The Florida Senate

BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Higher Education Appropriations Committee

BILL:	CS/CS/SB 850
INTRODUCER:	Higher Education Appropriations Committee, Higher Education Committee and Senator Alexander
SUBJECT:	Florida Institute of Phosphate Research
DATE:	March 10, 2010 REVISED:

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Harkey	Matthews	HE	**Fav/CS**
2.	Bryant	Hamon	HI	**Fav/CS**
3.				
4.				
5.				
6.				

Please see Section VIII. for Additional Information:

A. COMMITTEE SUBSTITUTE.....	x	Statement of Substantial Changes
B. AMENDMENTS.....		Technical amendments were recommended
		Amendments were recommended
		Significant amendments were recommended

I. Summary:

This bill expands the mission of the Florida Institute of Phosphate Research (FIPR), by allowing it to conduct research outside the scope of the phosphate industry. The bill transfers the institute to the University of South Florida (USF) Polytechnic by a type two transfer, and renames it the Florida Industrial and Phosphate Research Institute (FIPR). The bill renames the institute's board of directors as the Phosphate Research and Activities Board and revises the membership. The FIPR would have to maintain its public library and make available to the public the results of its activities. The bill authorizes the FIPR to contract with corporations, institutions, and domestic and foreign governmental agencies to carry out its activities.

This bill amends sections 211.31 and 378.101, Florida Statutes, and renumbers section 378.101 as section 1004.346, Florida Statutes.

This bill repeals section 378.102, Florida Statutes.

II. Present Situation:

Phosphate Mining

Phosphate rock is used to manufacture phosphate fertilizers and other industrial products.[1] In 2009, phosphate rock was mined by six firms in 4 states, producing an estimated 27.2 million tons of marketable product valued at $1.4 billion.[2] More than 95 percent of the mined rock was used to manufacture fertilizers and animal feed supplements.[3] Florida and North Carolina provided more than 85 percent of total domestic output.[4]

Deposits of phosphate rock were first discovered in Florida near Hawthorne in Alachua County in 1883.[5] Mechanized excavation began between 1900 and 1905 with steam shovels. With the availability of electricity in the 1920s, electrically-driven draglines, the current mining tool, came into use. Currently, phosphate mines are operated by three corporations in six Florida counties: Hamilton, Hardee, Hillsborough, Polk, Manatee, and Sarasota. In fiscal year 2008-2009, 22.8 million tons of phosphate rock were mined in Florida.[6]

Phosphate mining and processing and reclamation of the disturbed lands are subject to state and federal requirements to protect the health of the public, as well as the health of the environment. Uranium and related products such as radium occur in the ground with phosphate. When the rock is processed, a small amount of uranium and radium are released. According to FIPR, reclaimed lands often have higher radiation levels because higher concentrations of radioactivity are near the surface than before mining, and the cracks and openings in the ground provide new pathways for radon to reach houses directly above.[7] Phosphate research addresses issues such as waste disposal, environmental radioactivity, and the possibilities of air and water pollution.

Florida Institute of Phosphate Research

The 1978 Legislature created the Florida Institute of Phosphate Research (FIPR)[8] to conduct studies relating to:

- Radiation and water consumption and other environmental effects of phosphate mining;
- Reclamation alternatives including wetlands reclamation; and
- Phosphatic clay disposal and utilization.

The FPIR is required to establish methods for better and more efficient phosphate recovery mining and processing. The law requires the FIPR to educate and inform Florida citizens about

---

[1] United States Geological Survey, "Phosphate Rock Statistics and Information," readable at: http://minerals.usgs.gov/minerals/pubs/commodity/phosphate_rock/ (last viewed on February 24, 2010).
[2] U. S. Geological Survey, "Mineral commodity Summary, January 2010, Readable at : http://minerals.usgs.gov/minerals/pubs/mcs/2010/mcs2010.pdf (last viewed on February 24, 2010).
[3] *Id.*
[4] *Id.*
[5] Florida Institute of Phosphate Research, "Phosphate Primer," Readable at: http://www1.fipr.state.fl.us/PhosphatePrimer/0/7AF891B1F8C41CD585256F7900588FF0 (last visited on February 26, 2010).
[6] Florida Institute of Phosphate Research, telephone conversation with institute staff (February 26, 2010).
[7] Florida Institute of Phosphate Research, "Phosphate Primer," Readable at:http://www1.fipr.state.fl.us/PhosphatePrimer/0/C8D7947AB36A400E85256F880077B8CA (last viewed on February 26, 2010).
[8] ch. 78-136, L.O.F.

the industry, its effects, and the FIPR's research findings, as well as general scientific knowledge concerning the industry.

The FIPR is located in Bartow, Florida and is administratively attached to the University of South Florida (USF). USF provides administrative services to the institute including accounting, payroll, personnel, legal and travel services, and the FIPR pays a fee to USF for these services. A five-member board of directors, appointed by the Governor oversees the institute. The FIPR board of directors is comprised of 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 is required to appoint members on the basis of their ability to set priorities for, and give direction to, phosphate research. Members serve 3-year terms and may be reappointed.

The University of South Florida Polytechnic

The 2008 Legislature designated the Lakeland campus of USF as the "University of South Florida Polytechnic."[9] The USF Polytechnic is the newest of four campuses in the USF system. According to the USF Polytechnic website,[10] it is the state's only polytechnic and provides upper level undergraduate and graduate students with an opportunity for applied learning and research.[11] Section 1004.345, F.S., establishes USF Polytechnic as a separate organizational and budget entity from USF. USF Polytechnic is administered by a campus executive officer, appointed by the president of USF and a campus board. The campus board is comprised of four residents of the Lakeland campus service area appointed by the president of USF and one member of the USF board of trustees selected by that board. Members of the campus board serve 4-year terms and may be reappointed for one term.

Methods of Reorganizing State Government

Section 20.06, F.S., provides methods for transferring an agency, program or function to a different department, program, or office. A type one transfer is the transferring intact of an existing agency or department so that the agency or department becomes a unit of another agency or department. A type two transfer is the merging into another agency or department of an existing agency or department or a program, activity, or function thereof.

III. Effect of Proposed Changes:

The bill expands the mission of the FIPR, allowing research to be conducted in additional areas outside of the scope of the phosphate industry. The bill transfers FIPR to the USF Polytechnic by a type two transfer and changes its name to the Florida Industrial and Phosphate Research Institute (FIPR). The bill transfers s. 378.101, F.S., to s. 1004.346, F.S., thus moving the codification of the institute into the school code.

The bill replaces the 5-member FIPR board of directors with the 5-member Phosphate Research and Activities Board and revises the membership to include the campus executive officer of the USF Polytechnic and the Secretary of Environmental Protection. Board members serve 3-year terms and may be reappointed. Board members serve without compensation and are entitled to

[9] ch. 2008-97, L.O.F.
[10] http://www.poly.usf.edu
[11] *Id.*

reimbursement for per diem and travel expenses as provided in s. 112.061, F.S. The board must approve an annual report prepared by the institute's executive director which describes the expenditure of funds from the Phosphate Research Trust Fund.

The institute's executive director would be appointed by, and serve at the pleasure of, the USF Polytechnic's campus executive officer. The executive director must consult with the Phosphate Research and Activities Board regarding the projects the institute expects to undertake using funds from the Phosphate Research Trust Fund.

In addition to the current duties of FIPR, the bill would require the FIPR to provide the public with access to the results of its research activities and to maintain a public library, which may include special collections, related to its research activities.

The bill authorizes the FIPR to:

- Research and develop better and more efficient processes and practices for commercial and industrial activities including mitigating the health and environmental effects of such activities and developing and evaluating alternative technologies;
- Securing funding for its activities from grants and other sources;
- Entering into contracts with corporations, institutions, and domestic and foreign governmental agencies to carry out its activities;
- Promote the application, patenting, and commercialization of the institute's technologies, knowledge, and intellectual properties in accordance with USF's procedures;
- Educate the public about the science related to its scope of expertise;
- Hold public hearings;
- Establish public-private partnerships; and
- Provide consulting services.

According to the Board of Governors (BOG), the FIPR currently receives a very small amount of intellectual property revenue and that revenue has the potential to increase significantly from industries beyond the phosphate industry. For example, the FIPR holds the patent for using laser induced breakdown spectroscopy (LIBS) for certain on-line analyses in the phosphate industry. The technology can be extended to other industries, especially the coal industry. The potential revenues generated from the coal industry far exceed the potential revenues generated from the phosphate industry.

The bill corrects a cross-reference in s. 211.31, F.S., to conform to changes made in the bill.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

Section 211.3103, F.S., establishes an excise tax on the severing of phosphate rock from the soils or waters of Florida for commercial use. The first $10 million collected each year is paid to the Conservation and Recreation Lands trust fund. From the remaining revenues collected 9.3 percent is deposited in the Phosphate Research Trust Fund which funds FIPR.

The statute also requires the levy of a surcharge of $1.38 per ton severed until the surcharge revenue reaches a $60 million threshold. Beginning July 1, of the fiscal year following the date on which the surcharge revenue reaches the $60 million threshold, the per ton severed tax rate is reduced from $1.945 to $1.51. A minimum of 75 percent of the surcharge revenue shall be designated for the closure of the Piney Point and Mulberry sites. The remaining funds from the surcharge revenue must be used for approved reclamation of nonmandatory lands.

B. Private Sector Impact:

The broadened scope of the institute's research could benefit private industry. The amount is indeterminate.

C. Government Sector Impact:

According to the Department of Environmental Protection (DEP), as of November 4, 2009, the surcharge revenues had not reached $60 million, but if mining continued at the current rate, that amount could be reached by June 30, 2010.

Since fiscal year 2004-05, program expenditures have exceeded the Trust Fund revenues.[12] In order to cover the difference, the trust fund's cash balance is being depleted.

According to the Board of Governors (BOG), the FIPR receives funding from three revenue sources: from severance tax revenues paid by the Florida phosphate industry, interest revenue earned from the phosphate trust fund, and income from intellectual property and patents. In fiscal year 2008-09, the institute received a total of $3.3 million in revenues from these three sources.

According to the BOG, in fiscal year 2008-09, the FIPR paid a total of $516,000 in fees to the Department of Revenue, the General Revenue Fund and the University of South Florida (USF) of which USF received $110,000 for administrative services provided to

[12] Florida Senate Interim Report 2009-316, The Florida Institute of Phosphate Research, October, 2008.

the institute. According to the BOG, allowing the institute to secure additional funding from public, private, foreign, and domestic sources to carry out the research activities specified in this bill could increase the administrative costs of the institute. The amount of additional costs is indeterminable at this time.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Additional Information:

A. Committee Substitute – Statement of Substantial Changes:
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

CS/CS by Higher Education Appropriation Committee on March 10, 2010:
The Committee Substitute:

- Changes the name of the FIPR to the Florida Industrial and Phosphate Research Institute instead of the Florida Institute for Industrial and Phosphate Research;
- Authorizes the institute to conduct or contract for studies instead of conducting or contracting for a comprehensive study.

CS by Higher Education on March 4, 2010:
The Committee Substitute:

- Changes the name of the FIPR to the Florida Institute for Industrial and Phosphate Research instead of the Florida Institute of Polytechnic and Phosphate Research;
- Transfers the institute by a type two transfer, pursuant to s. 20.06(2), F.S., to the University of South Florida Polytechnic;
- Moves the codification of the institute from ch. 378, F.S. to ch. 1004, F.S., thus placing the institute in the Florida School Code;
- Replaces the current 5-member board that directs the institute with a 5-member Phosphate Research and Activities Board; and
  Revises the board's membership to include the Secretary of the Department of Environmental Protection and the campus executive officer of the USF Polytechnic.

B. Amendments:

None.