



Randy Leonard, Commissioner  
David G. Shaff, Administrator

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June 6, 2011

Mr. David Leland  
Program Manager  
Oregon Health Authority Drinking Water Program  
P.O. Box 14450  
Portland, OR 97293-0450

Dear Mr. Leland:

With the submission of this letter and attachments, the City of Portland Water Bureau (PWB) formally requests a variance to the treatment requirements of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2 rule) for the Bull Run surface water source. Portland is requesting a variance as an alternate form of compliance with the LT2 rule requirement that a public water system install a specified treatment technique for its raw surface water source to address the pathogenic microorganism *Cryptosporidium*.

The federal Safe Drinking Water Act (SDWA) provides public water systems such as PWB the opportunity to request variances to treatment technique provisions of national primary drinking water regulations. Section 1415(a)(1)(B) states that

*A State which has primary enforcement responsibility for public water systems may grant to one or more public water systems within its jurisdiction one or more variances from any provision of a national primary drinking water regulation which requires the use of a specified treatment technique with respect to a contaminant if the public water system applying for the variance demonstrates to the satisfaction of the State that such treatment technique is not necessary to protect the health of persons because of the nature of the raw water source of such system. A variance granted under this subparagraph shall be conditioned on such monitoring and other requirements as the Administrator may prescribe.*

The State of Oregon has assumed interim primacy for the LT2 rule and accordingly the Oregon Health Authority Drinking Water Program (OHA-DWP) has drafted Oregon Administrative Rules (OARs) that incorporate both the federal regulations for the LT2 rule and the variance provision of SDWA Section 1415(a)(1)(B).

OAR 333-061-0045(13) states that

*The Department may grant variances from the standards specified in OAR 333-061-0032(3)(e) through (g) requiring the use of a specified water treatment technique if the Department determines that the use of a specified water treatment technique is not necessary to protect public health based on the nature of the raw water source for a public water system.*

### **Nature and Duration of the Variance Request**

As described above, the Portland Water Bureau, PWS number OR4100657, is requesting a variance in accordance with SDWA Section 1415(a)(1)(B) to the surface water treatment requirement of the LT2 rule as it applies to the Bull Run water source. Specifically, Portland requests a variance to the treatment requirements of OAR 333-061-0032(3)(e) through (g) based on the attached demonstration that the nature of the Bull Run raw water source renders these treatment requirements unnecessary to protect public health. Portland requests that the duration of the variance be ongoing until a determination by OHA-DWP that the installation of treatment for *Cryptosporidium* is necessary to protect public health based on relevant analytical water quality monitoring results, other relevant information pertaining to the nature of the raw water source, or evidence of the transmission of cryptosporidiosis through Bull Run drinking water.

### **Relevant Analytical Results of Water Quality Monitoring**

Portland is submitting relevant analytical results of water quality monitoring, including testing results conducted pursuant to the requirements of national primary drinking water regulations, in the attached Portland Water Bureau Request for a Treatment Variance to the Long Term 2 Enhanced Surface Water Treatment Rule. These results—most importantly the fact that, during the one-year-long monitoring period, no *Cryptosporidium* oocysts were detected in any of the 449 water samples tested at the raw water intake or in any of the 315 samples tested at several upstream locations—supports Portland’s assertion that a treatment variance is merited.

### **Monitoring and Other Reasonable Requirements Prescribed as a Condition to a Variance**

Portland will perform ongoing monitoring and other reasonable requirements as a condition to any variance granted by the State of Oregon. PWB has researched and developed a proposed monitoring program to ensure the ongoing collection of relevant public health data necessary for the operation of the water system under a treatment variance to the LT2 rule. Section 6 of the attached Request for a Treatment Variance describes this monitoring program and other operational approaches the bureau intends to implement if a variance is granted.

### **Additional Information Pertinent to Portland’s Request for a Variance**

The attached Request for a Treatment Variance contains important information regarding the Bull Run water source in addition to water quality monitoring results. This information includes data and analysis regarding key characteristics of the highly protected Bull Run watershed such as watershed control policies and practices, wildlife types and densities, hydrology, forest and soil characteristics, and the fate and transport of pathogens. This additional information is provided to help characterize the conditions of the watershed and the basis for the nine-year absence of *Cryptosporidium* in PWB monitoring results. The document also includes important public health data and the consensus findings of several public health experts regarding the low risk of exposure to infectious *Cryptosporidium* through Bull Run drinking water.

**Other Information Required by OHA-DWP or the Environmental Protection Agency (EPA)**

Portland has engaged in multiple communications with OHA-DWP and EPA over the last 18 months and has sought to understand and incorporate all information required by either agency into its data collection efforts and this variance request. The attached Request for a Treatment Variance and the 2010 Sampling Plan and Study were specifically designed to accommodate and address the comments provided by EPA over the course of 2009 and 2010. OHA-DWP has not indicated at this time any additional information it requires in Portland's treatment variance request.

Portland believes that the findings and information provided in the attached document effectively demonstrate that the Bull Run water source is of such high quality that no additional treatment for *Cryptosporidium* is necessary to protect public health. Portland respectfully requests due consideration of the evidence provided. Do not hesitate to contact me with any questions or follow-up regarding this request.

Sincerely,

A handwritten signature in black ink that reads "David G. Shaff". The signature is written in a cursive, slightly slanted style.

David G. Shaff  
Administrator