WAC 246-290-630 General requirements. (1) The purveyor shall ensure that treatment is provided for surface and GWI sources consistent with the treatment technique requirements specified in Part 6 of chapter 246-290 WAC.

(2) The purveyor shall install and properly operate water treatment processes to ensure at least:
   (a) 99.9 percent (3-log) removal and/or inactivation of *Giardia lamblia* cysts;
   (b) 99.99 percent (4-log) removal and/or inactivation of viruses; and
   (c) 99 percent (2-log) removal of *Cryptosporidium* oocysts if required to filter.

(3) The purveyor shall ensure that the requirements of subsection (2) of this section are met between a point where the source water is not subject to contamination by untreated surface water and a point at or before the first consumer.

(4) The department may require higher levels of removal and/or inactivation of *Giardia lamblia* cysts, *Cryptosporidium* oocysts, and viruses than specified in subsection (2) of this section if deemed necessary to protect the health of consumers served by the system.

(5) The purveyor shall ensure that personnel operating a system subject to Part 6 of chapter 246-290 WAC meet the requirements under chapter 70.119 RCW and chapter 246-292 WAC.

(6) The purveyor of a Group A community system serving water from a surface or GWI source to the public before January 1, 1991, shall comply with applicable minimum treatment requirements. The purveyor shall meet either:
   (a) The filtration and disinfection requirements under WAC 246-290-660 and 246-290-662 respectively;
   (b) The criteria to remain unfiltered under WAC 246-290-690 and the disinfection requirements under WAC 246-290-692; or
   (c) The criteria to provide a limited alternative to filtration under WAC 246-290-691 and the disinfection requirements under WAC 246-290-692.

(7) The purveyor of a Group A noncommunity system serving water from a surface or GWI source, shall meet either:
   (a) The filtration and disinfection requirements under WAC 246-290-660 and 246-290-662, respectively; or
   (b) The criteria to provide a limited alternative to filtration under WAC 246-290-691 and the disinfection requirements under WAC 246-290-692.

(8) The purveyor of a Group A system first serving water from a surface or GWI source to the public after December 31, 1990, shall meet either:
   (a) The filtration and disinfection requirements under WAC 246-290-660 and 246-290-662, respectively; or
   (b) The criteria to provide a limited alternative to filtration under WAC 246-290-691 and the disinfection requirements under WAC 246-290-692.

(9) The purveyor of a system required to install filtration may choose to provide a limited alternative to filtration or abandon the surface or GWI source as a permanent or seasonal source and develop an alternate, department-approved source. Purveyors that develop alternate groundwater sources or purchase water from a department-approved public water system using a groundwater source shall no longer be subject to Part 6 of chapter 246-290 WAC, once the alternate source is approved by the department and is on line.
(10) A purveyor that chooses to provide a limited alternative to filtration shall submit an application to the department that contains the information necessary to determine whether the source can meet the criteria.

(11) If a limited alternative to filtration is provided, then the purveyor shall install and properly operate treatment processes to ensure greater removal and/or inactivation efficiencies of *Giardia lamblia* cysts, viruses, or other pathogenic organisms of public health concern (including *Cryptosporidium* oocysts) than would be achieved by the combination of filtration and chlorine disinfection.

(12) Systems that were required to develop a disinfection profile under 40 C.F.R. 141.172 shall provide that profile and a calculated disinfection benchmark, as described in 40 C.F.R. 141.172 (c)(2) and (3), along with other project information specified in WAC 246-290-110, when proposing any change to the disinfection treatment system. The proposal for change shall include an analysis of how the proposed change will affect the current level of disinfection. The profile must also be available for inspection during routine sanitary surveys conducted under WAC 246-290-416.

(13) Community and nontransient noncommunity systems serving less than ten thousand persons must meet the disinfection profiling and benchmarking provisions required under 40 C.F.R. 141.530 through 141.544.

(14) Systems required to develop a disinfection profile under 40 C.F.R. 141.530 shall provide that profile and a calculated disinfection benchmark, as described in 40 C.F.R. 141.543 along with other project information specified in WAC 246-290-110, when proposing any change to the disinfection treatment system. The proposal for change shall include an analysis of how the proposed change will affect the current level of disinfection. The profile must also be available for inspection during routine sanitary surveys conducted under WAC 246-290-416.

(15) A system using conventional, direct, or in-line filtration that must arrange for the conduct of a CPE, under 40 C.F.R. 141.175 (b)(4) or 40 C.F.R. 141.563, may be required to arrange for CTA. The department will determine the need for CTA on a case-by-case basis.

(16) Water systems subject to the requirements of Part 6 of this chapter must also comply with the enhanced treatment requirements for *Cryptosporidium* under 40 C.F.R. Subpart W. The requirements are in addition to the requirements of Part 6 of this chapter and include:

(a) General requirements under 40 C.F.R. 141.700;
(b) Source monitoring requirements under 40 C.F.R. 141.701-707;
(c) Disinfection profiling and benchmarking requirements under 40 C.F.R. 141.708-709;
(d) Treatment technique requirements under 40 C.F.R. 141.710-714;
(e) Requirements for microbial toolbox components under 40 C.F.R. 141.715-720; and
(f) Reporting and recordkeeping requirements under 40 C.F.R. 141.721-722.

(17) Water systems using UV reactors to obtain treatment credit for *Cryptosporidium* inactivation must:

(a) Validate the reactors using the validation testing procedures specified under 40 C.F.R. 141.720 (d)(2); or
(b) Validate the reactor under Austrian ONORM Standards or German DVGW Standards.