

**Department of Legislative Services**  
Maryland General Assembly  
2013 Session

**FISCAL AND POLICY NOTE**

Senate Bill 641 (Senator Frosh, *et al.*)

Education, Health, and Environmental Affairs  
and Finance

**Statewide Container Recycling Incentive Program**

This bill establishes a 5-cent beverage container deposit and a Statewide Container Recycling Incentive Program within the Maryland Department of the Environment (MDE). The bill also establishes a Container Recycling Incentive Fund administered by the Comptroller to be used for the payment of refunds and handling fees to container redemption centers and to support the new program, among other activities.

**Fiscal Summary**

**State Effect:** Special fund revenues increase by \$181.9 million in FY 2015 from the payment of deposits by distributors. General fund revenues increase by about \$507,300 in FY 2015 from investment earnings of the new fund. Special fund expenditures for payments to redemption centers increase by \$160.1 million in FY 2015 and by more than \$235.1 million annually thereafter. Special fund expenditures increase by \$142,500 in FY 2014 for MDE's administrative costs, and general/special fund expenditures increase by \$103,000 in FY 2015 for administrative costs of the Comptroller's Office. Future year estimates reflect annualization, inflation, and growth in beverage container sales and redemption rates.

(in dollars)	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
GF Revenue	\$0	\$507,300	\$609,200	\$118,200	\$0
SF Revenue	\$0	\$181,875,000	\$244,925,000	\$247,374,300	\$249,848,000
SF Expenditure	\$142,500	\$0	\$0	\$0	\$0
GF/SF Exp.	\$0	\$164,966,600	\$241,525,400	\$263,740,700	\$274,133,900
Net Effect	(\$142,500)	\$17,415,600	\$4,008,800	(\$16,248,200)	(\$24,285,900)

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

**Local Effect:** Local government expenditures increase by about \$28.0 million in FY 2014 for counties to establish redemption centers under the assumptions discussed below. Expenditures increase by more than \$27.7 million annually beginning in FY 2015 for counties to establish additional redemption centers and operate existing centers. Local net revenues increase by \$60.0 million in FY 2015 and by more than \$88.2 million annually through FY 2018 from the collection of handling fees, net of refunds passed through to consumers. Revenues may increase further due to any assistance provided from the new fund. **This bill imposes a mandate on a unit of local government.**

**Small Business Effect:** Meaningful.

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## Analysis

### Bill Summary:

#### *Establishment of the Deposit and Requirements on Distributors and Retailers*

By April 1, 2014, every distributor operating within the State must register with MDE. After April 1, 2014, any new prospective distributor must register with MDE no later than one month before commencing business. A distributor must maintain records available for inspection by MDE of the number of redeemable beverage containers sold, transferred, imported, or exported. A “distributor” is defined as a person that manufactures or imports beverages in redeemable beverage containers to sell within the State, but does not include airlines and shipping companies that transport containers.

Beginning October 1, 2014, every redeemable beverage container sold in the State must clearly indicate a refund value of 5 cents and the word “Maryland” or the letters “MD” on the container in a manner specified by the bill; no container marked as required by the bill may be sold to a consumer before October 1, 2014. This requirement does not apply to a refillable beverage container that has a brand name permanently marked on the container and the equivalent of a refund value of at least 5 cents that is paid on receipt of the container by a retailer or distributor. A “redeemable beverage container” is defined as an individual, separate, and sealed glass, metal, aluminum, steel, or plastic jar, can, or bottle that, at its time of sale, contains between 6 and 33.8 fluid ounces of a beverage intended for consumption within the State.

The bill broadly defines “beverage” to include soft drinks, alcoholic drinks (regardless of dairy-derived content), bottled water (including flavored water), fruit juice, tea, and coffee drinks. The definition does not include a syrup, liquid concentrate, condiment, or additive intended primarily as a flavoring ingredient in food or drink; any liquid that is a drug, medical food, infant formula as defined by the Federal Food, Drug, and Cosmetic

Act, or liquid dietary supplement as defined in the Dietary Supplement Health and Education Act of 1994; any milk and dairy-derived product; and any product that is frozen at the time of sale.

Beginning October 1, 2014, every distributor must pay to the Comptroller a deposit of 5 cents for every redeemable beverage container that the distributor sells, donates, or transfers within the State. Payment of deposits must be made on the fifteenth business day of each month for all sales, donations, and transfers occurring during the preceding month.

Beginning October 1, 2014, every distributor that pays a deposit to the Comptroller must collect from a retailer or on-premise seller a deposit of 5 cents on each redeemable beverage container the distributor sells within the State. A retailer must charge a consumer the deposit at the point of sale. A deposit charge must appear as a separate line item on a bill or invoice and may not be included in the calculation of any sales tax. A “retailer” is defined as a person who sells a beverage in a redeemable beverage container to a consumer for off-premises consumption. An “on-premise seller” is a person who sells a beverage in a redeemable beverage container for on-premise consumption, and includes a bar, restaurant, hotel, sporting venue, entertainment venue, and gaming venue.

#### *Acceptance of Containers and Payments of Refunds by Redemption Centers*

Beginning October 1, 2014, a person may return a clean, empty redeemable beverage container to a redemption center for a full refund of the 5-cent deposit paid on the container. Each county must designate convenience zones in consultation with MDE by April 1, 2014, and must prepare and make available to the public a map showing the convenience zones within its jurisdiction. The map must be updated by April 1 of each year. Beginning October 1, 2014, at least one licensed redemption center must be located within each convenience zone.

A redemption center may be operated by a county, municipal corporation, or a private business or nonprofit organization licensed by a county. A redemption center must:

- accept all types of empty redeemable beverage containers for which a deposit has been paid;
- verify that all containers bear a valid Maryland refund value;
- pay refunds in either cash or a redeemable voucher;
- ensure each container is recycled through a contractual agreement *with an in-state recycling facility*, or on-premises if the redemption center is also a recycling facility;
- remain open at least 40 hours per week, of which at least 5 hours must be on Saturday or Sunday; and

- forward to the Comptroller all documentation to support claims for payment.

A redemption center must refuse to pay the refund value on any container that is broken or corroded, contains free-flowing liquid, does not properly indicate a Maryland refund value, or exhibits characteristics of having been processed and baled previously. In addition, a redemption center may not accept more than 450 containers from a single redeemer at one time, except from a curbside recycling service provider or an on-premise seller.

A redemption center may use a reverse vending machine. A reverse vending machine, which issues a redeemable credit slip for the value of returned containers, must:

- accept any type of empty redeemable beverage container that bears a valid Maryland refund value and pay the refund in either cash or a redeemable voucher;
- reject a container if the reverse vending machine is unable to read the barcode; and
- be routinely serviced.

The Comptroller must remit to a redemption center the refund of each redeemable beverage container the redemption center accepts. In addition to the refund, the Comptroller must pay a handling fee to a redemption center. If the center is operated by a private entity, the handling fee is 0.025 cents for each container collected. If the center is operated by a local government, the fee is 3 cents for each container accepted during its first three years of operation and 2.5 cents per container after the third year.

A redemption center must request payment no more than twice per month and must include specified information along with supporting documentation on forms required by the Comptroller. The Comptroller may refuse payment on any request that contains significant discrepancies or that does not include sufficient supporting documentation.

Each county, in consultation with MDE, must adopt rules and procedures for the licensing of redemption centers. To protect against fraud, each county, in consultation with MDE, must establish random third-party verification procedures for redemption centers that count containers manually.

### *The Container Recycling Incentive Fund*

The bill establishes a Container Recycling Incentive Fund to be administered by the Comptroller, which consists of container deposits collected, money appropriated in the State budget, and any other money from any other source. (Although the bill also specifies that the fund's investment earnings remain in the fund, it does not amend § 6-226 of the State Finance and Procurement Article to exempt the fund from existing

law that requires all investment earnings and interest from special funds to accrue to the general fund.)

The fund must be used only to pay handling fees and refunds to redemption centers, to implement and administer the Statewide Container Recycling Incentive Program, and to provide funding for State and local recycling centers, recycling equipment, recycling education, and marketing, as well as State and local environmental programs. Money expended from the fund for the program is to supplement and not supplant funding that otherwise would be appropriated for the program.

MDE may adopt regulations to implement the bill. The Office of Recycling within MDE must work with the counties to (1) assist with the implementation of the program; (2) achieve a statewide redeemable beverage container redemption rate of 75% by December 31, 2019; (3) develop strategies for protecting against fraud in the payment of handling fees and refunds; and (4) facilitate the exchange of information between redeemable beverage container manufacturers, distributors, retailers, and licensed redemption centers, including universal product code information for reverse vending machines. Each county must be given credit for the redeemable beverage containers collected from curbside and diverted from municipal solid waste streams toward existing State recycling reduction rate goals.

**Current Law/Background:** Chapter 719 of 2010 (HB 982) required MDE to conduct a study to evaluate solid waste management processes that reduce the solid waste stream through recycling and source reduction. MDE created the Maryland Solid Waste Management, Recycling, and Source Reduction Study Group and consulted with local government officials, waste haulers, recyclers, environmental groups, academia, State elected officials, and other affected parties including material resource facilities to study these issues. In December 2011, the study group submitted its final report and recommendations which included, among other things, a discussion of beverage container deposit programs.

In discussing the nature of the problem, the study group found that beverage containers generally constitute a disproportionately large share of litter as compared with their share of the solid waste stream. Beverage containers are also larger than other prevalent types of litter, such as cigarette butts, and may be more visible. The study group speculated that this may be part of the reason for the prevalence of beverage container deposit programs. According to the Container Recycling Institute, 10 states have enacted and currently implement beverage container deposit programs: California, Connecticut, Hawaii, Iowa, Maine, Massachusetts, Michigan, New York, Oregon, and Vermont. Delaware repealed its container deposit law in 2010.

In its research of existing and proposed beverage recycling programs, the study group found that there are two main types of container deposit programs: (1) traditional programs where payments are made by consumers to the private sector, such as retailers; and (2) programs where the State funds redemption centers, and recycling processors purchase the collected materials from the redemption centers. The study group found that, while it is somewhat difficult to compare the cost of programs between states, the second type of program is generally cheaper. The study group also found that reverse vending machines may be an efficient tool, avoiding the need for personnel to count or weigh containers.

The study group also found that recycling rates of beverage containers are significantly higher in states that have established beverage container deposits. However, the study group also noted that, while these programs are generally regarded as successful in reducing beverage container litter, the reductions cannot be definitively traced to the container deposit programs. For example, data from a U.S. Environmental Protection Agency (EPA) national survey showed that beverage container litter has decreased by 74% across the nation as a whole since 1969.

Nevertheless, jurisdictions with container deposit programs generally have higher rates of recovery for beverage containers than jurisdictions with curbside programs alone. The study group report cited a 2002 report that found that the capture and participation rate for curbside programs is generally around 50%. Maryland recycled about 41.3% of beverage containers in 2011 through a combination of curbside and drop-off recycling, while states with deposit programs generally have an average recovery rate of roughly 80%. Thus, the study group concluded that a container deposit law in Maryland could roughly double the recycling rate of beverage containers in Maryland. While that would be a significant increase in the percentage of beverage containers recycled, it would only represent a 1% to 2% increase in the State's overall recycling rate for all materials.

Finally, the study group examined the environmental effects of beverage container recycling more broadly, noting that, as a potential benefit of implementing a deposit program, Maryland could avoid between 164,000 and 241,000 million tons of carbon dioxide equivalent annually. Thus, a deposit program would not only assist in achieving the State goal of increasing the statewide recycling rate to 55% and the waste diversion rate to 60% by 2020 established by Chapter 629 of 2012 (HB 929), but it could also support the State's goal of reducing greenhouse gas emissions by 25% by 2020 (established by Chapters 171 and 172 of 2009, SB 278/HB 315). Despite these environmental benefits, the study group did not recommend proposing beverage container deposit legislation in its report.

In December 2011, the University of Maryland Environmental Finance Center issued a report for the Abell Foundation and the Waterfront Partnership of Baltimore, Inc., to

quantify a beverage container deposit program's contribution to Maryland's goals to reduce greenhouse gas emissions and stormwater-related trash and to determine what money might be available to the State as a result of unredeemed beverage container deposits. The report noted the potential for litter reduction and an increase in recycling from a beverage container deposit program, but also acknowledged a potential negative impact on local recycling programs and potential concerns about handling costs. In conclusion, the report noted that the economic outcomes of a program would vary based on the design of the program. Finally, the report indicated that maximizing the benefits of container deposit legislation depends on achieving high recycling rates, and that minimizing the costs of container deposit legislation depends on an efficient return system.

**State Fiscal Effect:** Special fund revenues for the Container Recycling Incentive Fund increase by \$181.9 million in fiscal 2015 from the payment of deposits by distributors to the Comptroller assuming about 4.85 billion beverage containers are transferred by distributors in fiscal 2015, with about 3.6 billion containers resulting in the payment of a deposit after the October 1, 2014 program implementation date. Future year revenues reflect growth in beverage container sales.

Container Recycling Incentive Fund expenditures increase by about \$165.0 million in fiscal 2015 to (1) pay refunds and handling fees to redemption centers; (2) pay for the administrative expenses for MDE and the Comptroller's Office; and (3) otherwise support the Container Recycling Incentive Program, as required by the bill. Future year special fund expenditures reflect annualization, inflation, and an increase in the redemption rate, as discussed below.

#### *Refunds and Handling Fees to Redemption Centers*

The bill requires the Comptroller to remit to a redemption center the refund of each redeemable beverage container the redemption center accepts and to pay a handling fee of 3 cents to a center operated by a local government (2.5 cents after a center's third year of operation) and a handling fee of 0.025 cents to a privately operated center. Thus, special fund expenditures from the payment of refunds and handling fees increase by \$160.1 million in fiscal 2015. This estimate is based on the following information and assumptions:

- about 3.6 billion beverage containers result in a deposit in fiscal 2015;
- 55% of beverage containers are returned to redemption centers in fiscal 2015;
- no privately owned redemption centers are established due to the disproportionately small handling fee (less than one-hundredth the fee provided for locally owned centers); and

- fraudulent returns from out-of-state redeemers result in refund and handling expenditures equal to 2.5% of container deposit revenues.

Assuming 45% of containers are not returned to redemption centers, unclaimed deposits result in the retention of \$81.8 million in fiscal 2015. This revenue is sufficient to cover the cost of handling fee payments in fiscal 2015, with a remaining balance of about \$16.9 million for the Container Recycling Incentive Fund in fiscal 2015. The fund balance, if not spent, also generates interest earnings for the general fund of about \$507,300 in fiscal 2015, assuming an interest rate of 3%; future year general fund revenue increases are projected through fiscal 2017 due to investment earnings.

Although the bill specifies that the Container Recycling Incentive Fund is to be used to implement the Container Recycling Incentive Program, and for other specified activities, after providing refunds and handling fees to redemption centers, a significant portion of the \$16.9 million projected fund balance in fiscal 2015 may be retained and, therefore, not expended for other purposes, because it is projected that future revenues retained by the fund decrease as beverage container redemption rates increase. For example, under the above assumptions, and further assuming a 1% increase in beverage container sales, if the redemption rate increases from 55% in fiscal 2015 to 65% by fiscal 2017, then expenditures exceed revenues by \$16.4 million in fiscal 2017. Other states with a 5-cent deposit have experienced redemption rates that generally average around 75%, and the stated goal of the bill is to achieve a 75% redemption rate before 2020. Therefore, it is reasonable to expect that a redemption rate of at least 70% may be reached by or before fiscal 2018.

It is important to highlight the fact that as redemption rates increase, program funds necessarily decrease. Thus, not only is the Container Recycling Incentive Fund projected to be exhausted in fiscal 2018 under the assumptions used in this analysis, if redemption rates in the first year are significantly higher than 55%, then expenditures may exceed revenues even in the first year.

#### *Maryland Department of the Environment and Comptroller Administrative Expenses*

Special fund administrative expenditures for MDE increase by \$142,467 in fiscal 2014, which reflects an October 1, 2013 effective date. This estimate reflects the cost for MDE to hire two natural resource planners and one office secretary specialist to register distributors, consult with counties, develop regulations, communicate with all affected entities, assist in program development, and otherwise implement the bill. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses.

Positions	3
Salaries and Fringe Benefits	\$123,749
Equipment and Other Operating Expenses	<u>18,718</u>
<b>Total FY 2014 MDE Administrative Expenditures</b>	<b>\$142,467</b>

It is assumed that MDE administrative costs are covered by special funds from the State Recycling Trust Fund until revenues from the Container Recycling Incentive Fund are available. It is further assumed that the new MDE staff are hired upon the effective date of the bill to begin preparation for program implementation. For example, within six months of the bill's effective date, distributors must be registered with MDE and counties must have designated all convenience zones. Additionally, it is assumed that counties begin construction of redemption centers in fiscal 2014.

Future year MDE administrative expenditures reflect full salaries with annual increases and employee turnover as well as annual increases in ongoing operating expenses.

General/special fund administrative expenditures for the Comptroller increase by \$189,929 in fiscal 2015 to reprogram an existing information system and to hire an accountant to process refund returns, handle deposit documentation from redemption centers, and ensure payments are received by redemption centers. It includes a salary, fringe benefits, one-time start-up costs, and ongoing operating expenses.

Position	1
Salary and Fringe Benefits	\$81,733
Programming Costs	103,000
Equipment and Other Operating Expenses	<u>5,196</u>
<b>Total FY 2015 Comptroller Administrative Expenditures</b>	<b>\$189,929</b>

Future year administrative expenditures for the Comptroller reflect a full salary with annual increases and employee turnover as well as annual increases in ongoing operating expenses.

It is unclear if revenues to the new fund will be available in fiscal 2015 to cover the Comptroller's administrative costs, as the Comptroller's duties start prior to the receipt of container deposit revenues. Also, the bill does not establish a priority structure for determining uses of the new fund. Therefore, it is unclear whether the fund can cover the Comptroller's administrative expenses in future years should the fund balance become depleted. To the extent that refunds and handling fees receive first priority, general funds may be needed to cover the Comptroller's costs. This analysis assumes that MDE's administrative expenditures are covered with special funds from the Recycling Trust Fund if sufficient funds are not available from the new fund.

### *Other Container Recycling Incentive Program Expenditures*

In addition to the payment of handling fees and refunds to redemption centers, the Container Recycling Incentive Fund must be used to implement and administer the Statewide Container Recycling Incentive Program and to provide funding for State and local recycling centers, recycling equipment, recycling education, and marketing as well as State and local environmental programs. Thus, in addition to the issuance of refunds and handling fee payments and covering administrative expenses for MDE and the Comptroller, any remaining balance in the fund may result in grants to local governments to assist in the development and operation of redemption centers, grants to State agencies to increase recycling rates, and grants or loans to any entity approved by MDE to establish recycling or other environmental programs. However, as noted above, no fund balance is anticipated after payment of refunds and handling fees beginning in fiscal 2018.

**Local Fiscal Effect:** The bill requires at least one redemption center to be located within each designated convenience zone by October 1, 2014, although the bill does not mandate the number of convenience zones or redemption centers. However, based on the number of redemption centers per capita in other states with beverage container recycling programs, it is likely that over 300 redemption centers are eventually established. For this analysis, it is assumed that 175 redemption centers are built in fiscal 2014, prior to the program's implementation, and that an additional 25 redemption centers are established each year through fiscal 2018.

While the estimated capital and operating costs to establish and operate a redemption center varies widely, this estimate assumes that the average capital cost to construct a new center or to retrofit an existing building is \$160,000, while the average annual operating cost per center is \$140,000. Actual costs may vary significantly and depend on funding available for each county, any existing infrastructure that may be retrofitted, land availability and acquisition costs, and decisions regarding building design, staffing levels, and overall redemption center operations.

Under these assumptions, county expenditures increase by \$28.0 million in fiscal 2014, and by more than \$27.7 million annually beginning in fiscal 2015. In fiscal 2014 only, this increase in expenditures is not offset by any revenues from the payment of refunds and handling fees. However, total revenues from refunds and handling fees distributed to counties over a five-year period between fiscal 2014 and 2018 exceed estimated expenditures by \$156.4 million. This significant net increase in county revenues may be partially offset by the elimination of current revenues counties currently generate from the sale of recycled materials collected by county governments.

As discussed above, local governments may be among the recipients of grants made from any balance in the Container Recycling Incentive Fund after refunds and handling fees are paid and administrative costs recovered.

Finally, although this analysis assumes that all redemption centers are owned and operated by counties, if private redemption centers are established, local government expenditures increase to license these redemption centers. Additional county expenditures result from overseeing redemption center processes; managing the collection, transportation, and disposition of additional recyclable material; accounting of refunds, fees, and additional contracts; and consulting and communicating with MDE, the Comptroller's Office, and the public.

**Small Business Effect:** The bill may create a business opportunity for small businesses that establish private redemption centers. However, as noted above, this analysis assumes that no private redemption centers are established due to the disproportionately small handling fee provided under the bill. Additionally, small business container recyclers and other businesses engaged in the collection or recycling of beverage containers likely benefit from an increase in the demand for their services. Finally, small business retailers of redeemable beverage containers, as well as bars, restaurants, and other small on-premise sellers subject to the bill may incur additional costs to ensure that deposits are presented on consumer bills or invoices as a separate line item.

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### **Additional Information**

**Prior Introductions:** None.

**Cross File:** Although HB 1085 (Delegate McIntosh, *et al.* - Environmental Matters and Economic Matters) is identified as a cross file, it is different.

**Information Source(s):** Allegany, Anne Arundel, Baltimore, Calvert, Caroline, Carroll, Cecil, Harford, Howard, Kent, Montgomery, Prince George's, Queen Anne's, Talbot, and Worcester counties; Baltimore City; Maryland Association of Counties; Maryland Municipal League; Maryland Department of the Environment; Comptroller's Office; Container Recycling Institute; the states of California and Hawaii; Iowa State University; U.S. Environmental Protection Agency; University of Maryland Environmental Finance Center; Department of Legislative Services

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