Department of Health Office of Drinking Water

Interpretive or Policy Statement

Revised - 10/18/11

Title:	Uranium Sampling for New or Expanding Group B Source Approvals	Number: E.10	
References:	RCW 43.20.050(2)(b) Chapter 246-290 WAC Chapter 246-291 WAC		
Contact:	Sam Perry, Engineering and Technical Services Section		1
Phone:	(253) 395-6755		1. 1.
Email:	Sam.Perry@doh.wa.gov		
Effective Date:	January 1, 2019		4 11 7 3 7
Supersedes:	None // a/		
Approved By:	Mike Means, Director Mike Me	a 71	. 17 90

Conclusion statement

Purveyors proposing to create a new or expand an existing Group B system located in Ferry, Okanogan, Pend Oreille, Spokane, or Stevens County must submit analysis results of a raw source water sample for uranium in accordance with WAC 246-291-170 for each source. If the sample exceeds the uranium maximum contaminant level (MCL) of 30 μ g/l (parts per billion) under WAC 246-290-310, the Department of Health (department) will not approve the proposed new or expanding Group B source.

Background and Analysis

Radon is a gas produced from decay of uranium-238. High levels of radon indicate elevated levels of uranium in the rock and soil. The groundwater in Ferry, Okanogan, Pend Oreille, Spokane, and Stevens counties is known or suspected to have elevated levels of uranium because of naturally occurring uranium in the rock and soil.¹ Snohomish County is not included in this policy because high radon detection is limited to National Forest land where development is not allowed.

Uranium is a contaminant of public health concern. Some people who drink water with uranium in excess of 30 µg/l over many years may have an increased risk of kidney damage or

¹ See Radon Hazard Classification Map of Washington State

cancer. The U.S. Environmental Protection Agency has established an MCL for uranium which is adopted in WAC 246-290-310 for all Group A public water systems. WAC 246-291-170(5)(c) adopts the Group A uranium standard for Group B systems.

WAC 246-291-170(2)(c) requires a purveyor to submit analysis results of a raw source water sample for known or suspected contaminants of public health concern (uranium) when seeking design approval for a new or expanding Group B water system. WAC 246-291-170(4)(b) requires a purveyor to collect a confirmation water sample if the initial sample exceeds the uranium primary standard. If the average of the two samples exceeds the primary MCL under WAC 246-290-310, the department will not approve the new Group B source under WAC 246-291-170(5)(c).

Under WAC 246-291-170(5) departmental approval of a source requiring treatment for a primary drinking water contaminant, including uranium, is not permitted. This prohibition exists because there is no departmental standard in chapter 246-291 WAC requiring a trained and certified operator to be in responsible charge of operating complex treatment systems such as those used to remove uranium. Further, there is no departmental requirement in chapter 246-291 WAC for on-going water quality monitoring of contaminants in drinking water, so there would be no way to ensure treatment is effective.

Conclusion

Purveyors proposing to create a new or expand an existing Group B system located in Ferry, Okanogan, Pend Oreille, Spokane, or Stevens County must submit analysis results of a raw source water sample for uranium in accordance with WAC 246-291-170 for each source. If the sample exceeds the uranium maximum contaminant level (MCL) of 30 μ g/l (parts per billion) under WAC 246-290-310, the department will not approve the proposed new or expanding Group B source. Snohomish County is not included in this policy because high radon detection is limited to National Forest land where development is not allowed.