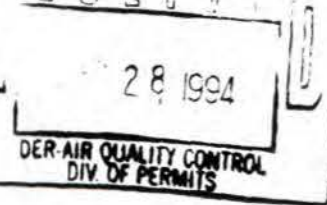


COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
AIR QUALITY PROGRAM



PLAN APPROVAL

Permit No.	<u>48-0004A</u>	Source &	<u>Kiln, Roller Mill and Clinker Cooler</u>
Owner	<u>ESSROC Materials, Inc.</u>	Air	<u>Electrostatic Precipitator and</u>
Address	<u>P.O. Box 32</u>	Cleaning	<u>Fabric Collectors (2)</u>
	<u>Nazareth, PA 18064</u>	Device	<u></u>
Attention:	<u>Mr. Robert D. Joyce</u>	Location	<u>Nazareth Plant No. 1</u>
	<u>Environmental Manager</u>		<u>Lower Nazareth Township</u>
			<u>Northampton County</u>

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, P. L. 2119, as amended, and with Chapter 127 of the rules and regulations of the Department of Environmental Resources, the Department on DEC 20 1994 approved plans for modification of the above indicated air contamination source.

this PLAN APPROVAL expires May 31, 1995.

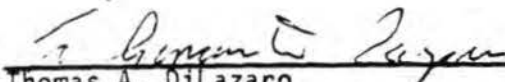
The plan Approval is subject to the following conditions:

- (1) The sources is to be modified in accordance with the plans submitted with the application (as approved herein).

(SEE ATTACHED)

Notify the person noted below when the installation is completed so that the source can be inspected for issuance of an OPERATING PERMIT.

NOTE: Babu H. Patel
Chief, Engineering Services
Air Quality Program
Cross Valley Centre
667 North River Street
Plains, PA 18705-1099


Thomas A. DiLazaro
Program Manager
Air Quality Program

- (2) This Plan Approval is issued for the modifications of the clinker burning operation as described in the application and supplemental information submitted to the Department. This plan approval also includes Reasonably Available Control Technology (RACT). Determinations as required by the Title I Provisions of the CAAA. The modifications will result in an increase of clinker production from 3450 short tons per day to 4070 short tons per day.
- (3) This Plan Approval covers the following sources and their associated air cleaning devices:
- (a) Preheater cement kiln and roller mill; electrostatic precipitator and fabric collector.
 - (b) Clinker cooler; fabric collector.
- (4) This source is subject to Subpart F of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR §60.4 requires submission of copies of all requests, reports, applications, submittals and other communications to both EPA and the Department. The EPA copies shall be forwarded to:
- Director
Air, Toxics and Radiation Division
US EPA, Region III
841 Chestnut Street
Philadelphia, PA 19107
- (5) The aforementioned sources are limited to an annual clinker production rate of 1,262,718 tons per year and an annual operating rate of 7446 hours per year.
- (6) The company shall record process raw materials used, fuel used, clinker produced, and operating hours to show compliance with Condition 5. These records shall be submitted to the Regional Air Pollution Control Engineer by January 31 of the following year.
- (7) The following allowable emission limits are established for the operation of the preheater cement kiln in the normal mode:
- ~~(a) Particulate matter emissions shall never exceed 32.5 lbs/hr.~~
 - ~~(b) Sulfur oxide emissions shall never exceed 500 ppm.~~
 - (c) Nitrogen oxide emissions shall never exceed 975.0 lbs/hr. (30 day rolling average).

- ~~(d) Visible air contaminants shall not be emitted in such a manner that the opacity of the emissions is equal to or greater than 20% for a period or periods aggregating more than 3 minutes in any hour; or equal to or greater than 60% at any time.~~
- (8) The following allowable emission limits are established for the operation of the preheater cement kiln in the by-pass mode:
- ~~(a) Particulate matter emissions shall never exceed 34.6 lbs/hr.~~
- ~~(b) Sulfur oxide emissions shall never exceed 500 ppm.~~
- (c) Nitrogen oxide emissions shall never exceed 975.0 lbs/hr. (30 day rolling average).
- ~~(d) Visible air contaminants shall not be emitted in such a manner that the opacity of the emissions is equal to or greater than 20% for a period or periods aggregating more than 3 minutes in any hour; or equal to or greater than 60% at any time.~~
- (9) The final RACT emission limits (30 day rolling average and 24-hour maximum) shall be based on CEM Data and will be incorporated in the RACT Operating Permit.
- ~~(10) The following allowable emission limits are established for the operation of the clinker cooler:~~
- ~~(a) Particulate matter emissions shall never exceed 10.2 lbs/hr.~~
- ~~(b) Visible air contaminants shall not be emitted in such a manner that the opacity of the emissions is equal to or greater than 10% for a period or periods aggregating more than 3 minutes in any hour; or equal to or greater than 30% at any time.~~
- (11) Continuous monitoring requirements are as follows:
- (a) Continuous emission monitors for nitrogen oxides, sulfur oxides and opacity shall be installed, operated, and maintained in accordance with the Department's "Continuous Source Monitoring Manual" (Revision No. 5-March 1993) for the preheater cement kiln.
- (b) Continuous emission monitor for opacity shall be installed, operated and maintained in accordance with the Department's "Continuous Source Monitoring Manual" (Revision No. 5 - March 1993) for the clinker cooler.
- (c) Continuous monitoring shall be conducted in accordance with 25 PA Code Chapter 139 and 40 CFR 60, Subpart F and be approved by the Department.

- (12) Testing requirements are as follows:
- (a) Source tests for the preheater cement kiln shall be conducted for particulate, SO_x, and NO_x in normal and by-pass modes.
 - (b) Source tests for the clinker cooler shall be conducted for particulate.
 - (c) Source tests shall be conducted in accordance with 25 PA Code Chapter 139 as per the Department's source testing procedures described in the latest Source Testing Manual or source testing procedures approved by the Department prior to testing. The stack tests shall be conducted within 60 days after achieving maximum firing rates, but no later than 180 days after start-up.
 - (d) At least 90 days prior to the tests, test procedures and sketches with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples shall be submitted to the Department for approval.
 - (e) At least two weeks prior to the tests, the Department shall be informed of the date and time of the tests.
 - (f) Within 60 days after completion of the tests, three copies of the complete test reports, including all operating conditions shall be submitted to the Department for approval.
- (13) The Department reserves the right to require the company to conduct source tests, as described in Conditions (11)(a) and (11)(b), in the future, if warranted.
- (14) The Department reserves the right to establish and impose more stringent limits than those stated in Conditions (7)(b), (7)(c), (8)(b), and (8)(c), of this Plan Approval based on the test results from each stack test performed and Continuous Emission Monitoring results as specified in Condition (11) of this Plan Approval.
- (15) All five fields of the electrostatic precipitator shall be energized during operation in either normal or by-pass modes.
- ~~(16) The company shall keep on hand a sufficient quantity of spare fabric collector bags for the fabric collector(s) associated with the aforementioned source(s) in order to be able to immediately replace any bags requiring replacement due to deterioration resulting from routine operation of the source(s) and fabric collector(s).~~
- ~~(17) The fabric collector(s) must be equipped with a device for monitoring the pressure differential across the collector(s).~~

- ~~(18) Paving shall be added to the areas near the covered coal storage, coal receiving building, uncovered limestone storage, and raw material unloading storage.~~
- ~~(19) In order to prevent fugitive particulate matter resulting from the use of in-plant roads from becoming airborne, the company shall adhere to the following plan:~~
- ~~(a) All paved in-plant roads shall be swept a minimum of two (2) times per week, weather permitting.~~
 - ~~(b) Prior to start up of the operation, submit to the Department for approval the use and frequency of water and chemicals to be applied on all paved and unpaved in-plant roads.~~
 - ~~(c) The company shall keep a log of the dates of road sweeping or cleaning.~~
- (20) The Department shall be notified by telephone within one (1) hour following any failure of process equipment, failure of air pollution control equipment or a process operational error which results in an increase in emissions above any allowable emissions. This notification also includes any de-energization or significant malfunction of the electrostatic precipitator during start-up, shutdown, and normal operating during both the normal and by-pass modes. In addition, the Department shall be notified in writing within five (5) days following such failure. The notification shall, as a minimum, include a statement of the exact time the failure occurred, its duration, and measures taken to correct the problem. The Department may take enforcement action for any violations of the applicable standards set forth in this Plan Approval.
- (21) Record keeping and reporting requirements are as follows:
- (a) The company shall maintain a file containing all records and other data that are required to be collected pursuant to the various provisions of this Plan Approval, 25 Pa. Code Section 129.95, such that records provide sufficient data and calculations to clearly demonstrate that the requirements of 25 Pa. Code Sections 129.91-4 are met and 40 CFR 75 and 76. The file shall include, but not be limited to: all air pollution control system performance evaluations and records of calibration checks, adjustments and maintenance performed on all equipment which is subject to this Plan Approval and 40 CFR 75 and 76. All measurements, records, and other data required to be maintained by the company shall be retained for at least two years following the date on which such measurements, records or data are recorded.

- (b) All CEM reports shall be submitted to the Department within thirty (30) days after each quarter but no later than the time frame established in the Department's latest Continuous Source Monitoring Manual. The Department reserves the right to require the report submissions in floppy disks with a format acceptable to the Department.
- (22) Issuance of an Operating Permit is contingent upon satisfactory compliance with conditions of this Plan Approval, upon the source(s) being constructed and operated as stated in the application, and upon satisfactory demonstration that the emissions from the source(s) will not be in violation of applicable Rules and Regulations of the Department.
- (23) Nothing in this permit shall be construed to supercede, amend or authorize violations of the provisions of any valid and applicable local law, ordinance or regulation, provided that said local law, ordinance or regulation is not preempted by the Pennsylvania Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, 35 P.S. §§4001-4015, et seq.
- (24) The permittee shall comply with the Pennsylvania Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, 35 P.S. §§4001-4015, et seq. and Title 25, Rules and Regulations, Article III, Air Resources promulgated thereunder.
- (25) This Plan Approval authorizes temporary operation of the source(s) covered by this Plan Approval provided the following conditions are met:
 - (a) The Department must receive written notice from the Owner/Operator of the completion of construction and the Operator's intent to commence operation at least five (5) working days prior to the completion of construction. The notice should state when construction will be completed and when Operator expects to commence operation.
 - (b) Operation is authorized only to facilitate the startup and shakedown of sources and air cleaning devices, to permit operations pending the issuance of an Operating Permit or to permit the evaluation of the source(s) for compliance with all applicable regulations and requirements.

- (c) This condition authorizes temporary operation of the source(s) for a period of 180 days from the date of commencement of operation, provided the Department receives notice from the Owner/Operator pursuant to subpart (a), above.
- ~~(d) The Owner/Operator may request an extension if compliance with all applicable regulations and Plan Approval requirements has not been established. The extension request shall be submitted in writing at least 15 days prior to the end of this period of temporary operation and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance and the reasons compliance has not been established.~~
- ~~(e) The notice submitted by the Owner/Operator pursuant to subpart (a), above, prior to the expiration of this Plan Approval, shall modify the plan approval expiration date. The new plan approval expiration date shall be 180 days from the date of the written notice.~~

