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## Media Release

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### Portland to Request Variance to Drinking Water Treatment Requirement

**City Will Develop Request Over Next Four Months, Submit to State Drinking Water Program this Spring**

Portland, OR—The Portland Water Bureau announced today its intent to develop a request for a variance to the treatment requirements of the federal Long Term 2 Enhanced Surface Water Treatment Rule (LT2). The variance, if recommended by the federal EPA and granted by the Oregon Department of Human Services Drinking Water Program, would enable the City to avoid much of the \$100 million in expenses required to design and build a water treatment facility at the City's Bull Run watershed to address the parasite *Cryptosporidium*.

"Portland has been conducting extensive water quality sampling looking for *Cryptosporidium* within the Bull Run for the last year—449 individual tests at the drinking water intake (totaling over 10,250 liters) and more than 300 at upstream locations," said Water Bureau Administrator David Shaff. "This sampling effort is probably the most intensive screening for *Cryptosporidium* in a protected watershed ever conducted within the United States. The results are now in and there were zero instances of *Cryptosporidium*. We therefore believe we have a very good case to make that the Water Bureau can continue its century long stewardship of the Bull Run in support of public health without constructing a treatment facility for *Cryptosporidium*."

The treatment variance is a provision of the Safe Drinking Water Act (SDWA) that provides for an alternative form of compliance with federal drinking water rules if a public water system can demonstrate that a required treatment is not necessary to protect public health due to the nature of the system's raw water source. The State Drinking Water Program has legal primacy over the LT2 regulation, but has formally asked the EPA to retain its lead role in evaluating Portland's variance request. Therefore the City anticipates working closely with both the State and EPA during this process.

Portland began intensive water quality monitoring in December 2009 to gather evidence relevant to the question of whether the Bull Run watershed was at risk of delivering the type and quantity of *Cryptosporidium* that can cause illness if consumed. Roughly 200 liters of water were tested each week through December 2010 at the intake where raw water from the Bull Run reservoirs first enters the drinking water system. The bureau augmented this testing with regular sampling at nine upstream locations in the watershed to determine if there were any so-called "hot spots" where *Cryptosporidium* might be entering the Bull Run River or the two drinking water reservoirs. No *Cryptosporidium* was found in any of the tests at any of the locations. The results of the intensive monitoring build on previous routine testing results which document that *Cryptosporidium* has not been detected in the watershed since September 2002.

With the conclusion of the one-year water sampling program, the Portland City Council last month approved a contract with Camp Dresser and McKee, Inc. (CDM) to provide the Water Bureau with additional expertise and support in developing and writing a treatment variance request. CDM has critical experience working with water utilities to create regulatory compliance strategies. Phillippe Daniel, CDM's lead on this project, played a key role as a consultant to the Massachusetts Water Resources Authority (MWRA) in a successful 1999-2000 lawsuit against the EPA regarding the agency's attempt to mandate filtration. The City anticipates submitting its LT2 variance request in the spring of 2011.

## **Background**

In January 2006 the EPA issued the Long Term 2 Enhanced Surface Water Treatment Rule (LT2) in accordance with the Safe Drinking Water Act. The purpose of the rule is to reduce illness linked with *Cryptosporidium*, a micro-organism (protozoan) which sickened thousands and killed over 50 people in a 1993 waterborne outbreak in Milwaukee, Wisconsin. Surface water supplies are particularly vulnerable to *Cryptosporidium* contamination if—unlike Portland's Bull Run supply—they regularly receive runoff or pollution from human or animal wastes. Conventional compliance with the rule for Portland would require the construction of a new water treatment facility to either remove or inactivate *Cryptosporidium*.

*Cryptosporidium* can enter surface water via human and animal fecal material. Surface water sources that are exposed to intensive human activities, pollution and animal wastes are most likely to contain the parasite. Portland's source water, the Bull Run River, is within one of the most stringently protected watersheds in the United States, far removed from the types of human activities and pollution that are associated with the presence *Cryptosporidium*. Public access to the watershed is not allowed and there are no sewage systems or cattle present anywhere near Portland's source water. The wildlife that inhabit the Bull Run watershed pose the most likely potential source of *Cryptosporidium*. Because of this, the city has only rarely detected *Cryptosporidium* in the Bull Run when it has conducted regular water quality monitoring and only at extremely low levels. *Cryptosporidium* has not been detected in Portland's drinking water samples since September 2002.

The Portland City Council committed in January 2005 to pursue alternative forms of compliance for the LT2 rule. Soon after, the City met with EPA officials to encourage the agency to alter the final rule so that it would include alternate approaches that would allow Portland to avoid building additional treatment. When that effort failed, the city filed a legal challenge to the final rule in the United States Court of Appeals for the District of Columbia Circuit in early 2006. In November 2007 the court issued a decision rejecting the city's challenge and upholding the rule.

Since the court decision, the City has been pursuing parallel compliance strategies. In 2009 The Portland City Council directed the Water Bureau to begin planning and budgeting to design an ultraviolet treatment facility in accordance with the LT2 rule which requires that additional treatment be in place by April 1, 2014. In addition, the Council directed the bureau to continue its attempts to obtain a variance to the treatment portion of the rule.

The Water Bureau has now completed its treatment variance sampling plan and study containing a year's worth of intensive raw water sampling data during which no *Cryptosporidium* was detected. The City anticipates a decision regarding its treatment variance request before the end of 2011.

For more information go to [www.portlandonline.com/water/lt2](http://www.portlandonline.com/water/lt2)

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