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Bill Number: SB1234 Patron: Aird

Bill Title: Water Testing and Treatment Program; Residential Well Water Testing and Treatment

Program Fund; certification; permits.

Bill Summary: Requires the Board of Health to promulgate regulations for use of drinking water treatment or filtration systems certified as compliant with National Sanitation Foundation and American National Standards Institute standards to remove or significantly reduce concentrations of perfluorooctanoic acid, perfluorooctane sulfonate, and other contaminants of concern. The bill requires any permit application for private well construction to include (i) an indication as to whether such permit is for new construction of a well, repair of an existing well, or modification of an existing well and (ii) if such permit is for new construction of a well that is intended to replace an existing well, an indication as to the reason such existing well will no longer be used. The bill establishes the Water Testing and Treatment Program and the Residential Well Water Testing and Treatment Program Fund to assist with the testing and treating of contaminated drinking water through grants for the use of eligible treatment and filtration systems in private residential wells. Such grants are contingent on applicants demonstrating (a) the severity of the drinking water contamination, (b) the lack of available public water alternatives, and (c) the economic need of the private residential well owner.

Budget Amendment Necessary: Yes **Items Impacted:** 281

Fiscal Summary: The instructs the Board of Health to adopt regulations for use of point-of-entry or point-of-use drinking water treatment systems (filtration). The purpose of the regulations is to reduce or remove perand polyfluoroalkyl substances (PFAS) and emerging contaminants of concern that meet or exceed U.S. Environmental Protection Agency (EPA) drinking water standards or any contaminant levels developed by the Virginia Department of Health (VDH).

The bill also requires VDH to establish a Residential Well Water Testing and Treatment Program (Program) and associated Program Fund (Fund), to be administered by the Office of Drinking Water (ODW). The purpose of the Program and Fund is to assist low-income owners of private residential wells through grants for the use of eligible treatment systems. VDH's ability to award grants is contingent on funds available, the severity of contamination, and the economic need of the well owner. Private wells fall under VDH's Office of Environmental Health Services (OEHS). As such, ODW would likely coordinate with OEHS to implement the Program and Fund.

The bill also specifies that eligible treatment and filtration systems are to be installed by a qualified third-party professional when appropriate.

The cost of the program is scalable depending on the level of funding provided.

General Fund Expenditure Impact:

<u>Agency</u>	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
VDH		\$1,001,130 -	\$1,001,130 -	\$1,001,130 -	\$1,001,130 -	\$1,001,130 -
		\$2,999,583	\$2,999,583	\$2,999,583	\$2,999,583	\$2,999,583
TOTAL		\$1,001,130 -	\$1,001,130 -	\$1,001,130 -	\$1,001,130 -	\$1,001,130 -
		\$2,999,583	\$2,999,583	\$2,999,583	\$2,999,583	\$2,999,583

Fiscal Analysis: The fiscal impact from establishing and operating the Program would involve testing drinking water for those who receive their drinking water from private wells, and treating the drinking water for those whose water is identified as contaminated through the tests. The bill provides that point-of-use and point-of-entry treatment systems are to be utilized to remove or significantly reduce concentrations of PFAS and other contaminants.

The exact number of private wells is unknown, but VDH estimates there are over 700,000 private wells in Virginia. Virginia Tech estimated that 22% of Virginians rely on private wells for drinking water, which could be as many as 1.6 million homes using a private well.

Laboratory costs to determine PFAS concentration in private well water will range from about \$300 to \$550 per sample, depending on the lab and the number of samples contracted with the lab for sampling. There are additional costs for properly collecting and delivering a sample to a certified lab. The point-of-use filters currently available on the market for PFAS removal cost \$40 to \$400 per filter, depending on the filter type and volume of water. Point-of-entry filters are significantly more costly to purchase and maintain.

The bill requires that when an eligible treatment and filtration systems needs to be professionally installed, then it must be installed by a qualified third-party professional. In the past, VDH's Septic and Well Assistance Program has covered costs of approximately \$2,500 for a qualified professional to install treatment devices. The bill states that grants from the Program shall not exceed 50 percent of the cost of eligible treatment or filtration systems. VDH estimates the average reimbursement for treatment and filtration system installation will be \$500 (50 percent of \$1,000) based on the range of costs for treatment devices and installation costs when using qualified professionals.

Filters would need to be replaced periodically, most likely every 6-months, so there are operation and maintenance costs. The bill does not provide for the Fund to cover the cost of operation and maintenance; therefore, those costs would be borne by the private well owner.

In addition to costs related to testing and treatment, agency resources would be needed to administer the Program and the Fund, such as determining who is eligible to receive testing and, based on testing results, who is eligible to receive a treatment system and what type of treatment system is appropriate. Agency staff would market the program, answer questions, establish regulations, implement the procedures and policy, and ensure that filters are properly distributed, used, and replaced.

Funding of \$1.0 million per year would allow for two full-time equivalent employees (FTEs) to collect approximately 1,290 PFAS samples per year at 645 locations throughout the Commonwealth that are served by private wells. VDH has limited experience with large scale sampling of private wells; however, based on prior sampling of waterworks, VDH expects the cost to obtain 1,290 sample results would be \$677,250. VDH estimates about 15% of the sampling locations might find PFOA or PFOS levels above the primary maximum contaminant levels (PMCLs). Approximately 97 private wells would need treatment. Some private wells would require multiple point-of-use units, as private wells can serve as many as 14 service connections. An estimated 107 point-of-use treatment systems would be funded for installation during the first year of the Program. VDH estimates treatment systems would cost, on average \$1,000 each with VDH's cost share portion being \$500, for a total cost of \$53,500 for 107 treatment systems. Private well owners would be responsible for operation and maintenance of the systems including replacing cartridges for treatment at an anticipated cost of \$150 per replacement. VDH anticipates costs of \$111,968 for one supervisor and \$101,328 for one inspector in the first year, plus mileage of \$52,084 related to traveling 74,405 miles to carry out the Program, and \$5,000 (\$2,500 per person) each year for training. These estimates lead to a total cost of \$1,001,130 in first year. The following chart lays out these expected costs in the first year:

	Qty	Unit cost	Cost
Sample Cost	1,290	\$525	\$677,250
Mileage	74,405	\$0.70	\$52,084
Treatment System	107	\$500	\$53,500
Supervisor	1	\$111,968	\$111,968
Inspector	1	\$101,328	\$101,328
Training	2	\$2,500	\$5,000
TOTAL			\$1,001,130

Cost estimates to utilize \$3.0 million per year would facilitate 6 FTEs to collect approximately 3,900 PFAS samples per year at 1,950 locations served by private wells. VDH anticipates costs of \$111,968 for one supervisor full-time equivalent employee and \$506,640 for five inspector full-time equivalent employees for the first year, plus milage costs of \$156,975 related to traveling 224,250 miles to carry out the Program, along with \$15,000 in training cost. Total costs are estimated to be \$2,999,583 in additional funds. A breakdown of cost estimates is as follows:

Qty	Unit cost	Cost

Sample Cost	3,900	\$525	\$2,047,500
Mileage	224,250	\$0.70	\$156,975
Treatment System	323	\$500	\$161,500
Supervisor	1	\$111,968	\$111,968
Inspector	5	\$101,328	\$506,640
Training	6	\$2,500	\$15,000
TOTAL			\$2,999,583

Other: