

Department of Legislative Services
Maryland General Assembly
2010 Session

FISCAL AND POLICY NOTE

House Bill 604 (Delegate V. Clagett)
Environmental Matters

Environment - Greywater - Residential Use

This bill defines “greywater” and authorizes its use, up to 400 gallons per day, for household gardening, composting, lawn watering, or landscape irrigation under specified conditions and restrictions.

Fiscal Summary

State Effect: The Maryland Department of the Environment (MDE) can handle the bill’s changes with existing budgeted resources.

Local Effect: Assuming the bill results in a significant increase in the use of greywater, net expenditures may increase and net revenues may decrease for local jurisdictions that do not currently prohibit or otherwise restrict the use of greywater.

Small Business Effect: Potential meaningful increase in business opportunities for small business on-site sewage disposal and plumbing contractors, and other similar small businesses.

Analysis

Bill Summary: Greywater is defined as used, untreated water collected from a clothes washing machine, shower, bathtub, or lavatory sink; specifically excluded is water from a toilet, kitchen sink, or a dishwashing machine.

The bill only allows the use of greywater if 15 specified conditions are met. Generally, these include ensuring that the water is properly stored and covered, that the water’s conveyance and end-use is properly managed, and that the water is contained on-site and

away from floodways or human contact. The greywater may not contain specified hazardous chemicals or waste from diapers; and the greywater system must be constructed to provide for overflow into a sewage system or an on-site sewage disposal (septic) system. Finally, the use of greywater must conform to applicable local laws.

Current Law: According to MDE, for the uses authorized by the bill, greywater is currently regulated as sewage. A person may only dispose of sewage in accordance with an approved on-site sewage disposal (septic) system permit or other method of disposal approved by the Secretary of the Environment (or designee). As defined by regulation, sewage includes water-carried domestic wastes. State law also prohibits a discharge of any wastewater, regardless of volume, into the waters of the State, without a permit from MDE. The definition of wastewater includes a liquid waste substance derived from residential operations or establishments.

Background: Traditionally, the municipal treatment facility has been the primary source of water disposal for single- and multifamily residential buildings and complexes. As long-term water shortages increasingly are predicted in areas across the nation, water conservation efforts have become more prominent. Various potentially useful and dependable water treatment and recycling technologies have been explored. One technique is greywater recycling, which is an on-site wastewater treatment and recycling system. Greywater systems are designed to safely manage wastewater and reduce water consumption.

Rather than irrigation, the use of greywater typically takes the form of providing a water source to meet nonpotable needs such as toilet flushing. This use is not regulated by MDE but by plumbing codes. The National Standard Plumbing Code (NSPC) is incorporated by reference as the State plumbing code and is updated every three to six years to reflect updated industry practices. The State Board of Plumbing uses the 2006 NSPC, with the 2007 supplement.

Counties are responsible for adopting and enforcing the State plumbing code or an equally stringent plumbing code. If the State Board of Plumbing determines that a county is not adequately enforcing a plumbing code, the board enforces the plumbing code in that county. The State plumbing code does not apply to Baltimore County and portions of Montgomery and Prince George's counties served by the Washington Suburban Sanitary Commission (WSSC) because the board does not have authority over these jurisdictions.

NSPC defines greywater as water that has been used for washing dishes, laundering clothes, or bathing. Under that definition, essentially any water, other than toilet wastes, draining from a household is greywater. Although greywater may contain grease, food particles, hair, and any number of other impurities, it may still be suitable for reuse as

nonpotable water. Reusing greywater serves two purposes: it reduces the amount of freshwater needed to supply a household, and reduces the amount of wastewater entering sewer or septic systems.

NSPC specifies how systems must be designed, installed, and maintained to prevent contamination of the potable water supply from nonpotable liquids, solids, or gases. NSPC approves greywater installation, materials, and treatment methods. In all buildings where dual water systems are installed, each system must be identified either by a color marking or metal tags. A sign indicating “unsafe water” must be posted on any outlets on the nonpotable water line that could be used for drinking or domestic purposes. Finally, NSPC outlines the cross-connection control techniques that must be followed to protect the potable water supply from backflow and back-siphonage.

MDE advises that, according to the literature it has reviewed, greywater is generally understood to contain disease-causing organisms and other contaminants, albeit in lesser concentrations than the overall profile for wastewater effluent.

Local Fiscal Effect: The bill states that any use of greywater is subject to local laws and regulations. Therefore, greywater use will not increase in any jurisdiction that currently prohibits its use through its plumbing code, sewer ordinance, or other law or regulation. Garrett County advises that if greywater use becomes authorized in the county, there will be no fiscal impact; Harford County indicates a potential need for greater inspection or enforcement resources; and Montgomery County states that additional personnel may be needed for permitting, inspection, and enforcement activities, at a cost of about \$92,000, which may be offset with new permit fee revenues. However, the use of greywater systems is not currently authorized in any of these counties.

WSSC advises that if greywater systems are authorized anywhere within its service area, its water service revenue will decrease by a greater extent than any potential savings in its wastewater operations. Legislative Services advises that a similar fiscal impact will likely occur in any jurisdiction with publicly owned water and wastewater operations to the extent the bill results in a significant increase in the use of greywater.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Garrett, Howard, and Montgomery counties; Washington Suburban Sanitary Commission; Maryland Department of the Environment; Department of Legislative Services

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