Office of Drinking Water
Policy

Title:	Requirements for Sources Hydraulically Connected to Surface Water Number: F.12 (rev)
References:	WAC 246-290-640 and WAC 246-290-451
Contact:	Donna Freier
Effective Date:	December 27, 2005
Supersedes:	March 30, 2001, Consistency Statement "Requirements for Sources in Hydraulic Connection to Surface Water"
Approved:	*Director, Office of Drinking Water*

Drinking water policies are written descriptions of the approach taken by the Program to implement a statute, regulation, court order, or other agency order, and may include the Program's current practice, procedure, or method of action based on that approach. Any generally applicable directives or criteria that provide the basis for imposing penalties or sanctions, or for granting or denying Program approvals, must either be in statute or established in a rule.

POLICY STATEMENT

This policy establishes a consistent process for a public water system to provide disinfection, establish a schedule for the collection of at least two microscopic particulate analysis (MPA) samples, and address consumer notification options if their source is determined or presumed to be in hydraulic connection (HC) with surface water.

POLICY SCOPE

This policy provides direction to Office of Drinking (ODW) staff to consistently implement the disinfection requirement for water systems with potential "ground water under the direct influence of surface water" (GWI) sources that have been determined or presumed to be in hydraulic connection with surface water.

This policy applies to:

- Sources designated groundwater and requiring one or two microscopic particulate analysis (MPA) samples.
- Sources designated potential GWI and requiring more than two MPA samples.

KEY DEFINITIONS

GWI means any water beneath the surface of the ground the department determines has the following characteristics (WAC 246-290-010):

- Significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as *Giardia lamblia* or *Cryptosporidium*; or
- Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH closely correlating to climatological or surface water conditions where natural conditions cannot prevent the introduction of surface water pathogens into the source at the system's point of withdrawal.

Potential GWI means a source identified by the department as possibly under the direct influence of surface water, and includes, but is not limited to, all wells with a screened interval fifty feet or less from the ground surface at the wellhead and located within two hundred feet of a surface water, and all Ranney wells, infiltration galleries, and springs.

Hydraulic connection is generally defined as a condition where water from one location (such as surface water) can reach another location (such as a well) through pervious subsurface geologies in a relatively rapid manner. A determination of hydraulic connection is made by application of WAC 246-290-640(3). In the GWI determination process, sources such as springs with no surface water body nearby, that are constructed in a relatively shallow aquifer that might be recharged by direct infiltration of surface water runoff, are considered to have a high risk for microbiological contamination.

PROCEDURE

#	Action By	Action
1	ODW Headquarters GWI Program lead or ODW Regional Office GWI Program representative	Notify purveyor in writing about the source designation of HC that triggers the requirement to: (1) provide disinfection, (2) establish a schedule for the collection of at least two microscopic particulate analysis (MPA) samples, and (3) address consumer notification options. The ODW notification will include guidance on: 1) the content, distribution, and frequency of consumer notices, 2) consumer mitigation of health risks during the interim period 3) how to contact technical assistance providers, and 4) when, where and to whom they can file a request to extend the time to achieve compliance if there is good cause for such an extension.
2	ODW Headquarters GWI Program lead or ODW Regional Office GWI Program representative	If ODW staff determine that the purveyor is not making a good faith effort in promptly scheduling and collecting the MPA samples, staff shall notify the purveyor in writing about the requirement to develop and submit an action plan, within 90 days, that identifies their schedule for completing the required actions.

#	Action By	Action
3	Purveyor	If required by ODW, submit, within 90 days, an action plan outlining an approach to address the HC condition that includes the following elements: • If modification of the source to preclude surface water influence is proposed, the action plan shall address preparation of a supporting project report prepared by a professional engineer (P.E.) licensed in Washington State. • If modification of the source is not proposed, the action plan shall address timing for the P.E.'s design of treatment and submittal of project and construction documents, and collection of at least two MPA samples. Treatment design and the associated schedule will be based upon the results of the first and second (if necessary) MPA samples.
4	Purveyor	Collect MPA samples and submit results to ODW within 30 days of the lab analysis date. Submit project and construction documents to ODW for review and approval of disinfection treatment facilities with enough lead time to install disinfection treatment as required in WAC 246-290-451 within 120 days of the first or second (if necessary) MPA sample result.
5	ODW Regional Office Compliance Officer in coordination with the ODW Headquarters GWI Program lead or the ODW Regional Office GWI Program representative	Establish a Bilateral Compliance Agreement (BCA) (WAC 246-290-050(2)) with the purveyor if the above timeframes will not be met and an alternate schedule can be adequately justified and established. The BCA will specify actions, timeframes, and justification. Failure to comply with the Bilateral Compliance Agreement will result in designating the water system a State Significant Non-Complier.