



The Florida Senate

Issue Brief 2009-316

October 2008

Committee on Environmental Preservation and Conservation

THE FLORIDA INSTITUTE OF PHOSPHATE RESEARCH

Statement of the Issue

The Florida Institute of Phosphate Research was created by the Legislature in 1978 to study phosphate issues and to be a resource to provide phosphate information to the phosphate industry and the general public. The institute is administratively housed at the University of South Florida and is funded by a portion of the phosphate severance tax. Since its creation, there has not been a comprehensive review of the activities of the institute and its use of state phosphate severance tax funds.

Discussion

In 1978 the Legislature provided a mechanism¹ for the reclamation and restoration of areas that were mined for phosphate prior to July 1, 1975. At that time, a portion of the proceeds derived from the severance tax for phosphate were to be deposited into the Phosphate Research Trust Fund and used to create the Florida Institute of Phosphate Research (FIPR). The institute's stated purpose was to conduct studies related to the economic and environmental effects of phosphate mining and land reclamation. This legislation implemented the recommendations of the Phosphate Land Reclamation Study Commission.

The FIPR is located in Bartow, Florida and is administratively attached to the University of South Florida. FIPR has a staff of 25 full-time and part-time employees. Pursuant to s. 378.101, F.S., the institute is governed by a 5-member board of directors appointed by the Governor. The membership of the board is as follows:

- One member from the faculty of a university within the State University System;
- One member from a major conservation group in Florida;
- One member from state government, and;
- Two members from the phosphate mining or processing industry.

The Governor must make these appointments on the basis of their ability to set priorities for phosphate research. The appointees are then tasked with giving direction to phosphate research efforts that address problems of the industry in which the public has substantial interest. Members serve 3-year terms and may be reappointed.

The FIPR also serves as a phosphate-related information resource. The FIPR's research concentrates on the following areas: chemical processing of phosphate rock into fertilizer (including studies on the byproduct phosphogypsum); beneficiation or mineral processing to separate clay and sand from the phosphate rock; reclamation of mined lands; mining processes; public and environmental health (including radiation issues).²

Other FIPR activities include intensive summer workshops for teachers; conferences and seminars; maintaining a library of information on phosphate; and providing mini-grants up to \$1,500 to develop phosphate teaching units. In addition, FIPR has implemented several other initiatives such as:

- "Stack Free by 53" which is a strategic project designed to determine whether it is feasible to eliminate all phosphogypsum stacks;

¹ See Chapter 78-136, Laws of Florida

² Florida Senate Interim Report 2005-154, Activities Related to the Closure of Phosphate Mining Operations and the Uses of Phosphate Mining Byproducts and Closed Phosphate Lands, December 2004.

- The use of phosphogypsum in landfills; and
- Creating a special Technical Advisory Committee to find solutions for the process water³ problem associated with phosphogypsum stacks at the Mulberry and Piney Point facilities.

Funding for FIPR is established in Section 211.3103, F.S., as part of the distribution of severance tax revenues. The severance taxation of solid minerals, including phosphate, was enacted into law in 1971. The tax rates and the disposition of these revenues have been amended since that time, most recently during the 2008 Legislative session.

Chapter 2008-150, L.O.F., reduced the minimum tax rate per ton severed from \$1.56 to \$1.51. Beginning July 1, 2008, the law established the per ton severed tax rate at \$1.945 and levied a surcharge of \$1.38 per ton severed until surcharge revenue equals \$60 million. The surcharge revenue is designated for the closure of the Piney Point and Mulberry sites and for approved reclamation of nonmandatory lands. Beginning July 1 of the fiscal year following the date on which the surcharge revenue equals \$60 million, the per ton severed tax rate is set at \$1.51.

FIPR is estimated to receive \$2.6 million for the 2008-2009 fiscal year from the severance tax distribution, and approximately the same amount under the revised distribution formula that will be effective July 1 of the fiscal year following the date on which the surcharge revenue equals \$60 million.

Severance Tax Distribution Formula	Effective July 1, 2008	Effective upon Receipt of Surcharge Revenue
Conservation & Recreation Lands Trust Fund	\$10 Million	
<i>Of the remaining funds</i>		
General Revenue	40.1%	37.0%
Counties	16.5%	13.6%
Economically Distressed Counties	13.0%	10.7%
Phosphate Research Trust Fund	9.3%	6.6%
Minerals Trust Fund	10.7%	0.0%
Nonmandatory Land Reclamation Trust Fund	10.4%	6.6%
Conservation & Recreation Lands Trust Fund		25.5%
Total:	100.0%	100.0%

As of June 30, 2008, the estimated ending cash balance for the Phosphate Research Trust Fund was \$10,191,909. The Phosphate Research Trust Fund revenue amounts, illustrated in the chart below, include all of the fund's revenue sources such as miscellaneous receipts and interest earnings. Since fiscal year 2004-05, program expenditures have exceeded the trust funds revenues and the fund's cash balance is depleting. Given the competing demands for severance tax revenues, it is advisable to explore program operations in the future.

³ Process water is the water used in the chemical process that turns phosphate into the phosphoric acid that is used to make fertilizer. Process water is acidic and is saturated with numerous chemicals.

Phosphate Research Trust Fund		
Fiscal Year	Revenues	Expenditures
2003-2004	\$3,943,534	\$3,917,042
2004-2005	\$3,277,814	\$3,627,889
2005-2006	\$3,512,821	\$3,919,134
2006-2007	\$2,641,745	\$4,410,093
2007-2008	\$2,885,355	\$3,906,854

The FIPR was created to study alternative reclamation alternatives and technologies and to study the disposal and utilization of phosphate clay. The Environmental Protection Agency (EPA) regulates the use of byproducts of phosphate mining, specifically phosphogypsum. Currently, phosphogypsum is classified as a waste product. As such, it cannot be used for any other commercial use. The EPA has, however, approved its use in limited quantities for research purposes and for limited agricultural uses.

It has been 30 years since the FIPR was established. During that time there has not been a legislative review of the institute. In 1989, the FIPR, pursuant to a review under the Open Government Sunset Review Act, was allowed to retain a public records exemption for certain records that contain proprietary information. In 1999, the Phosphate Research Trust Fund was recreated pursuant to a required trust fund review.