

Department of Legislative Services
Maryland General Assembly
2013 Session

FISCAL AND POLICY NOTE

House Bill 506 (Delegate Carr, *et al.*)
Environmental Matters

Environment - Dental Mercury - Water or Sewerage Service Bill Insert

This bill requires a water or sewerage service supplier with more than 100,000 customer accounts to annually include with billing information an insert that provides information on the amount of mercury in dental amalgams, the environmental impacts of dental materials containing mercury, and the availability of mercury-free alternatives for dental fillings. The Maryland Department of the Environment (MDE) is required to adopt regulations to implement the bill.

Fiscal Summary

State Effect: MDE can implement the bill with existing budgeted resources, assuming procurement and mailing of the required billing inserts is the responsibility of each affected water or sewerage service supplier. Revenues are not affected.

Local Effect: Local expenditures increase by about \$186,000 annually beginning in FY 2014 for Baltimore City and likely increase to a greater extent for the Washington Suburban Sanitary Commission (WSSC) to ensure that the required inserts are included with billing information. **This bill imposes a mandate on a unit of local government.**

Small Business Effect: Minimal.

Analysis

Current Law: Dental amalgams are regulated by the U.S. Food and Drug Administration's (FDA) Center for Devices and Radiological Health Leadership, which is responsible for ensuring that medical devices are reasonably safe and effective and that the labeling has adequate directions for use and any appropriate warnings.

MDE regulation of mercury relates primarily to mercury-added products (dyes or pigments, electric switches, and fluorescent lamps), thermostats, mercury fever thermometers, mercuric-oxide batteries, the use of mercury in schools, the collection of used fluorescent lights containing mercury, and public outreach and education.

Background: Dental amalgam fillings are made of elemental mercury, silver, tin, copper, and possibly other metallic elements. According to the American Dental Association (ADA), dentists use them because they are durable, easy to use, resistant to wear, and relatively inexpensive compared to other materials. ADA reports that, despite safety concerns that have been raised because of its mercury content, the mercury in amalgam combines with other metals to render it stable and safe for filling teeth. Other fillings, such as composite fillings, are available but are more expensive.

In June 2008, FDA posted a consumer notice on its website stating that “dental amalgams contain mercury, which may have neurotoxic effects on the nervous systems of developing children and fetuses.” In July 2009, FDA issued a final regulation reclassifying dental amalgam and its component parts (elemental mercury and a powder alloy) used in dental fillings from Class I (low risk) to Class II (moderate risk). By classifying a device into Class II, FDA can impose special controls to provide reasonable assurance of the safety and effectiveness of the device. Specifically, FDA recommends that dental amalgam product labeling include:

- a warning against the use of dental amalgam in patients with a mercury allergy;
- a statement that dental professionals use adequate ventilation when handling dental amalgam; and
- a statement discussing the scientific evidence on the benefits and risk of dental amalgam, including the risks of inhaled mercury vapor, that will help dentists and patients make informed decisions about the use of dental amalgam.

If a patient’s dental fillings are in good condition and there is no decay beneath the fillings, FDA does not recommend that amalgam fillings be removed or replaced as removal results in unnecessary loss of healthy tooth structure and exposes patients to additional mercury vapor released during the removal process. ADA also considers the removal of amalgam restorations from a nonallergic patient for the alleged purpose of removing toxic substances from the body, when such treatment is performed solely at the recommendation of the dentist, to be improper and unethical.

The U.S. Environmental Protection Agency (EPA) reports that 3.7 tons of mercury are disposed of each year by dental offices, which contributes significantly to the overall mercury contamination in wastewater. In 2003, dental offices were found to have been the source of 50% of all mercury pollution entering wastewater treatment plants.

According to EPA, there are five alternatives to dental amalgam containing mercury: resin composite; glass ionomer; resin ionomer; porcelain; and gold alloys.

Local Expenditures: Baltimore City estimates that, based on average historic costs to provide bill inserts, expenditures increase by about \$186,000 annually to provide the required inserts with billing information for about 210,000 customer accounts. WSSC was unable to develop an estimate of the cost to provide the required inserts in time for inclusion in this fiscal and policy note. However, if the cost per insert for WSSC is the same as for Baltimore City, then expenditures may increase by about \$412,000 for WSSC to provide inserts to about 465,000 customer accounts annually. Actual expenditures for WSSC may vary to the extent that the cost per insert differs from the cost estimated by Baltimore City. This analysis assumes that Baltimore City and WSSC are likely the only two entities subject to the bill, which is based on information provided by MDE.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Howard and Montgomery counties, the towns of Bel Air and Leonardtown, the cities of Baltimore and Salisbury, Maryland Department of the Environment, Department of Health and Mental Hygiene, Washington Suburban Sanitary Commission, U.S. Food and Drug Administration, U.S. Environmental Protection Agency, American Dental Association, Department of Legislative Services

Fiscal Note History: First Reader - February 18, 2013
mc/lgc

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