## **Department of Legislative Services**

Maryland General Assembly 2004 Session

### FISCAL AND POLICY NOTE

House Bill 111 (Delegates Morhaim and Bobo)

**Environmental Matters** 

# Solid Waste Disposal - Cathode Ray Tubes - Computer Monitors and Television Screens

This bill establishes provisions relating to the disposal and recycling of cathode ray tubes from computer monitors and television screens. Among other things, the bill prohibits the disposal of cathode ray tubes in solid waste acceptance facilities beginning December 31, 2005.

## **Fiscal Summary**

**State Effect:** General fund expenditure increase of \$76,800 in FY 2005. Future year estimates are annualized, adjusted for inflation, and reflect ongoing operating costs. Potential increase in general fund revenues beginning in FY 2006 from penalties.

(in dollars)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
GF Revenue	\$0	-	-	-	-
GF Expenditure	76,800	98,600	104,300	110,500	117,100
Net Effect	(\$76,800)	(\$98,600)	(\$104,300)	(\$110,500)	(\$117,100)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect

**Local Effect:** Potential significant increase in local expenditures for solid waste programs. **The bill imposes a mandate on a unit of local government.** 

**Small Business Effect:** Potential meaningful.

## **Analysis**

**Bill Summary:** The bill prohibits a person, on or after December 31, 2005, from disposing of a cathode ray tube from a computer monitor or television screen in a sanitary landfill, solid waste transfer station, or incinerator, or at any other location not designated for the management or recycling of cathode ray tubes by the Maryland Department of the Environment (MDE). After that date, any such facility may not accept any cathode ray tube for disposal, transfer for disposal, or incineration.

The bill also requires MDE's Office of Recycling to study, in consultation with representatives of the appropriate industry, local governments, the U.S. Environmental Protection Agency (EPA), and states in the region, feasible methods for the management and recycling of used cathode ray tubes. The office must develop a method for the management and recycling of used cathode ray tubes by December 31, 2005. MDE may adopt regulations to implement the bill. Any such regulations must be consistent with EPA guidelines and with methods developed by the office.

A person who violates the prohibitions established by the bill is guilty of a misdemeanor and on conviction is subject to a fine of up to \$1,000 for each violation.

Current Law/Background: Solid waste acceptance facilities are permitted by MDE. While there is no mandated State program for the management of end-of-life electronic equipment, since 2001, MDE has participated in a regional pilot project (called "e-Cycling") with EPA, Virginia, West Virginia, Delaware, Pennsylvania, and the District of Columbia. EPA and industry funding for this project has ended, however. The goal of the project was to develop information and data necessary to develop an infrastructure and a sustainable program for the proper management, recycling, and removal of cathode ray tubes and other electronic components and their associated hazardous materials from the waste stream. Twenty counties in Maryland and Baltimore City co-sponsored and participated in e-Cycling events in conjunction with the pilot project. As of December 2003, estimated costs for e-Cycling activities totaled over \$600,000, not including personnel, advertising, or operating costs.

According to MDE, the National Electronics Product Stewardship Initiative, which includes electronics manufacturers, governments, and nongovernment officials, created a national dialogue to establish an electronics waste recycling program for businesses and consumers. In January 2004, EPA announced it would no longer fund the initiative because its focus has shifted to federal legislation addressing electronic waste. EPA has, however, indicated that it will continue to work with stakeholders to find solutions to the electronic waste issue. In addition, EPA has encouraged states to seek partnerships with business and industry. According to the Midshore Regional Recycling Program, some

computer manufacturers are offering recycling services at a cost of about \$30 per computer.

MDE reports that several states including Massachusetts, California, Minnesota, Florida, and Arkansas have dedicated state resources to provide assistance to local governments and the private sector to develop an infrastructure for the collection of electronic waste prior to instituting a ban on the acceptance of cathode ray tubes at solid waste acceptance facilities.

According to MDE, in 1998, more than 20 million personal computers became obsolete nationally, while only 14% of those were reused or recycled. According to EPA, an estimated 2.26 million tons of consumer electronics were discarded nationally in 2001. Based on that estimate, MDE estimates that about 42,714 tons (8.5 million pounds) of electronics were discarded in Maryland in that year. From October 2001 through December 2003, MDE advises that about 15,500 tons (3.1 million pounds) of electronics were collected through various one-day recycling events and permanent collection facilities.

**State Expenditures:** General fund expenditures could increase by an estimated \$76,826 in fiscal 2005, which accounts for the bill's October 1, 2004 effective date. This estimate reflects the cost of hiring one natural resources planner to initiate a program to study and develop a method for the management and recycling of used cathode ray tubes and to conduct public outreach and educational activities; it also reflects the cost to hire one inspector to be trained to conduct inspections at solid waste acceptance facilities to enforce the bill's prohibition. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses, including travel.

<b>Total FY 2005 State Expenditures</b>	\$76,826
Equipment and Operating Expenses	9,139
Salaries and Fringe Benefits	\$67,687

The Department of Legislative Services (DLS) advises that costs for public education and outreach activities could increase to the extent MDE's outreach and education program becomes more extensive than currently anticipated. Future year expenditures reflect: (1) full salaries with 4.6% annual increases and 3% employee turnover; and (2) 1% annual increases in ongoing operating expenses.

To the extent that the bill increases disposal costs or the purchase price of new electronics, the State, as a user of electronics, would likely incur increased expenditures beginning in fiscal 2006. Any such increase cannot be estimated at this time.

**State Revenues:** General fund revenues could increase under the bill's monetary penalty provision for those cases heard in the District Court.

Local Fiscal Effect: The bill imposes restrictions on what materials can and cannot be accepted at permitted solid waste acceptance facilities beginning December 31, 2005. Because county solid waste programs assume the costs when the separation of any component of the waste stream is mandated, the bill could have a significant impact on county expenditures for solid waste programs. The bill will essentially require counties to establish separate collection facilities to house used cathode ray tubes. In addition, costs to monitor the waste stream and to transport the cathode ray tubes to these new facilities could also increase. Based on cost information from the four counties that have permanent collection facilities for electronic waste (Montgomery, Prince George's, Howard, and Wicomico) and contract with private recyclers, MDE estimates transportation and recycling costs to average \$0.25 per pound; this does not include costs to establish or manage a facility or costs related to collecting, storing, and inspecting. Although a precise estimate of the total increase in local expenditures cannot be made at this time, the bill could result in significant costs:

- The Northeast Maryland Waste Disposal Authority (a multi-county agency including Baltimore City and Anne Arundel, Baltimore, Carroll, Harford, Howard, and Montgomery counties) advises that the cost to counties could be significant.
- Montgomery County estimates that costs could increase by at least \$1.5 million annually for public outreach and education, inspection and handling services, management, and disposal; the county advises that fees would be increased to offset those costs.
- The Midshore Regional Recycling Program estimates that costs would increase by over \$87,000 annually for Caroline, Kent, Queen Anne's, and Talbot counties; this estimate is conservative as it is based solely on costs to process cathode ray tubes disposed of by households only.

As noted by Montgomery County, local jurisdictions could presumably offset any costs incurred to the extent they increase disposal fees and/or establish recycling fees. Also, if the electronics manufacturing industry establishes a "take back" program for consumers, costs to local jurisdictions could decrease. In addition, costs would presumably be lower for counties that already have permanent collection facilities.

To the extent the bill increases disposal costs or the purchase price of new electronics, local jurisdictions, as users of electronics, would likely incur increased expenditures beginning in fiscal 2006. Any such increase cannot be estimated at this time.

If any local jurisdiction violates the bill's prohibitions, it would be subject to a fine of up to \$1,000 per violation.

Small Business Effect: Small businesses disposing of used cathode ray tubes could incur increased disposal costs once the bill's prohibition takes effect. The number of small businesses that will be affected is unknown. Given the abundance of surplus electronic equipment that exists and the amount of electronic waste estimated to be generated each year, however, DLS advises that the impact could be significant. The increase in expenditures will depend largely on the extent to which product manufacturers establish any take-back or recycling programs and the extent to which any disposal or recycling fees are assessed. If any electronics manufacturers are small businesses, they could incur increased costs related to developing and implementing methods for the management and recycling of used cathode ray tubes. Likewise, to the extent that the bill results in an increase in the demand for small businesses involved in the demanufacturing or recycling of electronics, revenues could increase for those Costs may ultimately be borne by purchasers of electronics equipment if manufacturers pass on the costs in the purchase price of new equipment. If a small business fails to comply with the bill's prohibitions and requirements, it would be subject to a fine of up to \$1,000 per violation.

#### **Additional Information**

**Prior Introductions:** Virtually identical legislation was introduced as HB 911 of 2003. The bill received an unfavorable report from the House Environmental Matters Committee.

Cross File: None.

**Information Source(s):** Maryland Department of the Environment, Northeast Maryland Waste Disposal Authority, Harford County, Montgomery County, Queen Anne's County, Midshore Regional Recycling Program, Department of Legislative Services

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