

April 30, 2001

Mr. Tim Matz  
Lehigh Portland Cement Company  
7660 Imperial Way  
Allentown, PA 18195

Re: 089-11260-00119  
Registration of Source Shutdown Credits

Dear Mr. Matz:

In a letter dated January 12, 2000, Lehigh Portland Cement Company requested that the Office of Air Quality (OAQ) evaluate the banking of emission credits resulting from the shutdown of its Buffington Harbor Plant located in Gary, Indiana. Pursuant to the more stringent State Rule 326 IAC 2-3-3(b)(5) offset credits generated from shutting down an entire source cannot be banked. These emission credits can however be used in a limited situation. This is a State and not a Federal requirement. Emission credits are determined using the most recent representative two year baseline period. OAQ reviewed actual emission reports for the years 1993 through 1998 and based on the two year average emissions for the years 1995 and 1996 have determined the available emissions to be registered for offset credits to be the following:

Registered Emission Offset Credits (tons per year)				
CO	NO <sub>x</sub>	PM <sub>10</sub> *	SO <sub>x</sub>	VOC
7.9	265.67	139.19	8.86	0.88

\* filterable particulate matter only, OAQ will determine the amount of condensible PM

The above listed source was shutdown on or about May 31, 1999. Pursuant to 326 IAC 2-3-3(b)(5), the above listed emissions are creditable emission offsets provided the following criteria is met:

1. The work force to be affected has been notified of the proposed shutdown or curtailment.
2. The shutdown or curtailment occurred less than one (1) year prior to the date of permit application.
3. The proposed new source is a replacement for the shutdown source.

This notice also revokes construction permit CP 089-4074-00119 issued on May 11, 1995 and construction permit administrative amendment CP 089-6847-00119 issued on November 11, 1996.

Sincerely,

Original Signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

sims

cc: File - Lake County  
Air Compliance Section Inspector - Rick Massoels  
IDEM Northwest Regional Office  
Compliance Data Section - Karen Nowak  
Permit Tracking - Janet Mobley  
Air Programs Section - Michele Boner

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
Gary Air and Land Pollution Control**

**Technical Support Document (TSD)  
for Registration of Source Shutdown Credits**

**Source Background and Description**

Source Name: Lehigh Portland Cement Company  
 Source Location: N. Clark Road, Buffington Harbor, Gary, Indiana  
 County: Lake  
 SIC Code: 3241  
 Operation Permit No.: 089-11260-00119  
 Permit Reviewer: M. E. Sims

The Office of Air Quality (OAQ) has reviewed a request from Lehigh Portland Cement Company relating to the banking of emission credits due to the voluntary shutdown of the source. Lehigh Portland Cement Company operated under the following operation/construction permits:

Issued by City of Gary Air and Land Pollution Control			
Unit/Facility	Permit Number	Unit/Facility	Permit Number
Oil fired boiler	01810	Green pellet dryer	01820
Number 1 bulk tank	01812	Preheater KP	01821
Number 2 bulk tank	01813	Rotary kiln	01822
Number 3 bulk tank	01814	Clinker cooler	01823
Heated Hammermill	01815	Finish ball mill	01824
Material transfer	01816	Silo baghouse number 1	01825
Raw ball mill	01817	Silo baghouse number 2	01826
Pelletizer PP-1	01818	Silo baghouse number 3	01827
Pelletizer PP-2	01819	Silo baghouse number 4	01828
Issued by Indiana Department of Environmental Management (IDEM)			
Unit/Facility		Permit Number	
100 ton/day calcium aluminate melter		CP 089-4074-00119	

The source has also submitted the following approvals to IDEM:

Application #	Status
6041	Part 70 Operation permit, withdrawn 1/2/99
6847	CP administrative amendment, issued 11/6/96 extension to construct on CP #4074
7105	CP registration, withdrawn 4/24/98
11260	This review request

Lehigh Portland Cement Company is a calcium aluminate cement manufacturer located in the city of Gary in Lake County Indiana. During the 1998 commitment inspection, IDEM was informed that the company had taken the fire out of the kiln on Tuesday, September 15, 1998 at 4:00 am. IDEM was further informed that grinding of product would cease on Wednesday, September 30, 1998 or earlier. The bagging and shipping department would continue to operate until all of the finished product was exhausted. The property would then be cleared and sold.

In a letter dated June 16, 1999 to OAQ, Lehigh Portland Cement Company through their consulting company Krikau, Pyles, Rysiewicz and Associates requested that OAQ determine the amount of banked emission credits available due to the shutdown of the source.

The Office of Air Quality (OAQ) has performed the following emission credit banking review in conjunction with the source shutdown of Lehigh Portland Cement Company located at Buffington Harbor in Gary, Indiana. This review is necessary to meet the requirements of the Emission Offset program pursuant to 326 IAC 2-3-4, Banking of Emission Offsets. Pursuant to 326 IAC 2-3-3(b)(5) "A source may receive offset credit from emission reductions achieved by shutting down an existing source or permanently curtailing production or operating hours below baseline levels; provided, that the work force to be affected has been notified of the proposed shutdown or curtailment." The Lehigh Portland Cement Company was permanently shutdown on May 31, 1999. The source has provided OAQ with a copy of the letter notifying the work force of this shutdown.

### Evaluation of Available Emission Credits

The baseline used for determining available emission credits is actual emissions. Actual emissions are defined as follows:

"In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two (2) year period which precedes the particular date and which is representative of normal source operation. The commissioner shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period." [326 IAC 2-3-1(b)(1)]

Lehigh Portland Cement Company is required under 326 IAC 2-6 to annually submit an emission statement of actual emissions from its source. The following table summarizes the actual emissions reported to OAQ by Lehigh Portland Cement Company in the annual emission statements for the years 1993 through 1998.

Actual Reported Emissions						
Pollutant	1993	1994	1995	1996	1997	1998
CO	8.86	7.9	7.9	7.9	6.2	not reported
NO <sub>x</sub>	175.2	265.67	265.6	265.67	111.48	not reported
PM <sub>10</sub>	138.54	139.24	139.19	139.19	379.16	not reported
SO <sub>x</sub>	8.86	8.86	8.86	8.86	317.22	not reported
VOC	0.88	0.88	0.88	0.88	1.11	not reported

The source did not report any emissions data for the year 1998. As mentioned above, the fire was removed from the kiln and product grinding was ceased in September 1998. The year 1998 therefore is not representative of a full years operation and will not be considered for establishing the baseline operations. OAQ therefore considered the years 1996 and 1997 to establish the 2-year average baseline period. In reviewing the data for 1997 OAQ noticed the drastic change in the amount of emissions reported for NO<sub>x</sub>, PM<sub>10</sub> and SO<sub>x</sub> when compared to the years 1994 through 1996. Upon closer examination of the data presented with the 1997 report, OAQ determined that the change in the reported emissions was not due to production increases or decreases but due to a change in the emission factors used to determine the emissions. Emissions factors chosen for the annual report are solely at the discretion of the source. No explanation was provided as to why the source chose to use different emission factors for this year (1997) when clearly they had been consistent in the emission factors used prior to this year. Therefore OAQ will not use the data for 1997 to establish the 2-year baseline period.

Evaluating the data provided for the years 1995 and 1996, OAQ has established the baseline 2-year average actual emissions and therefore the emissions available for offset credit to be the following;

Available Emission Credits (tons per year)				
CO	NO <sub>x</sub>	PM <sub>10</sub>	SO <sub>x</sub>	VOC
7.9	265.67	139.19	8.86	0.88

Pursuant to 326 IAC 6-1-10.1 the PM<sub>10</sub> emissions represent filterable particulate matter only. No information was provided by the source on condensible particulate matter.

### Registration of Banked Emission Offsets

326 IAC 2-3-3(b)(5) was incorporated into Indiana air rules on July 1, 1981. When it was written, it was based on the Emission Offset Interpretive Ruling that was in 40 CFR Part 51, Appendix S at the time (August 7, 1980 version). That version of the interpretive ruling was written before attainment demonstration plans were submitted, and it did not allow the use of credits generated by shutdown or production curtailment, except in specific instances. The interpretive ruling was subsequently revised several times, and 40 CFR 51.165 was also promulgated to replace the interpretive ruling. However, when IDEM revised 326 IAC 2-3 in 1993, IDEM did not incorporate any of the revisions to the shutdown credits policy of the interpretive ruling or 40 CFR 51.165 into 326 IAC 2-3-3(b)(5), except that IDEM removed a transitional date that was no longer needed. Current State Rule 326 IAC 2-3-3(b)(5) reads as follows:

A source may receive offset credit from emission reductions achieved by shutting down an existing source or permanently curtailing production or operating hours below baseline levels; provided that the work force to be affected has been notified of the proposed shutdown or curtailment. Emission offsets that involve reducing operating hours or production or source shutdowns must be federally enforceable. Emission offsets may be credited for a source shutdown or curtailment provided that the applicant can establish that such shutdown or curtailment occurred less than one (1) year prior to the date of permit application, and the proposed new source is a replacement for the shutdown or curtailment.

Pursuant to 326 IAC 2-3-3(b)(5) the following emission credits are available to be used for emission offsets due to the shutdown of Lehigh Portland Cement Company, Gary Indiana. However, these emission credits cannot be banked pursuant to 326 IAC 2-3-4. Banking emission credits preserves those credits for a period of five (5) years. State Rule 326 IAC 2-3-3(b)(5) specifically states the amount of time credits are available following a source shutdown ( one (1) year) and thus cannot be banked for five (5) years.

Available Offset Emission Credits (tons per year)				
CO	NO <sub>x</sub>	PM <sub>10</sub> *	SO <sub>x</sub>	VOC
7.9	265.67	139.19	8.86	0.88

\* filterable particulate matter only

These emissions are creditable emission offsets provided the following criteria is met:

1. The work force to be affected has been notified of the proposed shutdown or curtailment.
2. The shutdown or curtailment occurred less than one (1) year prior to the date of permit application.
3. The proposed new source is a replacement for the shutdown source.

### Federal Requirements

Currently, the federal emission offset requirements in 40 CFR 51.165(a)(3)(ii)(C)(1) and (2) (and the most current version of the interpretive ruling in 40 CFR Part 51, Appendix S, (IV)(C)(3)(i) and (ii)) allow the use of shutdown credits if the area has an EPA-approved attainment plan and the only restriction on the use of shutdown credits are the state SIP cutoff dates (with federal guidelines for those cutoff dates). In the absence of an EPA-approved attainment plan, the shutdown or curtailment credits can only be used if the shutdown or curtailment occurred after the permit application date or if the proposed source is a replacement for the shutdown or curtailment and the federal cutoff date guidelines are followed.

In addition, an EPA guidance memo from John Seitz, dated July 23, 1993, entitled, "Use of Shutdown Credits for Offsets" clarifies that as long as an approved demonstration plan has been submitted, and the state meets and continues to meet other applicable Part D planning requirements, shutdown credits are allowed. The memo indicates that the restrictions on shutdown credits for states with approved demonstration plans were removed in the 1989 revisions to the interpretive ruling and 40 CFR 51.165. However, the policy does state that once a state fails to meet any of the milestones in the SIP or meet an RFP benchmark, the restriction on use of pre-application shutdowns must automatically resume.