

333-061-0100

Requirements for Oregon Very Small Water Systems

This rule applies to Oregon very small water systems as defined in OAR 333-061-0020. These are public water systems which serve 4 to 14 service connections or that serve commercial or public premises which are used by 10 to 24 people at least 60 days per year. Oregon very small water systems are exempt from the requirements in OAR chapter 333 division 061 except as provided in this rule.

- (1) Water suppliers responsible for Oregon very small water systems must comply with the provisions described herein and must take all reasonable actions to ensure that these systems provide safe drinking water as specified in this rule.
 - (a) Water suppliers must provide to the Authority, upon request, access to water system facilities, records or any information that will enable the Authority to conduct an inspection, collect water samples, or assess compliance with the requirements of this rule.
 - (b) It is a violation of this rule if:
 - (A) *E. coli* bacteria are present in one sample and total coliform bacteria are present in one or more samples collected according to subsection (2)(c) of this rule, within a 30-day period;
 - (B) Nitrate exceeds 10 mg/L in any sample collected according to subsection (2)(d) of this rule;
 - (C) Water system facilities do not meet the standards specified in section (3) of this rule; or
 - (D) Monitoring is not conducted according to section (2) of this rule.
- (2) Monitoring and Reporting Requirements.
 - (a) Samples required by this section must be collected and analyses performed according to subsections OAR 333-061-0036(1)(a) and (b). Results must be reported to the Authority within 10 days of the end of the required monitoring period.
 - (b) The Authority may require additional monitoring and analysis for contaminants included in OAR 333-061-0030 and OAR 333-061-0530 to determine whether an unreasonable risk to health exists.
 - (c) Water suppliers must monitor coliform bacteria as follows:
 - (A) At water systems supplied directly by a surface water source, water suppliers must collect one sample representative of the distribution system every month.
 - (B) At water systems supplied by only groundwater sources or where finished water is purchased from another public water system, water suppliers must collect one sample representative of the distribution system every calendar quarter.
 - (C) If coliform bacteria are present in any sample collected according to paragraphs (2)(c)(A) or (B) of this rule, the water supplier must collect one repeat sample at the same or a nearby location within 10 days of the date the coliform-present result was reported by the laboratory.
 - (D) If coliform bacteria are present in any sample, and the system is not continuously disinfected, the water supplier must collect one sample from each groundwater source supplying the water system within 10 days of the date the total coliform result was reported by the laboratory.
 - (i) Additional source water samples are not required if one was collected within the previous 90 days.
 - (ii) If a total coliform-positive sample is collected according to this subsection at a water system where all the water is purchased from a wholesale water system, the water supplier for the purchasing system must notify the water

supplier for the wholesale system(s) within 24 hours of being notified of the total coliform-positive sample.

- (E) At water systems supplied by only groundwater sources, if coliform bacteria are absent in eight consecutive quarterly samples, routine monitoring may be reduced to once per year. Routine monitoring must return to quarterly if coliform bacteria are present in any sample.
- (d) At water systems supplied directly by a ground or surface water source, water suppliers must monitor for arsenic and nitrate according to this subsection. Samples must be collected at a location representative of each source after any application of treatment. At water systems exclusively purchasing from another public water system, monitoring for arsenic and nitrate is not required.
 - (A) Water suppliers must monitor arsenic at least one time, before water is used for human consumption.
 - (B) Water suppliers must monitor nitrate at least once every year.
 - (i) If nitrate exceeds 10 mg/L in any sample:
 - (I) Water suppliers must collect one confirmation sample within 30 days of notification of the initial sample results, at the same sampling point as the initial sample.
 - (II) The results of the initial and confirmation sample will be averaged to determine compliance with paragraph (1)(b)(B) of this rule. If a confirmation sample is not collected, compliance will be based on the initial sample.
 - (ii) If the concentration of nitrate is 5 mg/L or less in three consecutive annual samples, nitrate monitoring may be reduced to at least once every three years. If the concentration of nitrate later exceeds 5 mg/L in any sample, water suppliers must return to monitoring nitrate annually for at least three years.
- (3) Standards for Water System Facilities. Water suppliers must comply with the following standards:
 - (a) Only materials designed for potable water service and meeting *NSF/ANSI Standard 61: Drinking Water System Components - Health Effects* or equivalent may be used in those elements of the water system which are in contact with potable water. Only chemicals meeting *NSF/ANSI Standard 60: Drinking Water Treatment Chemicals - Health Effects* may be used for water treatment or added to the drinking water supply.
 - (b) Groundwater Sources.
 - (A) Wells must be constructed according to the general standards for the construction and maintenance of water wells in Oregon as prescribed in OAR chapter 690, divisions 200 through 220.
 - (B) Springs must be constructed to exclude surface water.
 - (c) At water systems supplied by a surface water source, water suppliers must chlorinate as specified in paragraph (3)(d)(B) of this rule, and provide treatment approved by the Authority that consists of one of the following treatment processes:
 - (A) Cartridge or bag filtration with a one-micron or less absolute rating, in which case, water suppliers must replace filters according to the manufacturer's recommended pressure differential;
 - (B) Slow sand filtration;
 - (C) Ultraviolet light (UV) disinfection; or

- (D) Another treatment technology approved by the Authority.
- (d) If *E. coli* bacteria are present in two or more samples collected according to subsection (2)(c) of this rule within a 30-day period, the water supplier must either:
 - (A) Demonstrate it has removed the source of contamination; or
 - (B) Install continuous disinfection, as specified in subsection (3)(e) of this rule.
 - (C) Water suppliers that fail to collect a sample for coliform bacteria according to paragraphs (2)(c)(C) or (D) of this rule must comply with subsection (3)(d) of this rule or paragraph (4)(a)(A) of this rule at the discretion of the Authority.
- (e) At water systems with continuous disinfection treatment:
 - (A) Disinfectants must be applied proportional to water flow; and such that samples collected according to paragraphs (2)(c)(A) or (B) of this rule are absent of coliform bacteria.
 - (B) When chlorine is used, a residual concentration of at least 0.2 mg/L must be maintained throughout the distribution system.
 - (C) UV treatment units must meet NSF Standard 55, Class A.
- (f) Finished water storage facilities must:
 - (A) Be constructed to prevent the entry of contaminants;
 - (B) Have a screened vent; and
 - (C) Have a drain and an overflow.
- (4) Public Notice.
 - (a) Water suppliers must notify all people served by the water system according to this section when any of the following situations occur.
 - (A) *E. coli* bacteria are present in one sample and total coliform bacteria are present in one or more samples collected according to subsection (2)(c) of this rule within a 30-day period. A boil water or do-not-drink advisory must be issued, as determined by the Authority.
 - (B) 10 mg/L nitrate is exceeded according to paragraph (2)(d)(B) of this rule.
 - (C) A failure of any other treatment process listed in subsection (3)(c) of this rule occurs. A boil water or do-not-drink advisory must be issued, as determined by the Authority.
 - (D) Other situations with the potential to have serious adverse effects on human health because of short-term exposure, or long-term health effects for a residential population. The appropriate notice must be issued, as determined by the Authority.
 - (b) Water suppliers must distribute notices within 24 hours of becoming aware of a situation requiring notice.
 - (c) Public notices required by this section must be:
 - (A) Delivered by hand to all residential users served by the water system; or
 - (B) Posted in a conspicuous location so that all non-residential users have access to and may readily observe the notice; and
 - (C) Written in all appropriate languages; and
 - (D) Republished every 90 days or remain posted while the situation continues.
- (5) Water suppliers must pay an annual water system fee of \$75 as described in OAR 333-061-0089.
- (6) Violations of this rule are subject to civil penalties as described in OAR 333-061-0090.

Stat. Auth.: ORS 448.131

Stats. Implemented: ORS 448.131, ORS 448.150, ORS 448.17