

Department of Legislative Services
 Maryland General Assembly
 2001 Session

FISCAL NOTE

House Bill 111 (Delegate Morhaim, *et al.*)
 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.

Fiscal Summary

State Effect: General fund expenditure increase of at least \$28,200 in FY 2002 to implement a disposal and recycling program within MDE and conduct outreach activities. Future year estimates are annualized, adjusted for inflation, and reflect ongoing operating costs, but do not include any costs related to enforcement. Potential increase in general fund expenditures for enforcement beginning in FY 2005. Potential increase in general fund revenues beginning in FY 2005 from penalties.

(in dollars)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
GF Revenue	\$0	\$0	\$0	-	-
GF Expenditure	28,200	48,500	51,000	53,800	56,700
Net Effect	(\$28,200)	(\$48,500)	(\$51,000)	(\$53,800)	(\$56,700)

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, 2004, 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 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 specified 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, 2004. 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 not exceeding \$1,000 for each violation.

Current Law: None applicable.

Background: The EPA estimates that outdated computers, monitors, and televisions compose 2.5% of the national waste stream. MDE is currently part of a regional effort involving the EPA, Virginia, West Virginia, Delaware, Pennsylvania, and the District of Columbia to develop a regional solution and standard response to managing the disposal of electronics. The electronics manufacturing industry trade associations are also discussing a national initiative to establish a "take-back" program that offers businesses and consumers an outlet for used electronics.

According to MDE, several states are seeking solutions to the end-of-life management issues posed by cathode ray tubes in electronics:

- Massachusetts enacted a waste ban by regulation in 1998, but the ban was not effective until April 2000. This allowed sufficient time to issue grants and loans to establish a collection and processing infrastructure. In fiscal 1998 and 1999, the state allocated almost \$750,000 to spur the development of collection and processing infrastructure. In fiscal 2000, the state provided over \$400,000 in grants.

- Minnesota has not implemented a ban, but requires manufacturers to assume a stewardship role for their products by offering a closed loop take-back program for used electronics. The state has teamed with Sony and Waste Management to implement this program over five years. The cost is borne by the private-sector partners. The state allocated \$25,000 for education and outreach efforts.
- Florida's strategy for the disposal of electronics is to expand the state's collection and processing infrastructure through grants. The legislature authorized the appropriation of \$400,000 in grants annually from fiscal 2001 through fiscal 2005, for a total of \$2 million. The state is not currently considering a ban at this time.

State Expenditures: General fund expenditures could increase by at least \$28,200 in fiscal 2002, which accounts for the bill's October 1, 2001 effective date and a 90-day start-up delay. This estimate reflects the cost of hiring one natural resource 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 includes the salary, fringe benefits, one-time start-up costs, and ongoing operating expenses. The estimate assumes that the natural resource planner will travel approximately 1,200 miles annually.

Salary and Fringe Benefits	\$21,700
Equipment	4,800
Other Operating Expenses	<u>1,700</u>
Total FY 2002 State Expenditures	\$28,200

Legislative Services advises that costs for public education and outreach will depend largely on the number of entities that will be subject to regulation as a result of the bill, which is unknown. To the extent that MDE's outreach and education program becomes more extensive than anticipated, costs for these activities could increase.

Future year expenditures reflect: (1) the full salary with a 6.5% increase in fiscal 2003 and a 4.5% increase each year thereafter, with 3% employee turnover; and (2) 1% annual increases in ongoing operating expenses.

Legislative Services advises that future year estimates do not include any costs for enforcement. Because the bill's prohibition is effective December 31, 2004, costs to enforce the bill's prohibition would begin in fiscal 2005. MDE reports that because the number of entities that would be subject to regulation as a result of this bill is unknown, these costs cannot be reliably estimated at this time. To the extent the estimated costs are

not sufficient to meet the requirements of the bill, MDE may seek additional funding through the annual budget process.

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 2005. 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 after December 31, 2004. 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. Because the number of facilities that would be needed is unknown, and because the actual amount of cathode ray tubes that are disposed of annually in the State is unknown, a precise estimate of any increase in local expenditures cannot be made at this time. However, several counties report the potential for significant costs:

- *Montgomery County* currently has a computer recycling program. Costs for the program total approximately \$180 per ton. Although the county does not currently recycle televisions, the county reports that televisions are more expensive to dismantle and generate more debris than computers. Montgomery County advises that Howard County put out a solicitation for recycling all types of cathode ray tubes. Estimated costs from bidders totaled approximately \$800 to \$1,200 per ton. Montgomery County estimates that costs to operate a cathode ray tube recycling program in the county could total approximately \$1.5 million annually. This estimate is based on the estimated number of computers and televisions that would be discarded by households only. The county reports that it would also incur costs related to public education, screening at solid waste acceptance facilities, and storage.
- *Wicomico County* reports that it could incur capital costs of an estimated \$80,000 to construct a new facility to house cathode ray tubes and an estimated \$25,000 annually to recycle the material.
- *Talbot County* estimates that costs would increase by approximately \$20,000 annually to recycle used cathode ray tubes from households. Additional costs

would be incurred related to the recycling of used cathode ray tubes from businesses and government.

Presumably, local jurisdictions could offset these costs to the extent that they increase disposal fees and/or establish recycling fees. Also, if the electronics manufacturing industry establishes some sort of “take back” program for consumers, costs to local jurisdictions could decrease.

To the extent that 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 2005. 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, however, Legislative Services 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. To the extent that any electronics manufacturers are small businesses, the bill could result in 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 de-manufacturing or recycling of electronics, the bill could result in an increase in revenues for those entities. Costs may ultimately be borne by purchasers of electronics equipment to the extent that manufacturers pass on the costs in the purchase price of new equipment. To the extent that 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: None.

Cross File: None.

Information Source(s): Maryland Department of Environment; Maryland Municipal League; Montgomery, Prince George's, Talbot, and Wicomico counties; Baltimore City; City of Rockville; Department of Legislative Services

Fiscal Note History: First Reader – February 23, 2001
ncs/cer

Analysis by: Lesley Frymier

Direct Inquires to:
John Rixey, Coordinating Analyst
(410) 946-5510
(301) 970-5510