Plan for this unit shall contain response steps for when visible emissions are observed.

D.1.5 Baghouse Operating Parameters

That baghouses 261 and 262 shall be operated at all times when the roller press system is in operation.

(a) The Permittee shall take readings of the total static pressure drop across each of the two (2) baghouses, at least once per working shift when the Rotary Press System is in operation. The pressure drop across each baghouse shall be maintained within the range set forth in the approved site-specific Preventive Maintenance Plan. The Preventive Maintenance Plan for the baghouses shall contain troubleshooting contingency and corrective actions for the baghouses when the pressure reading is outside of the range specified in the approved site-specific Preventive Maintenance Plan for any one reading.

(b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications of this permit and shall be calibrated every six (6) months.

(c) The gauge employed to take the pressure drop across the baghouses or any part of the facility shall meet the specifications contained in the approved site-specific Preventive Maintenance Plan.

D.1.6 Broken Bag or Failure Detection

In the event that bag failure has been observed and emissions temporarily exceed the standards:

(a) All reasonable measures shall be taken to correct, as expeditiously as practicable, the conditions causing the emissions to exceed the allowable limits;

(b) All possible steps shall be taken to minimize the impact of the excessive emissions on ambient air quality which may include but not limited to curtailment of operation and/or shutdown of the facility.

Record Keeping Requirements

D.1.7 Record Keeping Requirements

(a) The Permittee shall maintain records of daily visible emission observations of the roller press system stack exhausts using the data sheet as provided under U.S. EPA Method 22.

(b) To document compliance with Condition D.1.1 and D.1.2, the Permittee shall maintain the following:

(1) Weekly records of the following operational parameters during normal operation:

(A) Differential pressure; and

(B) Cleaning cycle: frequency and differential pressure

(2) Documentation of all response steps implemented when the baghouses operate outside of the pressure drop range specified in the approved site-specific Preventive Maintenance Plan and when visible emissions are observed.

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Standard operating procedures for the equipment, manufacturer's specifications or their equivalent, and quality assurance/quality control (QA/QC) procedures which may be included in the preventive maintenance plan, shall also be maintained.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967

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

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE: IT HAS POTENTIAL TO EMIT 25 LBS/HR PARTICULATES ?_____, 100 LBS/HR VOC ?_____, 100 LBS/HR SULFUR DIOXIDE ?_____ OR 2000 LBS/HR OF ANY OTHER POLLUTANT ?_____ EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

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

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

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

COMPANY: ESSROC Cement Corporation PHONE NO._____

LOCATION (CITY AND COUNTY): Speed/Clark County
PERMIT NO.: 019-9349 AFS PLANT ID: 019-00008 AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 19____ _____ AM/PM

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____
_____
_

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

_____
_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

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

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

MALFUNCTION RECORDED BY: _____DATE:_____TIME:_____

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

326 IAC 1-6-1 Applicability of rule

Sec. 1. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO2, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m. : 11 IR 2373)

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

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

_____

_

_____

_

PAGE 2 OF 2

Mail to: Permit Administration & Development Section
Office Of Air Management
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

ESSROC Cement Corporation
Highway 31
Speed, Indiana 47172

Affidavit of Construction

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

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

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

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

4. I hereby certify that ESSROC Cement Corporation, Highway 31, Speed, Indiana 47172 has constructed the 2D Finish Mill Roller Press System in conformity with the requirements and intent of the construction permit application received by the Office of Air Management on January 5, 1998 and as permitted pursuant to **Construction Permit No. CP-019-9349, Plant ID No. 019-00008** issued on _____.

5. I hereby certify that ESSROC Cement Corporation is subject to the Title V program and has submitted a Title V operating permit application on June 3, 1996.

Further Affiant said not.

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

_____
Signature

_____
Date

STATE OF INDIANA)
)SS
COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____, 19 _____.

My Commission expires: _____

_____
Signature

_____
Name (typed or printed)

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name:	ESSROC Cement Corporation
Source Location:	Highway 31, Speed, Indiana 47172
County:	Clark
Construction Permit No.:	CP-019-9349
Plant ID No.:	019-00008
SIC Code:	3241
Permit Reviewer:	Marco A. Salenda

The Office of Air Management (OAM) has reviewed an application from ESSROC Cement Corporation relating to the construction and operation of a Roller Press System for the existing 2D Finish Grinding System. This Roller Press System replaces the Roller Crusher System, has a maximum cement production of 120 tons per hour, and consists of the following emission units:

(a) three (3) belt conveyors (ID# 39, 49, and 53);

(b) one (1) bucket elevator (ID# 41);

(c) one (1) roller press (ID# 45); and

(d) modification of existing conveyor (ID# 9).

Emission units 39, 49, 53, 41, and 45 are attached to a baghouse 261 and exhaust through a stack (ID# 93). Emission unit 9 is attached to baghouse 262 and exhaust through a stack (ID# 94).

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
93	Roller Press System	562	still unknown	10,600	ambient
94	Roller Press System	497	still unknown	3,200	ambient

Recommendation

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

Information, unless otherwise stated, 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 January 5, 1998, with additional information received on January 12, 1998.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (one page).

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	53.1	1036
Particulate Matter (PM-10)	1036	1036
Sulfur Dioxide (SO_2)	0.0	0.0
Volatile Organic Compounds (VOC)	0.0	0.0
Carbon Monoxide (CO)	0.0	0.0
Nitrogen Oxides (NO_x)	0.0	0.0
Single Hazardous Air Pollutant (HAP)	0.0	0.0
Combination of HAPs	0.0	0.0

(a) Allowable PM emissions are determined from the applicability of rule 326 IAC 6-3-2. See attached spreadsheets for detailed calculations.

(b) The allowable PM emissions based on the rules cited are less than the potential PM emissions, therefore, the allowable PM emissions are used for the permitting determination.

(c) Allowable PM emissions (as defined in the Indiana Rule) of PM are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

County Attainment Status

This source is located at the portion of Clark County that is considered attainment or unclassifiable for total suspended particulates (TSP) and particulate matter less than 10-microns (PM-10). Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	3,385
PM10	1,516
SO_2	56,341
VOC	1,538
CO	14,001
NO_x	72,542

(a) This existing source is a major stationary source because it is in one of the 28 listed

source categories and at least one regulated pollutant is emitted at a rate of 100 tons per year or more.

(b) These emissions were based on the Facility Quick Look Report, dated July 1997.

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	10 (after controls)	10 (after controls)	0.0	0.0	0.0	0.0
Contemporaneous Increases	---	---	---	---	---	---
Contemporaneous Decreases	---	---	---	---	---	---
Net Emissions	10	10	0.0	0.0	0.0	0.0
Significant Level	25 (PSD)	15 (PSD)	40 (PSD)	40 (Offset)	100 (PSD)	40 (Offset)

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted its Part 70 (T-019-6016-00008) application on June 3, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12) and National Emission Standards for Hazardous Air Pollutants (40 CFR Part 63) applicable to this facility.

State Rule Applicability

(a) 326 IAC 2-6 (Emission Reporting)
This facility is subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 10 tons/yr (for specific counties) or 100 tons/yr of VOC. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

(b) 326 IAC 5-1 (Visible Emissions)
Pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:

(1) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.

(2) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

(c) 326 IAC 2-2 PSD (Rules) and 326 IAC 6-3 (Particulate Emission Limitation for Process Operations)
Particulate matter (PM) emissions from the Roller Press System shall not exceed 5.5 pounds per hour. Compliance with this limit shall render 326 IAC 2-2 not applicable and shall satisfy the requirements of 326 IAC 6-3-2.

(d) 326 IAC 2-2 PSD (Rules)
Particulate matter less than 10 microns (PM-10) emissions from the Roller Press System shall not exceed 3.2 pounds per hour. Compliance with this limit will render 326 IAC 2-2 not applicable.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants 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) Construction Permit Application Form Y.

None of these listed air toxics will be emitted from this proposed construction.

Conclusion

The construction of this Roller Press System will be subject to the conditions of the attached proposed **Construction Permit No. CP-019-9349, Plt ID 019-00008**.

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for New Construction and Operation

Source Name:	ESSROC Cement Corporation
Source Location:	Highway 31, Speed, Indiana 47172
County:	Clark
Construction Permit No.:	CP-019-9349
Plant ID No.:	019-00008
SIC Code:	3241
Permit Reviewer:	Marco A. Salenda

On February 20, 1998, ESSROC Cement Corporation, the Office of Air Management (OAM) had a notice published in the Clark County Evening News, Jeffersonville, Indiana, stating that ESSROC Cement Corporation had applied for a construction permit to construct and operate a Roller Press System with control. The notice also stated that OAM proposed to issue a permit for this installation 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.

On March 23, 1998, ESSROC Cement Corporation submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows:

Comment 1

In reference to condition B.5 - First Time Operation Permit, item (b), the following sentence is vague and should be clarified:

Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

Response 1

Since the sentence in question applies to phase construction and since the Roller Press System will not be constructed in phases, item (b) of condition B.5 - First Time Operating Permit is deleted from the permit.

Comment 2

ESSROC requests that conditions C.2 - Open Burning, C.3 - Incineration, C.6 - Asbestos Abatement Projects - Accreditation, C.11 - Asbestos Abatement Projects, and C.16 - Compliance with 40 CFR 82 and 326 IAC 22-1 be deleted from the final permit. These rules have no direct applicability to the facility being permitted, and reference to these extraneous rules in the permit is therefore confusing. Moreover, the permit already states that ESSROC is not relieved of the responsibility to comply with applicable rules (see conditions B.1(b) and B.6(b)), so additional reference to these specific rules is unnecessary. ESSROC urges OAM to issue a permit that is streamlined as possible.

Response 2

Conditions C.2 - Open Burning, C.3 - Incineration, C.6 - Asbestos Abatement Projects - Accreditation, C.11 - Asbestos Abatement Projects, and C.16 - Compliance with 40 CFR 82 and 326 IAC 22-1 are deleted from the permit. Succeeding permit conditions are renumbered accordingly.

Comment 3

In reference to condition C.7 - Compliance Monitoring, ESSROC requests that the requirement to install equipment "no more than ninety (90) days after receipt of this permit" be revised to "within ninety (90) days of startup." Construction of this project is not anticipated to begin for another nine to ten months.

Response 3

Any required monitoring equipment should be installed upon start-up. Condition C.7 - Compliance Monitoring (renumbered as C.5) is revised to specify as such.

Comment 4

ESSROC requests that the last sentence of condition C.8 - Maintenance of Monitoring Equipment, item (a), (beginning "In the case of continuous monitoring, . . .") be deleted from the permit. There are no continuous monitoring requirements in the permit, and the reference is therefore confusing.

Response 4

IDEM agrees that the sentence in question only applies to continuous monitoring equipment (e.g., continuous emissions monitor (CEM) and continuous opacity monitor (COM)) and therefore is deleted as follows:

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. ~~In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.~~

This condition is renumbered as C.7.

Comment 5

ESSROC requests that condition C.10 - Pressure Gauge Specifications be deleted from the permit. ESSROC believes it is important to provide flexibility in the permit so that individual circumstances can be taken into account as necessary. ESSROC requests that the provision be revised to state that if a pressure gauge is required, such gauge would be approved by IDEM prior to use.

Response 5

The minimum requirements for pressure gauge specifications are needed to avoid further approval of a required pressure gauge that needs to be installed to satisfy compliance monitoring requirements. IDEM does not preapprove any required pressure gauges. However, since ESSROC has agreed to include the pressure gauge specifications in the Preventive Maintenance Plan, which IDEM has approved, the pressure gauge to be used shall meet the approved specifications. Therefore, Condition C.10 - Pressure Gauge Specifications (renumbered as C.9) is revised as follows:

C.9 Pressure Gauge Specifications

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~~ **meet the specifications contained in the approved site-specific Preventive Maintenance Plan**.

Comment 6

ESSROC requests clarification of the first sentence of condition C.13 - Monitoring Data Availability, item (a).

Response 6

Condition C.13 - Monitoring Data Availability (renumbered as C.12), item (a), is revised as follows:

With the exception of performance tests conducted in accordance with Section C- Performance Testing.**,** ~~All~~ **all** observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

Additional changes are also made to this condition under **Response 7**.

Comment 7

In reference to condition C.13 - Monitoring Data Availability, items (b) through (e), ESSROC believes that these requirements are inconsistent with existing rules related to malfunctions (326 IAC 1-6-1, *et seq*.) and that there is no regulatory authority to impose these requirements. ESSROC requests that these items be deleted and that reference be made instead to compliance with the requirements of 326 IAC 1-6-1 (Malfunction Rule).

Response 7

IDEM realizes that the malfunction rule was inadvertently left out of the draft permit and should have been included. A new condition C.6 - Malfunction Condition is added in the final permit as follows:

C.6 Malfunction Condition

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

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

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

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

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

The requirements of condition C.13 - Monitoring Data Availability (renumbered as C.12), are revised such that they pertain to abnormal conditions not caused by a malfunction. “Abnormal conditions” on monitoring equipment are conditions when the pressure drop reading is out of the required range or when visible emissions are observed from the stack exhausts, as determined via U. S. EPA Method 22. These conditions are not necessarily caused by a malfunction of an air pollution-emitting facility or control equipment. They can also be caused by such things as operator error or increased material throughput which are not covered under the malfunction rule. If the malfunction rule does not apply, then the source shall comply with items (b) through (d). Items (e) and (f) are deleted since IDEM believes that failure to take corrective actions is a violation and the agency would allow for enforcement discretion. The revised condition reads as follows:

C.12 Monitoring Data Availability

(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 permit shall be performed at all times the **air pollution emitting** equipment **listed in section D.1 of this permit** 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 **air pollution emitting** equipment ~~listed in Section D of this permit~~ 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 permit.

(c) If the **air pollution emitting** equipment is operating but ~~abnormal conditions prevail~~ **the associated air pollution control equipment monitoring parameter is outside the required range specified in the approved site-specific Preventive Maintenance Plan or visible emissions are observed at**

the stack exhausts, as determined via 40 CFR Part 60, Appendix A, Method 22, and if these conditions are not caused by a malfunction as defined in 326 IAC 1-2-39, additional observations and sampling should be taken with a record made of the nature of the ~~abnormality~~ **condition**. **An excursion from a monitoring parameter does not constitute a violation of this permit, but failure to take corrective actions is considered a violation.**

(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. **Failure to make the required observations, sampling, maintenance procedures, or record keeping is a violation of this permit.**

~~(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.~~

Comment 8

In reference to condition C.14 - General Record Keeping Requirements, item (a), ESSROC objects to the requirement that monitoring data be retained for five years. The applicable rule only requires that documents be maintained for a period of two years and "shall be available . . . upon request." 326 IAC 2-1-3(j)(5). ESSROC further requests that the phrase "within one (1) hour" be deleted from the permit. There is no authority for this requirement. Moreover, it is unclear whether the one-hour requirement pertains to review ***at the plant site*** or to transmittal of documents ***to Indianapolis***. If the latter, then one-hour time frame is clearly unreasonable – the time required would depend on the number of documents requested, amount of copying required, etc. Without waving the objections set forth above, ESSROC requests that if this condition is retained in the permit, that it be revised to require that "records shall be kept at the source location and available ***at the site*** within one hour.

Response 8

IDEM agrees that the underlying record keeping requirement should be based on 326 IAC 2-1-3(j)(5). Pursuant to this rule, ESSROC is required to maintain monitoring data for a period of two years and shall make such documents available "upon request." IDEM also interprets "upon request" as based upon any given time. Moreover, based on IDEM's experience, *practical* requests for compliance related records can be made available within "one hour" from verbal notification. IDEM will provide sufficient time depending on the situation on hand. Condition C.14 - General Record Keeping Requirements (renumbered as C.13), item (a), is revised as follows:

(a) Records of all required monitoring data and support information shall be retained for a period of ~~at least five (5)~~ **two (2)** years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location and available within one (1) hour upon verbal request of an IDEM, OAM, representative, ~~for a minimum of three (3) years. They may be stored elsewhere for the remaining two (2) years providing they are made available within thirty (30) days after written 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.

Comment 9

In reference to condition C.14 - General Record Keeping Requirements, item (d), ESSROC requests that the record keeping requirement should begin "within ninety days of startup," not permit issuance," since, as discussed above, construction of this project is not anticipated to begin for approximately nine to ten months.

Response 9

Any required record keeping should begin upon start-up. Condition C.14 - General Record Keeping Requirements (renumbered as C.13), item (d), is revised to specify as such.

Comment 10

ESSROC requests that condition C.15 - General Reporting Requirements be deleted from the permit. The permit is not a Title V permit, and IDEM does not currently have any statutory or regulatory authority to require the reporting set forth in condition C.15. Even if IDEM did have such authority, ESSROC believes that this condition is vague and unenforceable. For example, it is unclear what a "deviation" is or when such an event would have to be reported. Moreover, it is not clear what "appropriate response steps" should consist of. Finally, a quarterly compliance report is overly burdensome and unnecessary under the circumstances present here.

Response 10

IDEM realizes that quarterly compliance reports are required in Title V permits and not in state construction permits. In addition, there are no facility-specific reporting requirements necessary. Therefore, condition C.15 - General Reporting Requirements is not applicable and is deleted.

Comment 11

In reference to conditions D.1.1 (Particulate Matter) and D.1.2 (Particulate Matter less than 10 microns), ESSROC requests that the emission limits be revised to 53.13 lb/hr up to 24 tons/yr (for PM) and 14 tons/yr (for PM-10). The PSD rules define "significant net emissions increase" for PM and PM-10 as an increase in actual emissions *in tons/year* from a particular physical change or change in method of operation. It is incorrect and overly stringent to convert this "tons/yr" limit to a pounds/hour limit, which does not take into account routine and expected "down times" that occur in ESSROC's operation. (Note that the 53.13 lb/hr limit is that set under 326 IAC 6-3-2).

Response 11

IDEM imposed a PM and PM-10 limit of 5.5 and 3.2 pounds per hour, respectively. Compliance with these limits would ensure that the PSD significant levels for PM and PM-10 of 25 and 15 tons per year, respectively, are not exceeded. Compliance with the PM limit would also ensure compliance with 326 IAC 6-3-2.

IDEM realizes the PSD thresholds are in terms of tons per year of emissions, but it is IDEM's responsibility to provide practically enforceable permit conditions to ensure that the PSD thresholds are not exceeded by imposing short term limitations which are easily measured, especially if there is underlying rule that requires emissions to be limited based on short term limitations (e.g. 326 IAC 6-3-2 for PM).

During a meeting between IDEM and ESSROC representatives on July 10, 1998, ESSROC changed its position regarding this particular matter and agreed to the original language as proposed in operation conditions D.1.1 and D.1.2. ESSROC emphasized that the reason for acceptance is because it believes that the particulate limitations in this case will be easily met. ESSROC also emphasized that it does not want this decision to set a precedent for any future permitting exercise.

Comment 12

ESSROC requests clarification of condition D.1.3 - Testing Requirements as no performance test is specified in the draft permit.

Response 12

Upon further review, IDEM decides to make the following changes:

(1) Condition D.1.3 -Testing Requirements is revised such that testing for PM and PM-10 (filterable portion only) is required. Initial testing of the Roller Press System for these pollutants is necessary since it relies on the baghouses to operate properly to ensure that the PSD significant levels and PM limit per 326 IAC 6-3 are not exceeded. Therefore, condition D.1.3 shall read as follows:

D.1.3 Testing Requirements [326 IAC 2-1-4(f)]

~~Testing of this facility is not required by this permit. However, if testing is required, compliance with the PM and PM-10 limits specified in Conditions D.1.1 and D.1.2, respectively, shall be determined by a performance test conducted in accordance with Section C - Performance Testing. This does not preclude testing requirements on this facility under 326 IAC 2-1-4(f).~~ **Pursuant to 326 IAC 2-1-3 (Construction and Operating Permit Requirements) compliance stack tests shall be performed on the Roller Press System for PM and PM-10 (filterable portion only) within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. These tests shall be performed to determine compliance with the PM and PM-10 limits specified in Conditions D.1.1 and D.1.2. These tests shall be performed according to 326 IAC 3-2.1 (Source Sampling Procedures) utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner.**

(2) New conditions C.4 - Performance Testing and C.10 - Actions Related to Noncompliance Demonstrated by a Stack Test is added as follows:

C.4 Performance Testing [326 IAC 3-6]

(d) 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 methods approved by the IDEM, OAM.

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 Management
100 North Senate Avenue, P.O. Box 6015**

Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days before 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.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate 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 permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

Comment 13

Condition D.1.4 (Visible Emission Notations), item (e), makes reference to a "compliance response plan" which shall contain "troubleshooting contingency and response steps." ESSROC believes that this provision is inconsistent with the malfunction rule (326 IAC 1-6-1 *et seq*.), outside the scope of IDEM's regulatory authority, and should be deleted. In any event, the provision is vague and unenforceable as it does not provide clear guidance to the permittee as to what is required.

Response 13

During the meeting with ESSROC on June 10, 1998, the company agreed to perform visible emission determination via 40 CFR Part 60, Appendix A, Method 22. Instead of noting whether visible emissions are "normal" or "abnormal", this method determines whether a visible emission occurs or not and does not require the determination of opacity levels via Method 9. Since the source is not required to perform Method 9 readings, the person designated to perform Method 22 readings does not need to be certified according to the Method 9 procedures. However, it is

necessary that the observer is educated on the general procedures for determining the presence of visible emissions. Condition D.1.4 (Visible Emission Notations) is replaced with D.1.4 (Visible Emission Determinations) as follows:

D.1.4 ~~Visible Emissions Notations~~ **Visible Emission Determinations [40 CFR Part 60, Appendix A, Method 22]**

~~(a) Daily visible emission notations of the baghouse stack exhaust shall be performed during normal daylight operations. 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 time.~~

~~(c) In the case of batch or discontinuous operations, 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 an 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.~~

(a) Presence of visible emissions shall be determined at the baghouse stack during normal daylight operations. A trained observer shall determine whether visible emissions are present or not using 40 CFR Part 60, Appendix A, Method 22 (copy enclosed).

(b) A trained observer is someone who is trained and knowledgeable regarding the effects on the visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor). This training shall be obtained from written materials found in Citations 1 and 2 of Bibliography or from the lecture portion of the Method 9 certification course.

(c) The Preventive Maintenance Plan for this unit shall contain response steps for when visible emissions are observed.

In addition, all observations required under the above new condition shall be recorded using the data sheet as provided by the method. Condition D.1.6 - Record Keeping Requirements is revised accordingly to include this requirement.

Comment 14

In reference to condition D.1.5 (Baghouse Operating Parameters), items (a) through (e), ESSROC requests that this condition be deleted in its entirety from the permit, as there is no statutory or regulatory authority for such conditions. Without waiving this objection, ESSROC notes the following:

Item (a), the specified range of 7 - 9 inches of water is inappropriate. Different bag design specifications would result in different pressure drop ranges, and it is impossible at this time and in the context of this permit to specify the appropriate pressure drop range. ESSROC suggests that the requirement be revised to read "within the range set forth in the site-specific Preventive Maintenance Plan based on the design specifications of the bags used."

ESSROC also requests that the last sentence of item (a) be deleted, as there is no statutory or regulatory basis to require "troubleshooting contingency and corrective actions" in ESSROC's Preventive Maintenance Plan.

Item (c), for the reason set forth on condition C.10 above, ESSROC requests that this item be deleted.

Item (d), ESSROC believes it is unreasonable, onerous and outside the scope of IDEM's regulatory authority to require a baghouse inspection every quarter even when the system is working properly and visible emissions are within "normal" range. Such an inspection would require a complete shutdown of ESSROC's process. ESSROC requests that should condition D.1.5 remain in the permit, that item (d) be revised to require an annual inspection during routine shutdown periods or, alternatively, to delete the requirement altogether and address the issue in the Preventive Maintenance Plan.

Item (e), ESSROC requests that reference to "baghouse failure" be deleted from the permit. This condition is vague and unenforceable. ESSROC is subject to the existing malfunction rule, and the provisions of that rule should govern any malfunctions. In addition, it is unreasonable to require a shutdown of the affected compartment (there is only one compartment) before the cause of any malfunction has been established. ESSROC believes a more appropriate course of action would be to make reference to the requirements of the malfunction rule, which requires reasonable measures to be taken to correct the conditions causing an exceedance. Under certain circumstances, that may include curtailment of the operation and/or shutdown of the facility, but such steps may or may not be necessary depending on the circumstances.

Response 14

In reference to item (a), IDEM realizes that different bag design specifications would result in different pressure drop ranges. But considering that the Roller Press System to be installed will be operating at ambient temperatures, continuous replacement of bags would be considered abnormal. Notwithstanding this, IDEM agrees that the proper pressure drop range can be defined in the Preventive Maintenance Plan, which the source submitted for IDEM's preapproval. It is with understanding that the source shall update the Preventive Maintenance Plan, as necessary to reflect the appropriate pressure drop range for new bags. In addition, the Preventive Maintenance Plan shall contain the appropriate response steps to correct any "out of range" readings. IDEM, under 326 IAC 2-1-3(i)(8), is authorized to add requirements to ensure continuous compliance. Further authority can be found in 326 IAC 2-1-4(g) which references 326 IAC 2-1-3(j) which provides that IDEM may require the source to monitor emissions when necessary to demonstrate compliance with a rule. The proper operation of the baghouse is necessary to stay under PSD applicability thresholds and therefore such monitoring is necessary to demonstrate the source remains below such thresholds. The frequency of monitoring is also revised from "at least once per week" to "at least once per working shift". IDEM would like to point out that the latter has been required in most situations requiring parametric monitoring and ESSROC's case should not be treated any different. Item (a) is revised as follows:

(a) The Permittee shall take readings of the total static pressure drop across each of the two (2) baghouses, at least once per ~~week~~ **working shift when the Rotary Press System**

is in operation. ~~Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across each of the baghouses shall be maintained within the range of 7 - 9 inches of water, such that the particulate limitations in operation conditions D.1.1 and D.1.2 shall be met~~ **The pressure drop across each baghouse shall be maintained within the range set forth in the approved site-specific Preventive Maintenance Plan**. The Preventive Maintenance Plan for the baghouses shall contain troubleshooting contingency and corrective actions for the baghouses when the pressure reading is outside of ~~this~~ **the** range **specified in the approved site-specific Preventive Maintenance Plan** for any one reading.

Items (b) and (c) are combined as new item (b):

(b) **The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications of this permit and shall be calibrated every six (6) months.**

Item (d) is deleted.

In reference to item (e), it is rewritten as a separate new condition D.1.6 - Broken Bag or Failure Detection:

D.1.6 Broken Bag or Failure Detection

In the event that bag failure has been observed **and emissions temporarily exceed the standards**:

~~(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced.~~

~~(b) Within eight (8) 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) hours of discovery of the failure and shall include a timetable for completion.~~

(a) All reasonable measures shall be taken to correct, as expeditiously as practicable, the conditions causing the emissions to exceed the allowable limits;

(b) All possible steps shall be taken to minimize the impact of the excessive emissions on ambient air quality which may include but not limited to curtailment of operation and/or shutdown of the facility.

Comment 15

In reference to condition D.1.6 (Record Keeping Requirements), item (b)(1)(A), ESSROC requests that this provision read simply “differential pressure;” (delete the words “inlet,” “outlet” and “static”).

Response 15

The requested change is acceptable and the condition is revised accordingly.

Comment 16

In reference to condition D.1.6 (Record Keeping Requirements), items (b)(2) through (7), ESSROC believes that all of these requirements are vague and unenforceable and that certain items, e.g., (2) and (7), are outside the scope of IDEM's regulatory authority. ESSROC believes that the record keeping requirement set forth in condition C.14 of the draft permit, coupled with the Preventive Maintenance Plan, should be sufficient to address IDEM's concerns regarding these issues, and that these additional requirements should be eliminated.

Response 16

In reference to condition D.1.6 - Record Keeping Requirements (renumbered as D.1.7), item (b) is revised as follows:

(b) To document compliance with Condition D.1.1 and D.1.2, the Permittee shall maintain the following:

(1) Weekly records of the following operational parameters during normal operation:

(A) Differential pressure; and

(B) Cleaning cycle: frequency and differential pressure

(2) Documentation of all response steps implemented~~, per event~~ **when the baghouses operate outside of the pressure drop range specified in the approved site-specific Preventive Maintenance Plan and when visible emissions are observed.**

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

~~(4) Quality Assurance/Quality Control (QA/QC) procedures.~~

~~(5) Operator standard operating procedures (SOP).~~

~~(6) Manufacturer's specifications or its equivalent.~~

~~(7) Equipment "troubleshooting" contingency plan.~~

(4) Standard operating procedures for the equipment, manufacturer's specifications or their equivalent, and quality assurance/quality control (QA/QC) procedures which may be included in the preventive maintenance plan, shall also be maintained.

Comment 17

ESSROC requests that the sample malfunction report be deleted from the permit. The requirement to use this specified form is not contained in the malfunction rule. Moreover, the malfunction report form attached to the draft permit does not accurately reflect applicable malfunction requirements (for example, the quotation of 326 IAC 1-6-1 contained in the second page of the form does not accurately state the current version of that rule).

Response 17

IDEM will accept any substantially equivalent malfunction report form from ESSROC as long as all the requirements of the malfunction rule are included in the forms.

During the 30-day comment period, concerned citizens submitted comments on the proposed construction permit. Even though the proposed permit is not for burning tires, IDEM appreciates these comments. IDEM has addressed these types of comments in the permit (CP 019-3340) for the tire burning facility issued on September 5, 1997.

In addition to above changes per comments received, IDEM is making the following revisions to the proposed permit per changes on the model permit:

SECTION A SOURCE SUMMARY

(1) The first paragraph of Section A - Source Summary is revised as follows:

This permit is based on information ~~presented in the permit application and any information~~ requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) ~~and submitted to IDEM, OAM~~. **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.**

SECTION B GENERAL CONSTRUCTION AND OPERATION CONDITIONS

(2) Condition B.7 - Preventive Maintenance Plan is revised as follows:

B.7. Preventive Maintenance Plan [326 IAC 1-6-3]

~~Pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:~~

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) prior to startup, including the following information on each facility:

~~(a)~~ **(1)** Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.

~~(b)~~ **(2)** A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.

~~(c)~~ **(3)** Identification of the replacement parts which 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) The Preventive Maintenance Plans shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

SECTION C SOURCE OPERATION CONDITIONS

(3) Condition C.7 - Compliance Monitoring (renumbered as C.5) is revised as follows:

C.5 Compliance Monitoring

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, within ninety (90) days of start up. If due to circumstances beyond its control, this schedule cannot be met, the Permittee **may extend compliance schedule an additional ninety (90) days provided the Permittee** ~~shall~~ notify:

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**.** ~~and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved.~~

(4) Condition C.12 - Annual Emission Reporting (renumbered and retitled as C.11 - Emission Statement) is revised as follows:

C.12 ~~Annual Emission Reporting~~ **Emission Statement** [326 IAC 2-6]

~~That pursuant to 326 IAC 2-6 (Emission Reporting), the Permittee must annually submit an emission statement for the source. This statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual statement must be submitted to:~~

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that meets the

requirements of 326 IAC 2-6 (Emission Reporting). This annual statement must be received by April 15 of each year and must comply with the minimum requirements 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). The annual statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

~~The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30.~~

(**b**) **The annual emission statement 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, OAM, on or before the date it is due.**

Appendix A1: Emission Calculations

Company Name:	Essroc Cement Corporation
Plant Location:	Highway 31, Speed, Indiana 47172
County:	Clark
CP No.:	019-9349
Plt ID No.	019-00008
Permit Reviewer:	Marco A. Salenda

I. Facility Description

A. Roller Press System for 2D Finish Mill
1. Three (3) belt conveyors (ID#s 39, 49, and 53)
2. One (1) bucket elevator (ID# 41)
3. One (1) roller press (ID# 45)
4. modify existing conveyor (ID# 9)

B. Emission controls:
1. baghouse (control no. 261) for ID# 39, 49, 53, 41, and 45
2. baghouse (control no. 262) for ID# 9

II. Potential Emissions

Due to unavailability of emission factors for a roller press system, the following calculations determine the amount of particulate emissions created by the roller press system via the use of baghouse design parameters:

Assumption: PM = PM10

		Baghouse 261	Baghouse 262	TOTAL
Given:	Max. Gas Flowrate (acfm) =	10600	3200	
	Grain Loading (gr/acf) =	0.02	0.02	
	Control Efficiency (%) =	99.0%	99.0%	
	Emissions after controls (tons/yr) =	8.0	2.4	**10.4**
	Emissions before controls (tons/yr) =	795.9	240.3	**1036.2**

III. Allowable Emissions

The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

limit = 55 x (P ^0.11) - 40

Process:	Rate, P	Allowable PM Emissions		Potential Emissions after ctrls		Status
	(tons mat'l/hr)	(lb/hr)	(tons/yr)	(lb/hr)	(tons/yr)	
Roller Press System	120.0	53.13	232.69	2.37	10.36	will comply

SInce 232. 7 tons per year exceeds the 25 tons per year PSD significant level, the PM emissions from the Roller Press System is limited to 24 t
Compliance with this limit shall render 326 IAC 2-2 not applicable and shall also satisfy the requirements of 326 IAC 6-3-2.