



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
PAULDING COUNTY**

CERTIFIED MAIL

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center

Application No: 03-16065

DATE: 5/6/2004

Lafarge / Systech Corporation
Tim Weible
11435 Road 176
Paulding, OH 45879

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

NWDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: 5/6/2004
Effective Date: 5/6/2004**

FINAL PERMIT TO INSTALL 03-16065

Application Number: 03-16065
APS Premise Number: 0363000002
Permit Fee: **\$1250**
Name of Facility: Lafarge / Systech Corporation
Person to Contact: Tim Weible
Address: 11435 Road 176
Paulding, OH 45879

Location of proposed air contaminant source(s) [emissions unit(s)]:
11435 / 11397 County Road 176
Paulding, Ohio

Description of proposed emissions unit(s):
Modification of wet-process kilns (P014 + P015) to allow the addition of precalcined materials.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Record keeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or record keeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

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calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are

required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

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10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

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5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

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The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	19.10
PM ₁₀	7.43

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

1. The following rule is applicable to this facility: 40 CFR 63.1340 et seq. (Subpart LLL)

The permittee shall therefore comply with the following applicable emission limitations under 40 CFR 63.1347 and 63.1348: 10 percent opacity

The affected sources and/or emissions units at this facility subject to 40 CFR 63.1340 et seq. (Subpart LLL) are:

- i. Each raw mill;
 - ii. Each finish mill (including emissions units P007, P008, and P009);
 - iii. Each raw material, clinker, or finished product storage bin (including emissions unit P901 and P903);
 - iv. Each conveying system transfer point including those associated with coal preparation used to convey coal from the mill to the kiln (including emissions units P025 and P026, and P902 prior to the pug mill);
 - v. Each bagging and bulk loading and unloading system (including emissions units P001, P002, P003, P004, P005, and P006); and
 - vi. Mid-kiln injection operation of uncalcined and precalcined material (emission unit F006).
40 CFR 63.1340(b)
2. The first affected source in the sequence of materials handling operations subject to Subpart LLL is the raw material storage, which is just prior to the raw mill. Any equipment of the on-site nonmetallic mineral processing plant which precedes the raw material storage is not subject to Subpart LLL. In addition, the primary and secondary crushers of the on-site nonmetallic mineral processing plant, regardless of whether they precede the raw material storage, are not subject to Subpart LLL. Furthermore, the first conveyor transfer point subject to Subpart LLL is the transfer point associated with the conveyor transferring material from the raw material storage to the belt conveyor.
40 CFR 63.1340(c)
3. In conjunction with A.1. and A.2. above, the permittee shall comply with the following monitoring and/or record keeping requirements:
- 3.a The permittee shall monitor opacity in accordance with the operation and maintenance plan (O & M plan) developed in accordance with the requirements below.

The written O & M plan shall be developed and submitted as required in A.4.a below, and shall include the following information:

- i. Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits of A.1. above;
 - ii. Corrective actions to be taken when required by A.3.c below;
 - iii. Procedures to be used to periodically monitor the affected sources under A.2. above subject to the opacity standard of A.1. above. Such procedures must include the provisions of A.3.b below.
40 CFR 63.1350(a), (j)
- 3.b**
- i. The permittee must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to 40 CFR 60. The test must be conducted while the affected source is in operation.
 - ii. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permittee must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
 - iii. If no visible emissions are observed during the semi-annual test for any affected source, the permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the permittee must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
 - iv. If visible emissions are observed during any Method 22 test, the permittee must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to 40 CFR 60. The Method 9 test must begin within one hour of any observation of visible emissions.
 - v. The requirement to conduct Method 22 visible emissions monitoring under A.3.a above and A.3.b shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom.
 - vi. If any partially enclosed or unenclosed conveying system transfer point is located in a

building, the permittee shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of A.3.b.i through A.3.b.iv above for each such conveying system transfer point located within the building, or for the building itself (according to A.3.b.vii).*

- vii. If visible emissions from a building are monitored, the requirements of A.3.b.i through A.3.b.iv above apply to the monitoring of the building, and the permittee must also do the following: Test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

40 CFR 63.1350(a)

* The raw mill is a 'wet' process at this facility, and as such was never previously designated as an emissions unit. The raw mill and other associated affected sources (e.g. conveying system transfer points) are in a building. In consideration of 40 CFR 63.1350(a)(4)(vii), the permittee may monitor this building in accordance with A.3.b.vi and A.3.b.vii above.

- 3.c** The permittee shall monitor the raw mills and finish mills for opacity by conducting daily visual emissions observations of the mill sweep and air separator baghouses of these affected sources in accordance with the procedures of Method 22 of appendix A to 40 CFR 60. The Method 22 test shall be conducted while the affected source is operating at the representative performance conditions in accordance with 40 CFR 63.7(e). The duration of the Method 22 test shall be 6 minutes. If visible emissions are observed during any Method 22 visible emissions test, the permittee must:

- i. Initiate, within one-hour, the corrective actions specified in the O & M plan; and
- ii. Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the follow up Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 test in accordance with Method 9 of appendix A to 40 CFR 60. The duration of the Method 9 test shall be 30 minutes.

40 CFR 63.1350(e)

- 3.d** The permittee may submit an application to the Director for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of Subpart LLL under this permit subject to the provisions of A.3.e through A.3.i below.

If the application to use an alternate monitoring requirement is approved, the permittee must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.

40 CFR 63.1350(l)

- 3.e** The Director will not approve averaging periods other than those specified in this section A.3., unless the permittee documents, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.

40 CFR 63.1350(l)(1)

- 3.f** The permittee shall submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the following information:

- i. Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;
- ii. A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and
- iii. Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.

40 CFR 63.1350(l)(3)

- 3.g** The Director will notify the permittee of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Director will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Director will provide:

- i. Notice of the information and findings upon which the intended disapproval is based; and
- ii. Notice of opportunity for the permittee to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the permittee to provide additional supporting information.

40 CFR 63.1350(l)(4)

- 3.h** The permittee is responsible for submitting any supporting information in a timely manner to enable the Director to consider the application prior to the performance test. Neither submittal of an application, nor the Director's failure to approve or disapprove the application, relieves the permittee of the responsibility to comply with any provision of Subpart LLL under this permit.

40 CFR 63.1350(l)(5)

- 3.i** The Director may decide at any time, on a case-by-case basis, that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of Subpart LLL under this permit.

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40 CFR 63.1350(l)(6)

- 3.j** The requirements under A.3.c above to conduct daily Method 22 testing shall not apply to any specific raw mill or finish mill equipped with a continuous opacity monitor COM or bag leak detection system (BLDS). If the permittee chooses to install a COM in lieu of conducting the daily visual emissions testing required under A.3.c, then the COM must be installed at the outlet of the PM control device of the raw mill or finish mill, and the COM must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of, and according to PS-1 of appendix B of, 40 CFR 60. To remain in compliance, the opacity must be maintained such that

the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard. If the permittee chooses to install a BLDS in lieu of conducting the daily visual emissions testing required under A.3.c, the requirements in A.3.k through A.3.s below apply to each BLDS.

40 CFR 63.1350(m)

- 3.k** The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less. "Certify" shall mean that the instrument manufacturer has tested the instrument on gas streams having a range of particle size distributions and confirmed by means of valid filterable PM tests that the minimum detectable concentration limit is at or below 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

40 CFR 63.1350(m)(1)

- 3.l** The sensor on the BLDS must provide output of relative PM emissions.

40 CFR 63.1350(m)(2)

- 3.m** The BLDS must have an alarm that will activate automatically when it detects a significant increase in relative PM emissions greater than a preset level.

40 CFR 63.1350(m)(3)

- 3.n** The presence of an alarm condition should be clearly apparent to facility operating personnel.

40 CFR 63.1350(m)(4)

- 3.o** For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.

40 CFR 63.1350(m)(5)

- 3.p** All BLDS must be installed, operated, adjusted, and maintained so that they are based on the manufacturer's written specifications and recommendations. The US EPA recommends that where appropriate, the standard operating procedures manual for each bag leak detection system include concepts from EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997).
40 CFR 63.1350(m)(6)
- 3.q** The baseline output of the system must be established as follows:
- i. Adjust the range and the averaging period of the device; and
 - ii. Establish the alarm set points and the alarm delay time.
40 CFR 63.1350(m)(7)
- 3.r** After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the O & M plan. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 1 calendar year period unless a responsible official as defined in 40 CFR 63.2 certifies in writing to the Director that the fabric filter has been inspected and found to be in good operating condition.
40 CFR 63.1350(m)(8)
- 3.s** The permittee must maintain and operate the fabric filter such that the bag leak detector alarm is not activated and alarm condition does not exist for more than 5 percent of the total operating time in a 6-month block period. Each time the alarm activates, alarm time will be counted as the actual amount of time taken by the owner or operator to initiate corrective actions. If inspection of the fabric filter demonstrates that no corrective actions are necessary, no alarm time will be counted. The permittee must continuously record the output from the BLDS during periods of normal operation. Normal operation does not include periods when the BLDS is being maintained or during startup, shutdown or malfunction.
40 CFR 63.1350(m)(9)
- 3.t** The permittee shall maintain files of all information (including all reports and notifications) required by Subpart LLL under this permit, recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

The permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3); and

- i. All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9;
- ii. All records of applicability determination, including supporting analyses; and

- iii. If the permittee has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements.

In addition, regarding any continuous monitoring system, all records shall be maintained as required by 40 CFR 63.10(c).
40 CFR 63.1355

4. In conjunction with A.1. and A.2. above, the permittee shall comply with the following reporting requirements:
 - 4.a The permittee shall prepare, for each Subpart LLL affected source under this permit, a written operations and maintenance plan (O & M plan). The plan shall be submitted to the Director for review and approval, and shall meet the requirements of A.3.a above.

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard.
40 CFR 63.1350(a), (b)

- 4.b Regarding Subpart LLL, the permittee shall comply with the notification requirements in 40 CFR 63.9 as follows:
 - i. Notification of performance tests, as required by 40 CFR 63.7 and 63.9(e).
 - ii. Notification of opacity and visible emission observations required by A.3. above in accordance with 40 CFR 63.6(h)(5) and 63.9(f).
 - iii. Notification, as required by 40 CFR 63.9(g), of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8(e) is scheduled to begin.
 - iv. Notification of compliance status, as required by 40 CFR 63.9(h).
40 CFR 63.1353
- 4.c The permittee shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR 63, Subpart A as follows, and as in A.4.d through A.4.f below:
 - i. As required by 40 CFR 63.10(d)(2), the permittee shall report the results of performance tests as part of the notification of compliance status.
 - ii. As required by 40 CFR 63.10(d)(3), the permittee shall report the opacity results from tests required by A.5.c below.
 - iii. As required by 40 CFR 63.10(d)(4), if the permittee is required to submit progress reports as a condition of receiving an extension of compliance under 40 CFR 63.6(i), the permittee shall submit such reports by the dates specified in the written extension of

compliance.
40 CFR 63.1354(b)(1) - (3)

- 4.d** As required by 40 CFR 63.10(d)(5), if actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports, if applicable.
40 CFR 63.1354(b)(4)
- 4.e** Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
40 CFR 63.1354(b)(5)
- 4.f** The permittee shall submit a summary report semiannually which contains the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include: All failures to comply with any provision of the O & M plan developed in accordance with A.4.a above.
40 CFR 63.1354(b)(9)(v)
- 5.** In conjunction with A.1. and A.2. above, the permittee shall comply with the following testing/compliance demonstration requirements:
- 5.a** The permittee shall demonstrate initial compliance with the opacity standards using the test methods and procedures in A.5.b and 40 CFR 63.7. Performance test results shall be documented in complete test reports that contain the information required by items i. through x. below, as well as all other relevant information. The plan to be followed during testing shall be made available to the Director prior to testing, if requested.
- i. A brief description of the process and the air pollution control system;
 - ii. Sampling location description(s);

- iii. A description of sampling and analytical procedures and any modifications to standard procedures;
- iv. Test results;
- v. Quality assurance procedures and results;
- vi. Records of operating conditions during the test, preparation of standards, and calibration procedures;
- vii. Raw data sheets for field sampling and field and laboratory analyses;
- viii. Documentation of calculations;
- ix. All data recorded and used to establish parameters for compliance monitoring; and
- x. Any other information required by the test method.
40 CFR 63.1349(a)

- 5.b** The permittee shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of appendix A to 40 CFR 60. The performance test shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with 40 CFR 63.7(e). The maximum 6-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the following conditions apply:
- i. There are no individual readings greater than 10 percent opacity;
 - ii. There are no more than three readings of 10 percent for the first 1-hour period.
40 CFR 63.1349(b)(2)
- 5.c** The permittee shall conduct, or have conducted, emission testing for the Subpart LLL affected sources in accordance with the following requirements:
- i. The emission testing shall be conducted by December 14, 2002 [in accordance with 40 CFR 63.7(a)(2)(ix)].
 - ii. The emission testing shall be conducted to demonstrate compliance with the allowable opacity limit(s).
 - iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates: Method 9, 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the US EPA and Ohio EPA.
 - iv. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - v. The test(s) shall be conducted in accordance with A.5.a and A.5.b above.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA

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District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

6. In conjunction with A.1. and A.2. above, the permittee shall comply with the following miscellaneous requirements:

The permittee shall comply with all applicable requirements of 40 CFR 63 Subpart LLL (National Emission Standards for Hazardous Air Pollutants for Portland Cement Manufacturing) as well as with all the applicable requirements of subpart A of part 63 (General Provisions), as identified in Table 1 in the appendix of Subpart LLL.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F006 - Mid-kiln feed system introducing uncalcined and precalcined materials by the material handling system	OAC rule 3745-31-05(A)(3)	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.I.2.e through A.I.2.g)
Truck & front-end loader traffic activity; load-in, load-out, and wind erosion from storage piles; and conveying system transfer points from belt conveyor to belt conveyor		19.10 tons fugitive particulate emissions (PE)/yr 7.43 tons fugitive particulate matter 10 microns or less in diameter (PM ₁₀)/yr Visible particulate emissions limitations (see A.I.2.h)
This is a Chapter 31 modification to PTI #03-13947 which was issued final on 10/30/2003.	40 CFR Part 63, Subpart LLL	See A.I.2.b Opacity restrictions (see A.I.2.i)
	OAC rule 3745-17-07(B)	See Part II - 'Specific Facility Terms and Conditions' of this permit See A.I.2.c
	OAC rule 3745-17-08(B)	See A.I.2.d

2. Additional Terms and Conditions

- 2.a The mid-kiln injection operation of uncalcined and precalcined materials involve truck unloading of raw material into temporary storage piles. Raw material from storage piles is transferred by front-end loader into hopper. The conveying system transfer points reaches

- i. There shall be no visible particulate emissions from truck and front-end loader traffic activity except for one minute during any 60-minute period.
 - ii. There shall be no visible particulate emissions from load-in and load-out of storage piles except for one minute during any 60-minute period.
 - iii. There shall be no visible particulate emissions from wind erosion from storage piles except for one minute during any 60-minute period.
- 2.i** Opacity restrictions for "affected sources" applicable to 40 CFR Part 63, Subpart LLL shall comply with the following:
- i. The permittee shall not cause to be discharged from the conveying system transfer points any gases which exhibit opacity in excess of ten percent.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of the following fugitive emissions operations in accordance with the following frequencies:

<u>fugitive emissions operation</u>	<u>minimum inspection frequency</u>
truck and front-end loader traffic	Once during each day of operation
storage piles	Once during each day of operation
transfer points	Once during each day of operation

- 2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal conditions. No inspection shall be necessary when snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
- 3. The permittee may, upon receipt of written approval from the Ohio EPA Northwest District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- 4. The permittee shall maintain records of the following information:

- a. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
- b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. The dates the control measures were implemented; and
- d. On a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in '5.d.' shall be kept separately for (i) the paved roadway and (ii) wind erosion, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. Each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and,
 - b. Each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
19.10 tons fugitive PE/yr
7.43 tons fugitive PM₁₀/yr

Applicable Compliance Method:

Emissions Unit ID: **F006**

The emission limitations were established by combining the emissions from truck & front-end loader traffic activity; storage pile wind erosion; and material transfer operations. The emission limitations were determined as follows and are based on a maximum processing rate of 100 tons per hour:

- i. Truck & front-end loader traffic activity emissions were developed by incorporating a 95% control efficiency for use of best available control measures into the development of emission factors per AP-42 Section 13.2.1 (12/03).
- ii. Wind erosion from storage piles emissions were calculated using an emission factor of 3.63 lbs PM/acre*day, Air Pollution Engineering Manual, Air and Waste Management Association (1992) by a maximum storage pile area of 0.01 acre.
- iii. Material transfer operations (10 conveyor transfer points, storage pile load-in and load-out and hopper filling from front-end loader) were developed using emission factors from AP-42, Table 11.19.2-2 (01/95) and a maximum material handling rate of 100 tons per hour.

Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures and comply with the requirements of 40 CFR Part 60, Subpart LLL, compliance with the tons per year PE and PM10 limitations will be assumed.

b. Emission Limitation:

Visible particulate emissions not subject to 40 CFR Part 63, Subpart LLL shall comply with the following:

- i. There shall be no visible particulate emissions from truck and front-end loader traffic activity except for one minute during any 60-minute period.
- ii. There shall be no visible particulate emissions from load-in and load-out of storage piles except for one minute in 60-minute period.
- iii. There shall be no visible particulate emissions from wind erosion from storage piles except for one minute in 60-minute period.

Applicable Compliance Method:

If required, compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

c. Emission Limitation:

Opacity restrictions for "affected sources" applicable to 40 CFR Part 63, Subpart LLL

shall comply with the following:

- i. The permittee shall not cause to be discharged from the conveying system transfer points from the hopper to the mid-kiln injection point, any gases which exhibit opacity in excess of ten percent.

Applicable Compliance Method:

Compliance shall be demonstrated in association with testing requirements specified in 40 CFR Part 63, Subpart LLL. (See Part II - 'Specific Facility Terms and Conditions' of this permit)

VI. Miscellaneous Requirements

1. This PTI supercedes the terms and conditions of PTI #03-13947 issued on October 30, 2003.
2. P010 and P011, the two clinker cooler vents, were shutdown in June 2000 and as part of this permit, the emission reduction the facility will modify F006 and "net out" of PSD review for PE and PM₁₀. The summary of netting in this project is as follows:

Pollutant	PE	PM ₁₀
2001-2002 Past Actual Emissions (TPY)	302	216
Future Emissions (TPY)	328	231
Emissions Change associated with Precalcined Materials Modification (TPY)	26	14
Proposed Emissions Change Associated with Uncalcined Materials Permit (TPY)	13	5
Total Project Emissions Change (TPY)	39	20
Contemporaneous Emissions Change (TPY)	-209	-187
Total Net Emissions Change (TPY)	-171	-167
PSD Significance Levels (TPY)	25	15

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F006 - Mid-kiln feed system introducing uncalcined and precalcined materials by the material handling system	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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Emissions Unit ID: F006

None

NEW SOURCE REVIEW FORM B

PTI Number: 03-16065

Facility ID: 0363000002

FACILITY NAME Lafarge / Systech Corporation

FACILITY DESCRIPTION Modification of wet process kilns (P014) CITY/TWP Paulding

Emissions Unit ID: F006

SIC CODE 3241

SCC CODE

3-05-007 -06,-07,-08,-12

EMISSIONS UNIT ID

F006

EMISSIONS UNIT DESCRIPTION Mid-kiln feed system introducing uncalcined and precalcined materials by the material handling system

DATE INSTALLED

09/2002

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Truck & front-end loader traffic activity				5.87
	Load-in, load-out, and wind erosion from storage piles				0.14
	Conveying system transfer points from belt conveyor to belt conveyor				12.98
	Truck loading/unloading				0.11
PM ₁₀	Truck & front-end loader traffic activity				1.14
	Load-in, load-out, and wind erosion from storage piles				0.06
	Conveying system transfer points from belt conveyor to belt conveyor				6.18
	Truck loading/unloading				0.05
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP? LLL

PSD?

OFFSET POLICY?

NEW SOURCE REVIEW FORM B

PTI Number: 03-16065

Facility ID: 0363000002

FACILITY NAME Lafarge / Systech Corporation

FACILITY DESCRIPTION Modification of ~~wet process kilns (P014#~~ CITY/TWP Paulding

Emissions Unit ID: **F006**

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with the terms and conditions of this permit; truck and front-end loader traffic to apply water spray, sweeping, and vacuuming of paved traffic area; storage piles - maintenance of as low a pile height as possible; and transfer points to be watered when necessary

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____