



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

January 21, 2010

The Honorable Edward Butler, Chairman
Commerce and Consumer Affairs Committee
Room 302, LOB
Concord, NH 03301

RE: House Bill 1685, Relative to testing the water quality of private water supply wells

Dear Chairman Butler:

Thank you for the opportunity to comment on HB 1685. The goal of this bill is to improve public health protection by increasing awareness of water quality in private water supply wells such as those that serve individual residences in New Hampshire. This is proposed to be accomplished by mandating certain water quality testing for private water supply wells when real estate is sold, new wells are drilled, or existing wells are improved such as by hydrofracturing or drilling.

In New Hampshire, for reasons discussed in detail below, there is a well-recognized need for improved knowledge of water quality in residential wells by those who live in the households served by these wells and who consume the water. To further consider this problem, in 2007, a Private Well Working Group was formed by DES to study this issue as part of DES's drinking water strategy. As formed, the group had over 20 members from diverse organizations. After consideration of this issue, based on a majority vote, the group recommended in a report to the Groundwater Commission dated September 16, 2009 that legislation be proposed to require testing of private water supply wells. In October 2009, the majority of the Groundwater Commission voted to endorse this concept. HB 1685 has been proposed as the result of this process.

HB 1685 requires testing of new private wells as well as existing wells during the transfer of real estate or when improvements occur such as deepening or hydrofracturing, unless the buyer opts out. The cost for the proposed water quality analysis is estimated at between \$165 and \$300 per well. The responsibility for enforcement of this program is proposed to be placed with DES. DES would specifically be required to adopt rules regarding forms to be used and technical matters such as sample taking, handling, and analysis. DES would also be responsible for enforcement when violations are reported. DES would work with pump installers, real estate agents, laboratories, and mortgage lenders to ensure that all parties are aware of their responsibilities. HB 1685 specifically makes data reporting to the state optional but the well owner or home buyer may voluntarily elect to have the information shared with the New Hampshire Geological Survey for scientific purposes. DES anticipates that some additional staff effort would be required. However, most of this program would be implemented by shifting staff resources already being used for our education and outreach efforts to private well owners to the new responsibilities. We also expect that program staff supported by federal Safe Drinking Water Act (SDWA) funds could continue to be used for this expanded purpose. The United States Environmental Protection Agency (USEPA) has determined that private well

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water quality is a significant national public health issue and, therefore, allows SDWA funds to be used for this purpose. Therefore, there would be no cost to the general fund.

At the national level, private water supply well water quality is recognized as a public health issue by both federal agencies, such as the USEPA and the United States Public Health Service, and medical professionals that requires further attention. For example, attached is a recent policy statement entitled "Drinking Water from Private Wells and Risks to Children" from the American Academy of Pediatrics. This statement, which was published in PEDIATRICS magazine in June 2009, explains the issues and makes recommendations to pediatricians and others, including government agencies to improve children's health protection. HB 1685 is consistent with a specific recommendation for governments in this policy that water testing and reporting be required during real estate transactions.

Approximately 40 percent of New Hampshire residents (approximately 525,000 people) rely on private residential water supply wells for their water supply at home, and this percentage is growing. Many of these households have residential water supply wells that have not been tested for the entire suite of naturally occurring contaminants that can pose a health risk and that we know to be present in a significant percentage of wells as a result of New Hampshire's geology. Specifically:

- The United States Geological Survey and DES estimate that around 20 percent of all private wells in the state (approximately 47,000 of the state's 235,000 private wells) contain arsenic concentrations above the federal health-based limit of 10 ug/L that applies to public water systems. And, in some areas, up to 50% of the wells exceed this limit.
- About 33 percent of private residential wells (77,550 wells) exceed the proposed federal limit for radon in water of 4,000 pCi/L. Radon from water supplies is released to indoor air adding to radon drawn into homes from the soil to cause elevated levels of radon in the living spaces in many homes. Radon in indoor air is second only to smoking as a leading cause of lung cancer.
- Uranium and other radionuclides are also found in private residential wells but less frequently than arsenic and radon. The estimated percentages of wells in New Hampshire that exceed the federal health-based standards for these radionuclides are seven percent for uranium (16,000 wells), four for radium (9,400 wells), and four for gross alpha (9,400 wells).
- Approximately two percent of New Hampshire wells (4,700 wells) have fluoride exceeding the health-based limit of 4 mg/L.
- Beryllium occurs naturally in some of the state's bedrock. It is found in wells primarily in the Mt. Washington Valley area and exceeds the federal limit (4 ug/L) in approximately seven percent of wells in that area.

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Without knowledge of the concentrations of these natural contaminants in water supply wells, homeowners are unable to make informed decisions about consuming water from these wells and whether additional treatment is necessary.

DES suggests three changes to the bill as introduced. First, while the bill's testing requirements would take effect one year after the bill's passage, DES suggests that the inclusion of gross alpha among the "contaminants of concern" be phased in a year or two later, to enable the state's private laboratories to develop the capacity and the accreditation to perform this analysis, which is currently available at fewer than a handful of in-state laboratories. Second, the bill's language regarding the use of forms to be developed by DES for the reporting of analytical data should be clarified to enable laboratories to report results in a variety of formats if minimum standards for clarity and readability are met. DES also believes that serious consideration should be given to a requirement that volatile organic chemicals including gasoline contaminants such as methyl-tertiary butyl ether (MtBE) since these also can be present in groundwater at significant levels; we also recognize that this would increase the cost for testing.

If you have any questions or need additional information, please do not hesitate to call Sarah Pillsbury at 271-1168 or me at 271-3449.

Sincerely,


Thomas S. Burack
Commissioner

cc: Representative Spang

Enclosure