- WAC 246-290-690 Criteria to remain unfiltered. (1) For a system not using the "limited alternative to filtration" option to remain unfiltered, the purveyor using a surface water or GWI source shall meet the source water quality and site-specific conditions under this section, as demonstrated through monitoring conducted in accordance with WAC 246-290-694.
- (2) Source water quality conditions necessary to remain unfiltered.
 - (a) Coliform limits.
- (i) The purveyor shall ensure that representative source water samples taken before the first point of disinfection have a fecal coliform density less than or equal to 20/100 ml in ninety percent or more of all samples taken during the six previous calendar months the system served water to the public. Samples collected on days when source water turbidity exceeds 1.0 NTU shall be included when determining compliance with this requirement.
- (ii) The purveyor shall submit a written report to the department if no source fecal coliform data has been submitted for days when source turbidity exceeded 1.0 NTU. The report shall document why sample results are not available and shall be submitted with the routine monitoring reports for the month in which the sample results are not available.
 - (b) Turbidity limits.
- (i) The purveyor shall ensure that the turbidity level in representative source water samples taken before primary disinfection does not exceed 5.0 NTU.
- (ii) A system failing to meet the turbidity requirements in (b)(i) of this subsection may remain unfiltered, if:
- (A) The purveyor demonstrates to the department's satisfaction that the most recent turbidity event was caused by unusual and unpredictable circumstances; and
- (B) Including the most recent turbidity event, there have not been more than:
- (I) Two turbidity events in the twelve previous calendar months the system served water to the public; or
- (II) Five turbidity events in the one-hundred-twenty previous calendar months the system served water to the public.
- (iii) The purveyor of a system experiencing a turbidity event shall submit a written report to the department documenting why the turbidity event(s) occurred. The purveyor shall submit the report with the routine monitoring reports for the month in which the turbidity event(s) occurred.
- (iv) The purveyor of a system with alternate, department-approved sources or sufficient treated water storage may avoid a turbidity event by implementing operational adjustments to prevent water with a turbidity exceeding 5.0 NTU from being delivered to consumers.
- (v) When an alternate source or treated water storage is used during periods when the turbidity of the surface or GWI source exceeds 5.0 NTU, the purveyor shall not put the surface or GWI source back online, until the source water turbidity is 5.0 NTU or less.
 - (3) Site-specific conditions to remain unfiltered.
 - (a) Level of inactivation.
- (i) The purveyor shall ensure that the *Giardia lamblia* cyst and virus inactivation levels required under WAC 246-290-692(1) are met in at least eleven of the twelve previous calendar months that the system served water to the public.

- (ii) A system failing to meet the inactivation requirements during two of the twelve previous calendar months that the system served water to the public may remain unfiltered, if the purveyor demonstrates to the department's satisfaction that at least one of the failures was caused by unusual and unpredictable circumstances.
- (iii) To make a demonstration, the purveyor shall submit to the department a written report documenting the reasons for the failure. The purveyor shall submit the report with the routine monitoring reports for the month in which the failure occurred.
 - (b) Redundant disinfection components or automatic shutoff.

The purveyor shall ensure that the requirement for redundant disinfection system components or automatic shutoff of water to the distribution system under WAC 246-290-692(3) is met at all times the system serves water to the public.

- (c) Disinfectant residual entering the distribution system.
- (i) The purveyor shall ensure that the requirement for having a residual entering the distribution system under WAC 246-290-692(4) is met at all times the system serves water to the public.
- (ii) A system failing to meet the disinfection requirement under (c)(i) of this subsection may remain unfiltered, if the purveyor demonstrates to the department's satisfaction that the failure was caused by unusual and unpredictable circumstances.
- (iii) To make a demonstration, the purveyor shall submit to the department a written report documenting the reasons for the failure. The purveyor shall submit the report with the routine monitoring reports for the month in which the failure occurred.
 - (d) Disinfectant residuals within the distribution system.
- (i) The purveyor shall ensure that the requirement for maintaining a residual within the distribution system under WAC 246-290-692(5) is met on an ongoing basis.
- (ii) A system failing to meet the disinfection requirements under (d)(i) of this subsection may remain unfiltered, if the purveyor demonstrates to the department's satisfaction that the failure was caused by something other than a deficiency in source water treatment.
- (iii) To make a demonstration, the purveyor shall submit to the department a written report documenting the reasons for the failure. The purveyor shall submit the report with the routine monitoring reports for the month in which the failure occurred.
 - (e) Watershed control.
- (i) The purveyor shall develop and implement a department-approved watershed control program.
- (ii) The purveyor shall monitor, limit, and control all facilities and activities in the watershed affecting source quality to preclude degradation of the physical, chemical, microbiological (including viral contamination and contamination by *Cryptosporidium* oocysts), and radiological quality of the source. The purveyor shall demonstrate, through ownership and/or written agreements acceptable to the department, control of all human activities that may adversely impact source quality.
- (iii) At a minimum, the purveyor's watershed control program shall:
 - (A) Characterize the watershed hydrology and land ownership;
- (B) Identify watershed characteristics and activities that may adversely affect source water quality; and
- (C) Monitor the occurrence of activities that may adversely affect source water quality.

- (iv) If the department determines significant changes have occurred in the watershed, the purveyor shall submit, within ninety days of notification, an updated watershed control program to the department for review and approval.
- (v) The department may require an unfiltered system to conduct additional monitoring to demonstrate the adequacy of the watershed control program.
- (vi) A purveyor shall be considered out of compliance when failing to:
 - (A) Have a department-approved watershed control program;
- (B) Implement the watershed control program to the satisfaction of the department; or
 - (C) Conduct additional monitoring as directed by the department.
 - (f) On-site inspections.
- (i) The department shall conduct on-site inspections to assess watershed control and disinfection treatment.
- (ii) The department shall conduct annual inspections unless more frequent inspections are deemed necessary to protect the health of consumers served by the system.
- (iii) For a system to remain unfiltered, the on-site inspection shall indicate to the department's satisfaction that the watershed control program and disinfection treatment comply with (e) of this subsection and WAC 246-290-692, respectively.
- (iv) The purveyor with unsatisfactory on-site inspection results shall take action as directed by the department in accordance with a department-established schedule.
 - (g) Waterborne disease outbreak.
- (i) To remain unfiltered, a system shall not have been identified by the department as the cause of a waterborne disease outbreak attributable to a failure in treatment of the surface or GWI source.
- (ii) The purveyor of a system identified by the department as the cause of a waterborne disease outbreak may remain unfiltered, if the purveyor demonstrates to the department's satisfaction that system facilities and/or operations have been sufficiently modified to prevent another waterborne disease outbreak.
 - (h) E. coli MCL.
- (i) For a system to remain unfiltered, the purveyor shall ensure that the MCL for $E.\ coli$ under WAC 246-290-310 is met in at least eleven of the twelve previous calendar months the system served water to the public.
- (ii) A system failing to meet the criteria in (i) of this subsection, may remain unfiltered, if the purveyor demonstrates to the department's satisfaction that the $E.\ coli$ MCL violations were not caused by a deficiency in source water treatment.
- (iii) The department shall determine the adequacy of source water treatment based on results of total coliform monitoring at the entry to the distribution system in accordance with WAC 246-290-694(3).
- (i) Disinfectant residuals MRDL and disinfection byproducts MCLs Monitoring and compliance.
- For a system to remain unfiltered, the purveyor shall comply with the monitoring and MCL requirements under WAC 246-290-300(6) and 246-290-310(5) and (6), respectively.
 - (j) Laboratory services.
- (i) For a system to remain unfiltered, the purveyor shall retain the services of the public health laboratory or another laboratory certified by the department to analyze samples for total and fecal coliform. Laboratory services shall be available on an as needed ba-

sis, seven days a week, including holidays. The purveyor shall identify in the annual comprehensive report required under WAC 246-290-696 the certified laboratory providing these services.

(ii) The department may waive this requirement, if the purveyor demonstrates to the department's satisfaction that an alternate, department-approved source is used when the turbidity of the surface or GWI source exceeds 1.0 NTU.

[Statutory Authority: RCW 43.20.050 and 70.119A.080. WSR 17-01-062, § 246-290-690, filed 12/14/16, effective 1/14/17. Statutory Authority: RCW 70.119A.180 and 43.20.050. WSR 08-03-061, § 246-290-690, 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, § 246-290-690, filed 3/27/03, effective 4/27/03. Statutory Authority: RCW 43.02.050 [43.20.050]. WSR 99-07-021, § 246-290-690, filed 3/9/99, effective 4/9/99. Statutory Authority: RCW 43.20.050. WSR 93-08-011 (Order 352B), § 246-290-690, filed 3/25/93, effective 4/25/93.]