

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 77 CS

Waste-to-Energy Facilities

SPONSOR(S): Littlefield

TIED BILLS:

IDEN./SIM. BILLS: SB 824, HB 53

| REFERENCE | ACTION | ANALYST | STAFF DIRECTOR |
|--|-----------------------|----------------|-----------------|
| 1) <u>Environmental Regulation Committee</u> | <u>6 Y, 0 N, w/CS</u> | <u>Perkins</u> | <u>Kliner</u> |
| 2) <u>Utilities & Telecommunications Committee</u> | <u>12 Y, 0 N</u> | <u>Cater</u> | <u>Bohannon</u> |
| 3) <u>Agriculture & Environment Appropriations Committee</u> | <u></u> | <u></u> | <u></u> |
| 4) <u>State Resources Council</u> | <u></u> | <u></u> | <u></u> |
| 5) <u></u> | <u></u> | <u></u> | <u></u> |

SUMMARY ANALYSIS

The bill amends the criteria in section 403.7061, F.S., conditioning the approval by the Department of Environmental Protection for the construction of a new waste-to-energy facility (WTE), or the expansion of a WTE, to require that the county where the facility is located has a solid waste management/recycling program designed to achieve a waste reduction goal of 30 percent. This amendment mirrors a similar provision in an earlier section of law, providing consistency, and is designed to account for fluctuations in recyclable commodities.

The bill provides that if a WTE were proposed to be built in a county with a population less than 100,000, that the county would have a program designed to achieve the 30 percent waste reduction goal, and not just provide an opportunity to recycle.

The bill does not appear to have a significant impact on state or local governments.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. HOUSE PRINCIPLES ANALYSIS:

The bill does not appear to advance any of the House Principles.

B. EFFECT OF PROPOSED CHANGES:

Issue – Waste-to-Energy Facility

General Background

For more than twenty years, WTE has been recognized as a source of renewable energy. WTE facilities produce relatively clean, renewable energy through the combustion of municipal solid waste in specially designed power plants equipped with pollution control equipment to clean emissions. A WTE facility uses an enclosed device using controlled combustion to thermally break down solid, liquid, or gaseous combustible solid waste to an ash residue that contains little or no combustible material.

Combustion is an intricate treatment process. During burning, organic wastes are converted from solids and liquids into gases. These gases pass through the flame, are heated further, and eventually become so hot that their organic compounds break down into the constituent atoms. These atoms combine with oxygen and form stable gases that are released to the atmosphere after passing through air pollution control devices. The management or disposal of metals and ash, other by-products of the combustion process, is an environmental concern. Ash is an inert solid material composed primarily of carbon, salts, and metals.¹

Solid waste is regulated by two major programs under the federal Resource Conservation and Recovery Act (RCRA).² The RCRA Subtitle C program regulates the disposal of solid waste that is hazardous, while the RCRA Subtitle D program regulates nonhazardous solid waste. WTE facilities must determine if their ash is a hazardous waste; accomplished by testing. Ash classified as hazardous must be handled under RCRA Subtitle C regulations as a hazardous waste. Ash not classified as hazardous must be disposed of in accordance with Subtitle D and state regulations.³

According to the Integrated Waste Services Association (IWSA), an interest group formed in 1991 to promote integrated solutions to municipal solid waste management problems, trash volume is reportedly reduced by approximately 90 percent and the remaining 10 percent (ash residue) must be regularly tested to meet strict U. S. Environmental Protection Agency standards allowing reuse or disposal in landfills. According to the IWSA, ash residue makes good cover in landfills because it exhibits concrete-like properties causing it to harden once it is placed and compacted in a landfill, reducing the potential for rainwater to leach contaminants from trash landfills into the ground.⁴ A WTE facility typically produces electricity, steam, or other energy that is used to power the facility and excess energy is usually sold to a power company.

The Florida Statutes limit the definition of a WTE facility to exclude facilities that primarily burn fuels other than solid waste even if such facilities also burn some solid waste as a fuel supplement. The defined term also does not include facilities that burn vegetative, agricultural, or silvicultural wastes,

¹ <http://www.epa.gov/epaoswer/general/orientat/rom37.pdf>, pages 1,2

² 42 U.S.C. s/s 6901 et seq. (1976)

³ <http://www.epa.gov/epaoswer/non-hw/muncpl/dmg2/chapter8.pdf>, pages 35-36

⁴ <http://www.wte.org/waste.html>

bagasse, clean dry wood, methane or other landfill gas, wood fuel derived from construction or demolition debris, or waste tires, alone or in combination with fossil fuels.⁵

In Florida, it is estimated that approximately half of the population is served by waste management systems that include 12 WTE facilities.⁶

The following table depicts the current WTE facilities in Florida along with the most current recycling rates:

Florida WTE Facilities

| County | Facility | Ownership Type | Start Year | Recycle Rate 1999 | Recycle Rate 2000 | Recycle Rate 2001 | Recycle Rate 2002 |
|--------------|---|----------------|------------|-------------------|-------------------|-------------------|-------------------|
| Bay | Bay County Resource Recovery Facility | Public | 1987 | 13% | 16% | 18% | 21% |
| Broward | North & South Broward County Resource Recovery Center | Private | 1991 | 25% | 26% | 25% | 23% |
| Miami-Dade | Dade County Resource Recovery Center | Public | 1982/89 | 19% | 20% | 21% | 18% |
| Hillsborough | Hillsborough County Solid Waste Energy Recovery Facility/McKay Bay Refuse to Energy Project | Public | 1987/85 | 30% | 32% | 30% | 32% |
| Lake | Lake County Resource Recovery Facility | Private | 1991 | 31% | 26% | 14% | 24% |
| Lee | Lee County Solid Waste Resource Recovery Center | Public | 1994 | 33% | 30% | 30% | 33% |
| Palm Beach | North County Regional Resource Recovery Center | Public | 1989 | 36% | 31% | 39% | 36% |
| Pasco | Pasco County Solid Waste Resource Recovery Facility | Public | 1991 | 16% | 19% | 16% | 26% |
| Pinellas | Pinellas County Resource Recovery Facility | Public | 1983/85 | 24% | 23% | 30% | 35% |
| Polk | Ridge Generating Station | Private | 1994 | 32% | 30% | 22% | 25% |

Present Situation

The Legislature recognizes the need to use an integrated approach to municipal solid waste management with policies intended to foster integrated solid waste management by using waste reduction, recycling, WTE facilities, and landfills. Progress is being made using this integrated approach to municipal solid waste management, and WTE facilities continue to be an integral part of the state's solid waste management practices.⁷

Under current law, each county is required to implement a recyclable materials recycling program and counties and municipalities are encouraged to form cooperative arrangements for implementing recycling programs.⁸

⁵ s. 403.7061(4), F.S.

⁶ http://www.usmayors.org/uscm/us_mayor_newspaper/documents/11_03_03/mwma_compatibility.asp and the Florida Department of Environmental Protection

⁷ s. 403.7061(1), F.S.

⁸ s. 403.706(2)(a), F.S.

Section 403.706(4)(a), F.S., provides that a county's solid waste management and recycling programs be designed to provide for sufficient reduction of the amount of solid waste generated within the county and the municipalities within its boundaries in order to meet goals for the reduction of solid waste prior to the final disposal or the incineration of such waste at a solid waste disposal facility. The goal provides that the amount of solid waste that would be disposed of within the county and municipalities within its boundaries be reduced by at least 30 percent. Pursuant to section 403.706(4)(c), F.S., a county with a population of 100,000 or less may provide its residents with the opportunity to recycle in lieu of achieving the 30 percent reduction goal.

By comparison, section 403.7061(2), F.S., provides that notwithstanding any other provisions of state law, the Department of Environmental Protection will not issue a construction permit or certification to build a WTE facility or expand an existing WTE facility unless the facility achieves the requirements set forth in section 403.7061(3)(c), F.S. The language in section 403.706(3)(c), F.S., requires the county in which the facility is located must achieve the 30 percent waste reduction goal set forth in section 403.706(4), F.S., by the time the facility begins operation. Counties with a population of 75,000 or less are not given the option of merely providing the opportunity of recycling for its residents but must achieve the 30 percent goal.

As a result of section 403.7061(2), F.S., a WTE facility which achieves a 29 percent waste reduction goal would not be allowed to expand, receive a construction permit or certification to build a WTE facility, even if the county has an excellent recycling program. A county's recycling rate may decline due to factors that are beyond the county's control. This achievement criteria appears to be in conflict with section 403.706(4)(a), F.S., which only requires that the facility be designed to provide for reduction of the amount of solid waste in order to meet the waste reduction goal prior to the final disposition or the incineration of waste at a solid waste disposal facility.

Effect of Proposed Change

The bill amends the criteria in section 403.7061, F.S., conditioning the approval by the Department of Environmental Protection for the construction of a new WTE, or the expansion of a WTE, to require that the county where the facility is located has a solid waste management/recycling program designed to achieve a waste reduction goal of 30 percent. This amendment mirrors a similar provision in an earlier section of law, providing consistency, and is designed to account for fluctuations in recyclable commodities.

The bill provides that if a WTE were proposed to be built in a county with a population less than 100,000, that the county would have a program designed to achieve the 30 percent waste reduction goal, and not just provide an opportunity to recycle pursuant to section 403.706(4)(c), F.S.

C. SECTION DIRECTORY:

Section 1. Amends s. 403.7061(3), F.S., to revise a permit requirement for a WTE facility.

Section 2. Provides the act will take effect October 1, 2005.

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:

The bill may allow communities to move forward with establishing or expanding an existing WTE facility if the county develops a program designed to achieve the 30 percent waste reduction goal. The expenditure is unknown and is linked to the size of the facility and technology desired.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR: None.

D. FISCAL COMMENTS: None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable because this bill does not appear to: require cities or counties to spend funds or take actions requiring the expenditure of funds; reduce the authority that cities or counties have to raise revenues in the aggregate; or reduce the percentage of a state tax shared with cities or counties.

2. Other: None.

B. RULE-MAKING AUTHORITY:

No additional rulemaking authority is required to implement the provisions of this bill.

C. DRAFTING ISSUES OR OTHER COMMENTS:

According to the Department of Environmental Protection, only two counties, Hillsborough and Pasco, are currently anticipating expansion of existing county-owned WTE facilities.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE & COMBINED BILL CHANGES

On February 9, 2005, the Environmental Regulation Committee favorably adopted one amendment to HB 77. The amendment provides that if a WTE were proposed to be built in a county with a population less than 100,000, that the county would have a program designed to achieve the 30 percent waste reduction goal, and not just provide an opportunity to recycle.