

10/11/95

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
SOUTHCENTRAL REGION
AIR QUALITY CONTROL PROGRAM

PLAN APPROVAL

APPROVAL NO.	<u>06-1002</u>	Source &	<u>Portland Cement Mfg. Facility</u>
Owner/Operator:	<u>Allentown Cement Co., Inc.</u>	Air	<u>Various</u>
Address:	<u>P. O. Box 199</u>	Cleaning	<u></u>
	<u>Blandon, PA 19510-0199</u>	Device	<u></u>
Attention:	<u>Mr. Daniel M. Harrington</u>	Location	<u>Evansville Plant</u>
	<u>Pres./General Manager</u>		<u>Maidencreek Township</u>
			<u>Berks 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 OCT 11 1995 approved plans for the modification of the above indicated air contamination source(s).

The PLAN APPROVAL expires May 31, 1996.

The plan approved is subject to the following conditions:


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

(SEE THE ATTACHED ADDITIONAL CONDITIONS)

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

NOTE:

Roger A. Fitterling
Air Quality Control Program
2005 Cross Roads Boulevard
Reading, PA 19605
(610) 916-0100


LEIF ERICSON
Air Quality Program Manager

cc: Permits ✓
Southcentral Regional Office
Reading District Office
Reading District Office

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Sources:

- 1) Kiln No. 1 (Fuller); Multi-Clones (Fuller) and Fabric Collector (Fuller).
- 2) Kiln No. 2 (Fuller); Multi-Clones (Fuller) and Fabric Collector (Fuller).
- 3) Raw Mill Operations
 - a) Raw Mill #1; Two (2) Settling Chambers (Buell) and Fabric Collector (Norblo)
 - 1) Heater #1 (Todd)
 - 2) Raw Mill #1
 - 3) Separator #1
 - 4) Associated Conveying Equipment
 - b) Raw Mill #2; two (2) Settling Chambers (Buell) and Fabric Collector (Norblo)
 - 1) Heater #2 (Todd)
 - 2) Raw Mill #2
 - 3) Separator #2
 - 4) Associated Conveying Equipment
 - c) Raw Mill #3; Two (2) Fabric Collectors (BHA)
 - 1) Heater #3 (Todd)
 - 2) Raw Mill #3
 - 3) Separator #3A
 - 4) Separator #3B
 - 5) Associated Conveying Equipment
- 4) Wash House Boiler (Weil McLain)
- 5) Two (2) Rock Silo Heaters (Jackson Church)
- 6) Auxiliary Kiln Drive (Caterpillar) Model D343
- 7) Fire Pump (Cummins)
- 8) Miscellaneous Combustion Units (less than 20 million BTU/hr). See Table I.

Table I
 Allentown Cement Co.
 Miscellaneous Combustion Units
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<u>Source</u>	<u>Rating</u>	<u>Model</u>
Compressor (John Deer)	unknown	Model 4239DF
Compressor (Duetz)	unknown	Model F6L912
Welding Unit (Duetz)	unknown	Model F3L912
Welding Unit (White)	unknown	Model D2000X117
Welding Unit (Waukesha)	unknown	Model VPD
Welding Unit (Continental)	unknown	Model F163
Water Pump	8 HP	
Water Pump	8 HP	
Water Pump	3 HP	
Water Pump	3 HP	
Generator	19 HP	
Generator	8 HP	
Generator	5 HP	
Ten (10) Orchard Heaters	unknown	
Torpedo Heater	0.15 Million BTU/hr	
Torpedo Heater	0.15 Million BTU/hr	
Torpedo Heater	0.35 Million BTU/hr	

Conditions (continued):

- 2) This Plan Approval is issued for the purpose of defining the Department's NO_x Reasonably Available Control Technology (RACT) determination for the sources of the company's Evansville Plant.
- 3) This Plan Approval establishes NO_x RACT for the two (2) Portland Cement Kilns as:
 - a) Installation and operation of the "LINKman" system or Department approved equivalent to monitor the operation of the kilns.
 - b) An ~~interim~~ NO_x emission limit (not to be exceeded) of 8.83 pounds per Ton of Clinker.
 - c) Operate and maintain the kilns in accordance with good air pollution control practices.
- 4) A final NO_x emission limit will be determined upon evaluation of the source testing of the kilns for emissions of NO_x. The final NO_x emission limit will be incorporated into the Operating Permit upon its issuance. This final limit can not exceed the interim limit unless the change is submitted as a SIP revision.
- 5) Prior to issuance of an operating permit, and before October 31, 1995 the company must perform a stack test on kilns No. 1 & 2 covered by this Plan Approval in accordance with the provisions of Chapter 139 to show compliance. The stack test shall be performed while the aforementioned source is operating at the maximum rated capacity as stated on the application. The stack test shall be for emissions of NO_x.
- 6) At least sixty (60) days prior to the test, the company shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.
- 7) At least thirty (30) days prior to the test, the Regional Air Quality Program Manager shall be informed of the date and time of the test.
- 8) Within thirty (30) days after the source test(s), three copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Program Manager for approval.
- 9) The company shall verify the emissions of NO_x from the kilns annually by testing during the period from May 1st through October 31st or by some other means approved by the Department for each year authorized by the Plan Approval, Operating Permit or Renewal. This testing shall begin in the calendar year 1996 and shall be conducted in accordance with the provisions of Chapter 139 of the Department's Rules and Regulations.

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- 10) The "LINKman" system or Department approved equivalent shall be utilized a minimum of 70% of the time that the kilns are in operation on a 12 month running average. Operation is any time raw materials are being fed to the kiln or product is exiting the kilns.
- 11) This Plan Approval establishes NO_x RACT for the Raw Mill Heaters (Todd) as presumptive as defined in Section 129.93(c)(1) and shall be operated and maintained in accordance with good air pollution control practices.
- 12) This Plan Approval establishes NO_x RACT for the Wash House Boiler (Weil McLain) and the two (2) Rock Silo Heaters as presumptive as defined in Section 129.93(c)(1) and shall be operated and maintained in accordance with good air pollution control practices.
- 13) This Plan Approval establishes NO_x RACT for the Auxiliary Kiln Drive (Caterpillar) and Fire Pump (Cummins) as presumptive as defined in Section 129.93(c)(5) and shall be operated and maintained in accordance with good air pollution control practices.
 - a) Each unit is limited to a maximum annual operating time of 500 hours (12 month running total).
 - b) Each unit shall be operated and maintained in accordance with good air pollution control practices.
- 14) This Plan Approval establishes the NO_x RACT for the Miscellaneous Combustion Units as presumptive as defined in Section 129.93(c) and shall be operated and maintained in accordance with good air pollution control practices.
- 15) The company shall maintain a permanent record in a manner approved by the Department. The records shall contain the following information:
 - a) For sources subject to Condition No. 3, 11 & 12.
 - 1) Monthly fuel consumption
 - 2) Annual fuel consumption (12 month running total)
 - 3) Heating value of fuels (BTUs)
 - 4) Hours of operation
 - b) For sources subject to Condition No. 13:
 - 1) The date of operation of each unit
 - 2) The hours of operation of each unit
 - 3) The fuel fired by each unit
 - 4) Heating value of each fuel
 - 5) Annual fuel consumption
 - 6) Annual hours of operation (12 month running total)

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- 16) The company shall comply with all requirements of Section 129.95. The annual report for each calendar year is due no later than March 1 of the following year authorized by the Plan Approval, Operating Permit or Renewal.
- ~~17) The sulfur content of the No. 2 fuel oil fired in this boiler shall not, at any time, exceed 0.5% (by weight).~~
- 18) Records required under this Plan Approval shall be kept for a period of five (5) years and shall be made available to the Department upon its request.
- ~~19) This Plan Approval is issued to permit the company to fire either virgin No. 2 fuel oil or the specific waste derived liquid fuel identified in this approval in the company's Portland Cement Kilns No. 1 & 2 during start-up and idling periods and the three (3) Todd Heaters associated with the raw mills. The company is only permitted to use Spec. 4 oil as supplied by Tri-State Industrial Fuels, Inc. and/or International Recovery Corporation unless company receives prior approval from the Department.~~
- ~~20) The waste derived liquid fuel (Spec. 4 oil) shall not exceed the following limitations:~~

<u>Constituent/Property</u>	<u>Limitation Level</u>	<u>Analytical Technique</u>
(A) Arsenic	5 PPM	Atomic Absorption
(B) Cadmium	2 PPM	Atomic Absorption
(C) Chromium	10 PPM	Atomic Absorption
(D) Lead	100 PPM	Atomic Absorption
(E) PCB	10 PPM	H2SO4 Extraction/GC with Electron Capture
(F) TX	1000 PPM	ASTM D-808-81
(G) Ash	2%	ASTM D-482
(H) Sulfur	0.6%	X-ray Diffraction

- ~~21) The Spec. 4 oil may not contain detectable levels of pesticides and/or herbicides.~~

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- ~~22) No Spec. 4 oil shipments may be blended into existing fuel or burned by itself unless an analysis has been performed by constituents/property of Condition 20 and a copy of the analysis is available demonstrating that none of the levels are exceeded. The company shall maintain records of the analysis and consumption of waste fuel by the source for a period of not less than five (5) years. These records shall be made available to the Department on request.~~
- ~~23) The maximum firing rate of Spec. 4 oil shall not exceed 70 gallons per hour per Todd Heater on Raw Mills No. 1 and No. 2 and 125 gallons per hour per Todd Heater on Raw Mill No. 3.~~
- ~~24) The total consumption of Spec. 4 oil for the Raw Mill Operation shall not exceed 1,228,500 gallons per year.~~
- ~~25) The maximum firing rate of Spec. 4 oil per Kiln shall not exceed 600 gallons per hour.~~
- ~~26) The total consumption of Spec. 4 oil per kiln shall not exceed 83,900 gallons per year.~~
- ~~27) An annual report for Spec. 4 oil is to be submitted to the Regional Air Pollution Control Engineer containing quarterly consumption data. The report for the previous calendar year is due no later than March 1st each year.~~
- ~~28) Allentown shall make provisions for personnel of the Department to take samples of the Spec. 4 oil at any time the fuel is on hand and/or being used in the source.~~
- ~~29) Equipment (a differential manometer or equivalent, as approved by the Department), shall be provided and maintained so that at any time the pressure drop across the fabric collectors of the raw mills can be measured.~~
- ~~30) The operation of the raw mills shall not result in visible or malodorous emissions.~~
- ~~31) 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 shall state when construction will be completed and when the Operator expects to commence operation.~~~~

~~(b) Operation is authorized only to facilitate the start up 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 one hundred eighty (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 fifteen (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 one hundred eighty (180) days from the date of the written notice.~~

(32) For purposes of EPA and the SIP this Plan Approval does not expire.

~~(33) The company may add or remove sources from the Miscellaneous Combustion Units List by submitting a letter to the Department, without submitting a Plan Approval Application, provided the Department considers the new source to be of minor significance for emission purposes. The company shall maintain an inventory of active sources covered by this condition at the facility, and the Department will revise the permit upon renewal of the Operating Permit.~~