

Department of Legislative Services
 Maryland General Assembly
 2003 Session

FISCAL AND POLICY NOTE
Revised

House Bill 39

(Delegate Leopold, *et al.*)

Environmental Matters

Education, Health, and Environmental Affairs

Housing and Community Development - Radium Pilot Grant Program

This bill creates a Radium Pilot Grant Program in the Department of Housing and Community Development (DHCD) to provide financial aid to residential well owners to remove radium or gross alpha from well water. Implementation of the program is subject to the availability of funds in the State budget. The bill is effective July 1, 2003 and will remain in effect until June 30 at the end of the third year after its implementation.

Fiscal Summary

State Effect: General fund expenditures could increase by approximately \$44,800 in FY 2004 and \$89,600 from FY 2005 through 2006, assuming funds are available in the budget. Revenues would not be affected.

(in dollars)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	44,800	44,800	44,800	0	0
Net Effect	(\$44,800)	(\$44,800)	(\$44,800)	\$0	\$0

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

Local Effect: Anne Arundel County's expenditures could also increase by approximately \$44,800 to provide the grant funds required under the bill.

Small Business Effect: Minimal. Businesses that sell or install water treatment systems may benefit if demand increases for their service.

Analysis

Bill Summary: DHCD can only award a grant to a well owner who: (1) lives in a county that participates in the program; (2) has installed a water treatment system that removes excess radium or gross alpha; and (3) does not earn more than 110% of the statewide or metropolitan statistical area median income. Counties that choose to participate in the program must process grant applications from well owners. DHCD must match the grant awarded by the county and make a formula available to the counties that uses a sliding scale based on income so that lower income well owners will be eligible for larger grants. The combined county and State grant cannot exceed 25% or be less than 10% of the cost of the treatment system installed by the well owner. The bill authorizes DHCD to adopt regulations to implement the program.

Implementation of the bill is subject to the availability of funds in the State budget. Within 30 days after the program is implemented, DHCD must send certification to the Department of Legislative Services of the date it was implemented.

Current Law: DHCD is responsible for operating model or demonstration projects of practical research related to community assistance to improve the health, safety or socio-economic welfare of its citizens. The Maryland Department of the Environment (MDE) has primary enforcement responsibility for drinking water standards under the federal Safe Drinking Water Act. MDE also issues regulations and permits for well construction and is required to disclose the complete results of tests of wells used for domestic purposes.

Background: Radium is a rare, radioactive metallic element that occurs naturally in trace amounts in rocks, soils, and groundwater. It is used in radiotherapy and for luminescent paints. As radium decays, it releases energy into the environment until a stable, nonradioactive substance forms. In certain doses, it can cause bone cancer; however, the potential for bone cancer caused by radium in water is not well documented. The first step in determining the level of radium in drinking water is the “short-term gross alpha test.” The term “gross” means “total.” Most naturally occurring radioactive elements emit alpha particles as they decay, which signals the presence of specific radioactive substances. There are other radioactive substances besides radium that may contribute to the gross alpha radiation in water. Analyses for these substances are usually not necessary.

In 1998, Anne Arundel County sampled 50 private wells as part of a pilot water quality study. It found that 15 of the 22 wells in the northern part of the county had gross or total alpha radiation that exceeded federal drinking water levels set by the U.S. Environmental Protection Agency for drinking water (15 picocuries per liter.) According to MDE, the

radium does not pose a health emergency – the risk associated with consuming water containing 5 pCi/l of radium for one year is comparable to one chest X-ray. Follow-up studies of 100 wells conducted by MDE in other counties, including Prince George’s, Baltimore, Harford, Cecil, and Queen Anne’s, revealed only six additional wells with elevated levels.

Anne Arundel County estimates that 16,000 wells are in areas where radium may be a problem and that approximately 5,900 wells may require treatment.

MDE provides technical assistance and advice to local governments about wellhead protection. The program staff reviews each new public drinking water supply well application to ensure proper location of wells. County health departments provide information to residents regarding water testing and treatment options but grants are generally not available to well owners.

State Expenditures: General fund expenditures would increase by approximately \$44,800 for fiscal 2004, 2005, and 2006, assuming funds are available in the budget. DHCD estimates that water treatment systems would cost \$2,000 and that grants would range from \$200 to \$500 per well owner. This estimate also assumes that:

- the program would only be needed in Anne Arundel County;
- DHCD and the county would split the share of the grant equally;
- 10% of the eligible households would apply for a grant;
- households with annual incomes of \$19,999 or less would receive 45% of the grants (State portion: \$15,150); and
- households with annual incomes between \$20,000 and \$58,150 would receive the remainder (State portion: \$29,650).

The Department of Legislative Services advises that the actual cost of the treatment system chosen by each well owner is unknown (the price of treatment systems varies from \$500 to over \$3,000). Also, expenditures will be higher if radium contamination is discovered in other counties.

Local Expenditures: Anne Arundel County also advises that it only expects about 10% of eligible well owners to apply, based on tepid response to advertisement of current testing programs and the cost of installing a treatment system. Its expenditures for the program would be approximately \$44,800 to match the State grant. The match will vary depending upon the cost of the treatment system.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Washington County, Montgomery County, Anne Arundel County, Kent County, Worcester County, Department of the Environment, Department of Housing and Community Development, Department of Legislative Services

Fiscal Note History: First Reader - February 4, 2003
amm/jr Revised - House Third Reader - March 18, 2003

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