

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISED

PERMITTEE

PCS Phosphate Company, Inc.  
Attn: Bob Startzer  
2660 East U.S. Route 6  
Marseilles, Illinois 61341

<u>Application No.:</u> 72121009	<u>I.D. No.:</u> 099817AAI
<u>Applicant's Designation:</u>	<u>Date Received:</u> February 1, 2006
<u>Subject:</u> Mono and Dicalcium Phosphate Production Plant	
<u>Date Issued:</u> March 2, 2006	<u>Expiration Date:</u> October 5, 2010
<u>Location:</u> 2660 East U.S. Route 6, Marseilles	

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of

Limestone Unloading System  
Two Limestone Grinding Mills Controlled by Two Baghouses  
Surge Silo Controlled by the Baghouse  
Pug Mill Mixer Controlled by the Scrubber  
Pellet Dryer Controlled by Two Cyclones and Scrubber  
Pellet Cooling Area Controlled by Baghouse  
Seven Product Screens Controlled by Baghouse  
Product Recycling System Comprised of Five Conveyors and Four Cage Mills  
Controlled by Baghouse  
Product Load-Out Area Controlled by Baghouse  
Natural Gas-Fired Boiler

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/yr for particulate matter with an aerodynamic diameter of 10 microns or less (PM-10)). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
  - b. Prior to the initial issuance of a FESOP to this source, a draft of this permit has undergone a public notice and comment period.
  - c. This permit supersedes all operating permit(s) for this location.
2. Operations and emissions of the phosphate production plant shall not exceed the following limits:

Unit of Equipment	Production Rate		Emission Factor (Lb/Ton)	Control Efficiency (%)	PM Emissions	
	(T/Mo)	(T/Yr)			(Lb/Mo)	(T/Yr)
Unloading System	25,300	171,700	0.003*	-	76	0.26
2 Grinding Mills	25,300	171,700	1.46**	99.7	111	0.38
Surge Silo	25,300	171,700	0.003	99.7	--	0.01
Pug Mill Mixer	45,200	306,600	0.014	***	633	2.15
Pellet Dryer	45,200	306,600	0.101	***	4,562	15.48
Cooling Area	45,200	306,600	0.036	***	1,627	5.52
7 Screens	45,200	306,600	0.048	***	2,170	7.36
Recycling System	45,200	306,600	0.024	***	1,085	3.70
Load-Out Area	45,200	306,600	0.003	50.0	68	0.23
					Total	35.09

\* SIC 305-020-06

\*\* SIC 305-019-07

\*\*\* Emission Factor was derived from the stack test performed in 1995 and accounts for control device efficiency. It is assumed that replacement of some scrubbers with baghouses after testing resulted in no increase in emissions.

These limits are based upon maximum production rate and emission factor derived from the stack test data and standard emission factors. As a result of these PM emissions limitations, the emissions of PM-10 are effectively limited to an equal or lesser quantity. Compliance with annual limits shall be determined on a monthly basis from the sum of the data from the previous month plus the preceding 11 months (i.e., a 12 month running total).

- No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
- Operation and emissions of the natural gas fired dryer and boiler shall not exceed the following limits:

Natural Gas Usage: 50 mmscf/Month, 590 mmscf/Year

Pollutant	Emission Factor (Lb/mmscf)	Emissions	
		(Tons/Mo)	(Tons/Yr)
Nitrogen Oxides (NO <sub>x</sub> )	100	2.5	29.5
Carbon Monoxide (CO)	84	2.1	24.8
Particulate Matter (PM)	7.6	0.2	2.2
Volatile Organic Material (VOM)	5.5	0.1	1.6

These limits are based on the maximum firing rate, standard emission factors and year round operation. Compliance with annual limits shall

be determined on a monthly basis from a running total of 12 months of data.

5. The Permittee shall maintain monthly records of the following items:
  - a. Phosphate production (tons/month and tons/year).
  - b. PM-10 emission (tons/month and tons/year).
6. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
7. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Unit in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, a description of the exceedances or violation, and efforts to reduce emissions and future occurrences.
8. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Illinois EPA  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Illinois EPA  
Division of Air Pollution Control  
5415 North University  
Peoria, Illinois 61614

It should be noted that this permit has been revised to reflect the replacement of pug mill mixer baghouse. This revision does not relax monitoring, recordkeeping, or reporting requirements contained in federally enforceable conditions of this permit. These permit conditions assure that this source would not be a major source for purpose of CAAPP.

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If you have any questions on this permit, please call Valeriy Brodsky at 217/782-2113.

Donald E. Sutton, P. E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:VJB:psj

cc: Illinois EPA, FOS Region 2  
Lotus Notes

Attachment A

This attachment provides a summary of the maximum emission from Mono and Dicalcium Phosphate Production Plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is a maximum production rate of phosphates 306,600 tons per year. The resulting maximum emissions are below the levels (i.e., 100 tons/yr for particulate matter with an aerodynamic diameter of 10 microns or less (PM-10)) at which this source would be considered a major source for purposes of the Clean Air Act Program Permit (CAAPP). Actual emissions from this source will be less than predicted in this summary to the extent that material is handled, and control measures are more effective than required in this permit.

Emission Units	Emissions (Tons/Year)			
	PM	NO <sub>x</sub>	CO	VOM
Unloading System	0.3			
Grinding Mills	0.4			
Surge Bin	0.01			
Pug Mill Mixer	2.2			
Pellet Dryer	15.5			
Cooling Area	5.5			
Screens	7.4			
Recycling System	3.7			
Load-Out Area	0.2			
Combustion Equipment	2.2			
Totals:	37.4	29.5	24.8	1.6

DES:VJB:psj