

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/CS/CS/HB 659 Fossil Fuel Combustion Products

SPONSOR(S): State Affairs Committee; Agriculture & Natural Resources Appropriations Subcommittee; Agriculture & Natural Resources Subcommittee; Goodson

TIED BILLS: None **IDEN./SIM. BILLS:** SB 682

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Agriculture & Natural Resources Subcommittee	11 Y, 2 N, As CS	Renner	Blalock
2) Agriculture & Natural Resources Appropriations Subcommittee	10 Y, 2 N, As CS	Helpling	Massengale
3) State Affairs Committee	16 Y, 0 N, As CS	Renner	Camechis

SUMMARY ANALYSIS

The Federal Resource Conservation and Recovery Act (RCRA) directs the Environmental Protection Agency (EPA) to implement a solid and hazardous waste management and disposal program. The hazardous waste program, under RCRA Subtitle C, establishes a "cradle to grave" system for controlling hazardous waste from the time it is generated until its ultimate disposal, which includes the generation, transportation, treatment, storage, and disposal of hazardous waste.

On February 12, 1985, Florida received authorization from the EPA to administer its own hazardous waste management and disposal program under RCRA. Currently, the Department of Environmental Protection (DEP) implements Florida's Resource Recovery and Management Program pursuant to Part IV of chapter 403, F.S., which specifically provides that due to the permeability of the soil and high water table in Florida, hazardous waste landfills are prohibited in the state. Under RCRA and Florida's hazardous waste program, certain waste products are exempt, such as fossil fuel combustion (FFC) wastes. FFC wastes are produced from the burning of fossil fuels (coal, oil, natural gas) and include all ash, slag, and particulates removed from flue gas. These wastes are categorized by the EPA as "special wastes" and have been exempted from both the state and federal hazardous waste regulatory programs.

The bill creates a regulatory program in statute for the "beneficial use" of Fossil Fuel Combustion Products (FFCPs). The bill defines "beneficial use" as the use of FFCPs in building products and as a substitute for raw materials, necessary ingredients, or additives in other products according to accepted industry practices. The bill provides definitions for "FFCPs," "fossil fuel-fired electric or steam generation facilities," "pavement aggregate," and "structural fill."

The bill specifies that the storage of FFCPs destined for beneficial use must comply with applicable DEP rules and be conducted in a manner that does not pose a significant risk to public health or violate applicable air or water quality standards. The bill also provides that the beneficial use of FFCPs is exempt from regulation under part IV of chapter 403, F.S., but DEP may take appropriate action if the beneficial use is demonstrated to be causing violations of applicable air or water quality standards or criteria in DEP rules, or if the beneficial use poses a significant risk to public health. The bill does not limit any other requirements applicable to the beneficial use of FFCPs established under chapters 403 or 376, F.S., or under local or federal laws, including requirements governing air pollution control permits, national pollutant discharge elimination system permits, and water quality certifications pursuant to section 401 of the Clean Water Act.

The bill provides that nothing is to be construed to limit DEP's authority to approve the beneficial use of materials other than FFCPs as defined above. The provisions in the bill are not to be construed to limit or otherwise modify any FFCP beneficial use previously approved by DEP, use in the on-site construction of surface impoundments, roads or similar works at fossil fuel-fired electric or steam generation facilities, or the recovery of these products for beneficial use from FFCP landfills, impoundments, or storage areas.

Lastly, the bill amends current law to exempt a disposal facility or part of a facility that accepts fly ash, bottom ash, boiler slag, or flue-gas emission control materials from the operation of a fossil fuel-fired electric or steam generation facility, from a clean coal or other innovative technology process at a fossil fuel-fired electric or steam generation facility, or from any combination thereof from the prohibition of hazardous waste landfills in Florida.

The bill does not appear to have a fiscal impact on state or local government. The bill has a potentially positive fiscal impact on private and publicly-owned electric utilities. See Fiscal Comments section.

This document does not reflect the intent or official position of the bill sponsor or House of Representatives.

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DATE: 3/29/2013

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Current Situation

Federal Regulation of FFCPs

The Federal Resource Conservation and Recovery Act (RCRA)¹ directs the Environmental Protection Agency (EPA) to implement a solid and hazardous waste management and disposal program. The hazardous waste program, under RCRA Subtitle C, establishes a “cradle to grave” system for controlling hazardous waste from the time it is generated until its ultimate disposal, which includes the generation, transportation, treatment, storage, and disposal of hazardous waste.² RCRA also sets forth a framework for the management of non-hazardous solid wastes.³

On February 12, 1985, Florida received authorization from the EPA to administer its own hazardous waste management and disposal program under RCRA. Currently, DEP implements Florida’s Resource Recovery and Management Program pursuant to Part IV of chapter 403, F.S., which specifically provides that due to the permeability of the soil and high water table in Florida, hazardous waste landfills are prohibited in the state. Under RCRA and Florida’s hazardous waste program, certain waste products are exempt from the hazardous waste disposal requirements, such as fossil fuel combustion product (FFCP) wastes. FFCP wastes are produced from the burning of fossil fuels (coal, oil, natural gas) and include all ash, slag, and particulates removed from flue gas. These wastes are categorized by the EPA as “special wastes” and have been exempted from both the state and federal hazardous waste regulatory programs.

FFCP wastes are divided into 2 categories:

- Large-volume coal combustion wastes generated at electric utility and independent power producing facilities that are managed separately.
- All remaining fossil fuel combustion wastes including:
 - Large-volume coal combustion waste generated at electric utility and independent power producing facilities that are co-managed with certain other coal combustion wastes.
 - Coal combustion wastes generated at non-utilities.
 - Coal combustion wastes generated at facilities with fluidized bed combustion technology.
 - Petroleum coke combustion wastes.
 - Waste from the combustion of mixtures of coal and other fuels.
 - Waste from the combustion of oil.
 - Waste from the combustion of natural gas.

FFCP Waste Disposal in Florida

As stated above, Florida has been granted the authority to administer its own solid and hazardous waste management and regulatory program, and has agreed to issue permits that conform to the regulatory requirements of the federal law, to inspect and monitor activities subject to regulation, to take appropriate enforcement action against violators, and to do so in a manner that is no less stringent than the federal program.⁴

¹ 42 U.S.C. § 6901 et seq. (1976)

² EPA website on Laws and Regulations. See <http://www.epa.gov/lawsregs/laws/rcra.html>

³ *Id.*

⁴ DEP website on Hazardous Waste Regulation Section. See <http://www.dep.state.fl.us/waste/categories/hwRegulation/default.htm>

Section 403.703, F.S., defines hazardous waste as “solid waste, or a combination of solid wastes, which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or may pose a substantial present or potential hazard to human health or the environment when improperly transported, disposed of, stored, treated, or otherwise managed.”

Section 403.7045(1)(f), F.S., provides that industrial byproducts (or FFCPs) are not regulated by chapter 403, F.S., if:

- A majority of the industrial byproducts are demonstrated to be sold, used, or reused within 1 year.
- The industrial byproducts are not discharged, deposited, injected, dumped, spilled, leaked, or placed upon any land or water so that such industrial byproducts, or any constituent thereof, may enter other lands or be emitted into the air or discharged into any waters, including groundwaters, or otherwise enter the environment such that a threat of contamination in excess of applicable department standards and criteria or a significant threat to public health is caused.
- The industrial byproducts are not hazardous wastes as defined under s. 403.703, F.S. and rules adopted under this section.

Section 403.7222, F.S., defines a hazardous waste landfill as “a disposal facility or part of a facility at which hazardous waste that has not undergone treatment is placed in or on land.” Due to the permeability of the soil and high water table in Florida, hazardous waste landfills are prohibited in the state.

Beneficial Use of FFCP in Florida

FFCPs such as coal ash are currently being used beneficially in Florida. Coal ash can be reused in two forms — encapsulated (bound into a product) or unencapsulated. In 2010, 6.6 million tons of coal ash, including fly ash, was produced in Florida, according to DEP. Usually 30 to 50 percent of coal ash is used for cement production, road construction, wall board manufacturing, and for agricultural use as a gypsum soil amendment, and the rest is sent to landfills. Environmental benefits from these types of uses include greenhouse gas reduction, energy conservation, reduction in land disposal, and reduction in the need to mine/process virgin materials.

Kingston Fossil Plant Coal Fly Ash Slurry Spill

On December 22, 2008, a retention pond wall collapsed at the Tennessee Valley Authority’s (TVA) Kingston plant in Harriman, Tennessee, releasing a combination of water and fly ash that flooded 12 homes, spilled into nearby Watts Bar Lake, contaminated the Emory River, and caused a train wreck. Officials said 4 to 6 feet of material escaped from the pond to cover an estimated 400 acres of adjacent land.

In response to the spill, the EPA is currently proposing to regulate for the first time coal ash to address the risks from the disposal of the wastes generated by electric utilities and independent power producers. The EPA is considering two possible options for the management of coal ash for public comment. Both options fall under RCRA. Under the first proposal, the EPA would list these residuals as special wastes subject to regulation under the Subtitle C hazardous waste program of RCRA, when destined for disposal in landfills or surface impoundments. Under the second proposal, the EPA would regulate coal ash under Subtitle D of RCRA, the section for non-hazardous wastes. The proposed rule was published in the Federal Register on June 21, 2012, but rulemaking has been put on hold.

According to DEP, if the EPA changes course and requires FFCP waste to be regulated as a hazardous waste under RCRA, then the state would be forced to find ways of disposing of such wastes. Since hazardous waste landfills are prohibited in Florida, coal burning utilities would be forced to find disposal facilities outside the state willing to take the FFCPs.

Effect of Proposed Changes

The bill creates s. 403.7047, F.S., establishing a specific regulatory program in Florida for the beneficial use of FFCPs. The bill defines “beneficial use” as the use of FFCPs in building products and as a substitute for raw materials, necessary ingredients, or additives in other products according to accepted industry practices, including the following:

- Asphalt, concrete or cement products, flowable fill, and roller-compacted concrete.
- Structural fill or pavement aggregate that meets the following requirements:
 - The FFCP is not in contact with groundwater, surface water bodies, or wetlands, and is not placed within 100 feet of a potable well that is being used for or might be used for human or livestock water consumption; and
 - The placement of the FFCP does not extend beyond the outside edge of the structure or pavement. Placement of the structure, pavement, or soil must be completed as soon as practical after placement of the FFCP.
- Use of flue-gas emission control materials, which meet the definition of gypsum and are used in accordance with applicable Florida Department of Agriculture and Consumer Services rules.
- Waste stabilization or initial or intermediate cover material used for lined Class I, II, or III landfills, provided that the material meets applicable DEP rules for landfill cover or a landfill’s permit conditions for cover.
- Any other use that meets the criteria of s. 403.7045(1)(f), F.S.,⁵ or that is approved by DEP prior to use as having an equivalent or reduced potential for environmental impacts, when used in equivalent quantities, compared to the substituted raw products or materials.

The bill defines “FFCPs” as fly ash, bottom ash, boiler slag, flue-gas emission control materials, and other nonhazardous materials, such as gasifier slag, fluidized-bed combustion system products, and similar combustion materials produced from the operation of a fossil fuel-fired electric or steam generation facility, from a clean coal or other innovative technology process at a fossil fuel-fired electric or steam generation facility, or from any combination thereof.

The bill also provides definitions for “fossil fuel-fired electric or steam generation facilities,” “pavement aggregate,” and “structural fill.”

The bill specifies that the storage of FFCPs destined for beneficial use must comply with applicable DEP rules and be conducted in a manner that does not pose a significant risk to public health or violate applicable air or water quality standards.

The bill also provides that the beneficial use of FFCPs is exempt from regulation under part IV of chapter 403, F.S., but DEP may take appropriate action if the beneficial use is demonstrated to be causing violations of applicable air or water quality standards or criteria in DEP rules, or if the beneficial use poses a significant risk to public health. The bill does not limit any other requirements applicable to the beneficial use of FFCPs established under chapters 403 or 376, F.S., or under local or federal laws, including requirements governing air pollution control permits, national pollutant discharge elimination system permits, and water quality certifications pursuant to section 401 of the Clean Water Act.

In addition, the bill provides that nothing is to be construed to limit DEP’s authority to approve the beneficial use of materials other than FFCPs as defined above, pursuant to other provisions of this part. The language in the bill is not to be construed to limit or otherwise modify any FFCP beneficial use previously approved by DEP, use in the on-site construction of surface impoundments, roads or similar works at fossil fuel-fired electric or steam generation facilities, or the recovery of these products for beneficial use from FFCP landfills, impoundments, or storage areas.

Lastly, the bill amends s. 403.7222, F.S., to exempt a disposal facility or part of a facility that accepts fly ash, bottom ash, boiler slag, or flue-gas emission control materials from the operation of a fossil fuel-fired electric or steam generation facility, from a clean coal or other innovative technology process at a

⁵ Section 403.7045(1)(f), F.S., provides that industrial byproducts that meet specified criteria are not regulated under ch. 403, F.S.

fossil fuel-fired electric or steam generation facility, or from any combination thereof from the prohibition on hazardous waste landfills in Florida.

B. SECTION DIRECTORY:

Section 1. Creates s. 403.7047, F.S., providing standards for storage of certain fossil fuel combustion products; providing an exemption for beneficial use of fossil fuel combustion products from certain rules; providing that the act does not prohibit DEP from taking appropriate action to regulate a beneficial use in certain circumstances; providing that the act does not limit other requirements applicable to the beneficial use of fossil fuel combustion products; providing that the act does not limit the recovery of beneficial use products or the authority of DEP to approve the beneficial use of materials other than fossil fuel combustion products; clarifying that the act does not limit or modify any fossil fuel combustion product beneficial use previously approved by DEP.

Section 2. Amends s. 403.7222, F.S., excluding certain types of facilities from provisions on hazardous waste landfills.

Section 3. Provides an effective date of July 1, 2013.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

See Fiscal Comments below.

D. FISCAL COMMENTS:

The bill has a potentially positive fiscal impact on private and publically-owned electric utilities that generate FFCPs due to the bill specifically authorizing some currently widespread uses of FFCPs and other uses that may not be as common. This could result in a reduction in disposal costs for private and publicly-owned electric utilities.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to affect county or municipal governments.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On March 7, 2013, the Agriculture & Natural Resources Subcommittee amended and reported HB 659 favorably as a committee substitute (CS). The CS makes the following changes:

- Reduces the number of identified beneficial uses by removing FFCPs for pipe bedding aggregate, fertilizers, metallurgical applications, filter cloth precoat for sludge dewatering, and blowdown. The CS clarifies that the beneficial use of FFCPs in agriculture is limited to the use of flue-gas emission control materials which meet the definition of gypsum in accordance with the DACS rules. The CS also provides an additional condition for the use of FFCPs that meets the criteria of s. 403.7045(1)(f), F.S., or that is approved by the DEP prior to use as having an equivalent or reduced potential for environmental impacts, when used in equivalent quantities, compared to the substituted raw products or materials.
- Deletes the definition of pipe bedding aggregate.
- Provides that the use of FFCPs for roads or similar works at fossil fuel-fired electric or steam generation facilities are not limited by the bill.
- Deletes the term blowdown from the list of certain FFCPs that a disposal facility accepts from the operation of a fossil fuel-fired electric or steam generation facility, clean coal or other technology process.

On March 18, 2013, the Agriculture and Natural Resources Appropriations Subcommittee amended and reported CS/HB 659 favorably as a committee substitute. The CS makes the following changes:

- Modifies the definition of "beneficial use" to include "building materials."
- Deletes specific uses of combustion products, including use in roofing material, blasting grit, aggregate in products, wallboard products, plastics, paints, and insulation products.
- Deletes specific use of combustion products used for extraction or recovery of materials and compounds contained within fossil fuel combustion products from being considered a beneficial use.

On March 28, 2013, the State Affairs Committee amended and reported CS/CS/HB 659 favorably as a committee substitute (CS). The CS restricts how and where FFCPs can be beneficially used by doing the following:

- Changes the term 'building materials' to 'building products' in the definition of beneficial use;
- Provides the FFCP is not in contact with groundwater, surface water bodies, or wetlands and is not placed within 100 feet (the current bill provides for 25 feet) of a potable well that is being used or might be used for human or livestock water consumption; and
- Provides the FFCP does not extend beyond the outside edge of the structure or pavement (the current bill provides for 4 feet beyond the outside edge).