

General Comments

Department of Human Services, Drinking Water Program, Oregon Administrative Rules Chapter 333, Division 61 (OAR 333-061) have recently been revised as a result of new EPA regulations (Ground Water Rule, Long Term 2 Enhanced Surface Treatment Rule and Stage 2 Disinfectants and Disinfection Byproducts Rule) and various house keeping revisions and corrections. The sections that specifically address Groundwater Under the Direct Influence (-0032 (7)) and Natural Filtration (0032 (8)) have also been modified. When the proposed rule revisions have been finalized later this year, OAR rule references will need to be modified to reflect the changes. Information regarding the proposed rule changes is available on our web site at http://www.oregon.gov/DHS/ph/dwp/proposed_rules.shtml (see <http://www.oregon.gov/DHS/ph/dwp/docs/pwsrules/ProposedRulesDraft.pdf> for a copy of the proposed rule).

Task 1.H – Cost for Municipal-Type ASR Source Water Treatment Systems

Page 2, Second bullet

GWUDI - Required treatment includes filtration and disinfection. Potentially eligible for up to 2-log removal credits for *Giardia* and *Cryptosporidium*, if criteria for natural filtration are met.

Page 3, First Paragraph

If natural filtration criteria for 2-log removal for cryptosporidium and giardia are met for water categorized as GWUDI, the source water must only be disinfected for 1-log inactivation of giardia.

Page 3, Third Paragraph

OAR 333-061-0032(1) requires that surface water treatment facilities remove and / or inactivate specific pathogenic microorganisms that could be present in the raw surface water, as listed in Table 2 below.

Page 4, Table 3

In addition to membrane filtration, natural (i.e. bank filtration), cartridge and bag filtration can be added as alternative filtration technologies.

Page 5, Table 5

OARs for SWTR do not specify log removal credits, using the listed treatment technologies, for viruses. If the log removal credits for viruses are listed in the table then a reference for the source of credits should be included in the memo.

Task 1.H – Assess Water Treatment Needs and Regulatory Approach

Page 1, Third Paragraph

A review of OAR 333-061-0032(7) indicates that as long as the project is designed to withdraw alluvial (i.e. , course sand, gravel, and boulders) groundwater from locations greater than 200 feet, from a surface water source, it is classified as “groundwater” and is thus not required to provide filtration or disinfection.

Page 3, Third Paragraph

Add bullet stating “Greater distances if geologic conditions or historical monitoring data indicate additional risk to the source.”

Page 5, Second Paragraph

While the DHS Drinking Water Program agrees that the proposed project is not a “Public Water System”, we would welcome further discussion regarding the Total Coliform Rule and its application in this instance as OAR 690-350-0010(6)(a) does state that “Injection source water for ASR shall comply with drinking water standards, treatment requirements, and performance standards established by the HD under OAR 333-061-0030 and 0032 (ORS 448.131 and .273) or the maximum measurable levels established by the Environmental Quality Commission under OAR 340-040 (ORS 468B.165), whichever are more stringent.”

Page 6, First Paragraph

Natural filtration credit is granted based on the results of water samples collected for Microscopic Particulate Analysis (MPA) when the MPA risk scores are all less than 20. Natural filtration must be demonstrated to achieve at least 2.0 log removal of *Giardia* and *Cryptosporidium* through the completion of a site-specific study that establishes that the local hydrogeologic setting is capable of providing the adequate log reduction in the number of particles in the *Giardia* and *Cryptosporidium* size range between the surface water and the groundwater sources. If groundwater as ASR source water is classified as GWUDI, additional MPA sampling must be conducted during implementation of the recharge project in order to assess the degree of natural filtration credit that can be obtained.

Task 1.F – Review Regulatory and Permitting

Page 5, Table 1, Column 4, Row 4

Based on OAR 0032(7) 200 ft criteria, County Line and Echo Meadows groundwater are classified as “groundwater”.

Page 5, Table 1, Column 5, Row 5

No treatment may be necessary. If points of AR water withdrawals (wells) are designed to be more than 200 feet away from injection locations, the provisions of OAR 333-061-0032(7)(a) apply which classify AR groundwater as “groundwater” and not as groundwater under the direct influence of surface water (GWUDI).

Task 1.G – Flow Regimes and Fisheries Resources – Summary of Available information

No comment