- WAC 246-290-638 Analytical requirements. (1) The purveyor shall ensure that only qualified persons conduct measurements for pH, temperature, turbidity, and residual disinfectant concentrations. In this section, qualified means:
 - (a) A person certified under chapter 246-292 WAC;
- (b) An analyst, with experience conducting these measurements, from the state public health laboratory or another laboratory certified by the department;
- (c) A state or local health jurisdiction professional experienced in conducting these measurements; or
- (d) For the purpose of monitoring distribution system residual disinfectant concentration only, a person designated by and under the direct supervision of a waterworks operator certified under chapter 246-292 WAC.
- (2) The purveyor shall ensure that measurements for temperature, turbidity, pH, and residual disinfectant concentration are made in accordance with "standard methods," or other EPA approved methods.
- (3) The purveyor shall ensure that samples for coliform and HPC analysis are:
- (a) Collected and transported in accordance with department-approved methods; and
- (b) Submitted to the state public health laboratory or another laboratory certified by the department to conduct the analyses.
 - (4) Turbidity monitoring.
- (a) The purveyor shall equip the system's water treatment facility laboratory with a:
 - (i) Bench model turbidimeter; and
- (ii) Continuous turbidimeter and recorder if required under WAC 246-290-664 or 246-290-694.
- (b) The purveyor shall ensure that bench model and continuous turbidimeters are:
- (i) Designed to meet the criteria in "standard methods," approved methods under 40 C.F.R. 141.74 (a)(1), or alternative testing methods under Appendix A to Subpart C of 40 C.F.R. Part 141; and
- (ii) Properly operated, calibrated, and maintained at all times in accordance with the manufacturer's recommendations.
- (c) The purveyor shall validate continuous turbidity measurements for accuracy as follows:
- (i) Calibrate turbidity equipment using a primary standard on at least a quarterly basis for instruments using an incandescent light source and on at least an annual basis for instruments using an LED or laser light source; and
- (ii) Verify continuous turbidimeter performance on a weekly basis, not on consecutive days, with grab sample measurements made using either a properly calibrated bench model turbidimeter or a secondary standard as specified by the manufacturer.
- (d) When continuous turbidity monitoring equipment fails, the purveyor shall measure turbidity on grab samples collected at least every four hours from the combined filter effluent and individual filters while the system serves water to the public and the equipment is being repaired or replaced. The purveyor shall have continuous monitoring equipment online within five working days of failure.
- (5) Purveyors shall verify instruments used for continuous monitoring of free and total chlorine residual with a grab sample measurement at least every five days, or with a protocol approved by the department as required under 40 C.F.R. 141.74 (a)(2).

(6) Purveyors monitoring for *Cryptosporidium* or *E. coli* as required under 40 C.F.R. 141.701 shall collect samples and have them analyzed under 40 C.F.R. 141.704 and 141.705.

[Statutory Authority: RCW 43.20.050, 70A.125.080, and 70A.130.010. WSR 21-23-097, § 246-290-638, filed 11/17/21, effective 1/1/22. Statutory Authority: RCW 43.20.050, 34.05.365, and 70.119A.080. WSR 19-07-063, § 246-290-638, filed 3/19/19, effective 4/19/19. Statutory Authority: RCW 43.20.050 and 70.119A.080. WSR 17-01-062, § 246-290-638, filed 12/14/16, effective 1/14/17. Statutory Authority: RCW 70.119A.180 and 43.20.050. WSR 08-03-061, § 246-290-638, filed 1/14/08, effective 2/14/08. Statutory Authority: RCW 43.20.050 (2) and (3) and 70.119A.080. WSR 03-08-037, § 246-290-638, filed 3/27/03, effective 4/27/03. Statutory Authority: RCW 43.02.050 [43.20.050]. WSR 99-07-021, § 246-290-638, filed 3/9/99, effective 4/9/99. Statutory Authority: RCW 43.20.050, § 246-290-638, filed 3/25/93, effective 4/25/93.]