

Department of Legislative Services
Maryland General Assembly
2005 Session

FISCAL AND POLICY NOTE
Revised

House Bill 355

(Delegate Glassman, *et al.*)

Environmental Matters

Education, Health, and Environmental Affairs

Nontransient Noncommunity Water Systems - Methyl Tertiary Butyl Ether -
Testing

This bill requires each nontransient noncommunity water system to be tested for the presence of methyl tertiary butyl ether (MTBE). Testing would be required at a frequency determined by the Maryland Department of the Environment (MDE). Each water system must report test results to MDE. If a test indicates that the level of MTBE exceeds the State advisory level, as determined by MDE, the water system must notify the persons regularly served by the system and, for systems that regularly serve minors, the parents or guardians of such minors.

Fiscal Summary

State Effect: The bill would not materially affect State operations or finances.

Local Effect: Any increase in local expenditures to conduct tests and provide required notifications would be minimal and absorbable within existing local resources.

Small Business Effect: Minimal.

Analysis

Current Law: A nontransient noncommunity water system is defined in regulation as a public water system that is not a community water system and that regularly serves at least 25 of the same individuals over six months per year.

Although not required under current law, MDE currently monitors and/or requires regular monitoring for MTBE at nontransient noncommunity water systems in Maryland. Monitoring frequency is based on the vulnerability of the water systems to contamination and previous monitoring results. Although there is no State primary drinking water regulation for MTBE, MDE does have action levels when MTBE is detected in water supplies. When MTBE is detected at levels above 0.5 ppb, the sample location is placed on annual monitoring by MDE. When MTBE is detected at levels over 10 ppb, MDE conducts an investigation to determine the source of the contamination. Treatment and notification is recommended for water supplies with levels above 20 ppb, the current State advisory level.

Background: MTBE is a chemical compound used as a gasoline additive. It raises the oxygen content in gasoline, which helps engines burn cleaner, thus reducing tailpipe emissions. It was originally introduced in the late 1970s to replace lead. MTBE is being used at higher concentrations in some states, such as Maryland, to fulfill the oxygenate requirements set by Congress in the 1990 federal Clean Air Act amendments. According to MDE, reformulated gasoline is used in 14 counties in the State.

At room temperature, MTBE is a volatile, flammable, and colorless liquid that dissolves easily in water. Because MTBE is more water soluble and less biodegradable than other gasoline components, it can be introduced into groundwater from leaking underground and aboveground petroleum storage tanks. Recent studies indicate that MTBE vapors can also lead to groundwater contamination. Low levels of MTBE can make drinking water undrinkable due to its offensive taste and color. Although there is limited data on the human health effects of MTBE when ingested through drinking water, the U.S. Environmental Protection Agency has advised that MTBE is a potential human carcinogen at high doses.

Concern regarding MTBE in Maryland increased in 2004 with the discovery of groundwater contamination in Harford County; MTBE contamination has also been found in other Maryland counties. Emergency regulations addressing MTBE contamination, which require improved release detection and site monitoring, took effect January 26, 2005.

According to MDE, currently there are 575 nontransient noncommunity water systems and 625 associated monitoring locations in the State. Of the monitoring locations, 234 are tested annually and 391 are monitored on a three-year or six-year frequency. Local governments own 181 of the 575 nontransient noncommunity water systems in the State. MDE advises that it currently regulates approximately 250 small nontransient noncommunity systems (those that serve fewer than 100 people).

MDE advises that from January 2002 through December 2004, only one nontransient noncommunity water system has had levels of MTBE exceeding 20 ppb. Further, MDE advises that, during its normal course of action, it recommends notification to the persons regularly served by the water system and the legal guardians of minors.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Maryland Department of the Environment, Baltimore City, Calvert County, Caroline County, Howard County, Montgomery County, Prince George's County, Washington Suburban Sanitary Commission, U.S. Environmental Protection Agency, Department of Legislative Services

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