

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-001 Purpose and scope. (1) The purpose of ~~((these rules))~~ this chapter is to ~~((define basic regulatory requirements to))~~ protect the health of consumers using Group B public drinking water supplies. ~~((These rules are specifically designed to ensure the provision of high quality drinking water in a reliable manner and in a quantity suitable for intended use.))~~ This chapter establishes standards for proper design and construction.

(2) ~~((The rules set forth are adopted under chapter 43.20 RCW and owners of Group B public water systems shall be responsible for ensuring compliance with these rules.))~~ A local board of health may adopt rules under RCW 70.05.060 or 70.46.060 that are no less stringent than this chapter. Local board of health rules may include, but are not limited to:

- (a) System operations and maintenance;
- (b) Ongoing water quality and water use monitoring;
- (c) Reporting of water quality and water use monitoring data to the local health jurisdiction;
- (d) Water system inspections or sanitary surveys;
- (e) Public notification in addition to the minimum requirements under WAC 246-291-360;
- (f) Requirements that apply at the time of a property transfer;
- (g) Requirements for building permit applicants that detail what constitutes evidence of an adequate water supply as required for permitting decisions; and
- (h) Regulation of Group B systems with two or fewer service connections.

(3) This chapter is adopted under chapter 43.20 RCW. A purveyor of a Group B system shall comply with this chapter and rules adopted by a local board of health under RCW 70.05.060 or 70.46.060.

- (4) Other statutes relating to this chapter are:
- ~~((RCW 43.20B.020, Fees for services--Department of health and department of social and health services;~~
 - ~~(b))~~ Chapter 43.70 RCW, Department of health;
 - ~~((c) Chapter 70.05 RCW, Local health departments, boards, officers--Regulations;~~
 - ~~(d))~~ (b) Chapter 70.116 RCW, Public Water System Coordination Act of 1977; and
 - ~~((e))~~ (c) Chapter 70.119A RCW, Public water systems--Penalties and compliance.

~~((3) Prior to expanding a Group B public water system to a Group A public water system, the entire system shall be brought into compliance with chapter 246-290 WAC.))~~

AMENDATORY SECTION (Amending WSR 95-20-078, filed 10/4/95, effective 11/4/95)

WAC 246-291-010 Definitions, abbreviations, and acronyms.

((Abbreviations:

~~CSE~~ — comprehensive system evaluation;

~~GWI~~ — ground water under the direct influence of surface water;

~~m~~ — meter;

~~MCL~~ — maximum contaminant level;

~~mg/L~~ — milligrams per liter;

~~ml~~ — milliliter;

~~mm~~ — millimeter;

~~NTU~~ — nephelometric turbidity unit;

~~psi~~ — pounds per square inch;

~~umhos/cm~~ — micromhos per centimeter;

~~VOC~~ — volatile organic chemical;

~~WFI~~ — water facilities inventory form; and

~~WHPA~~ — wellhead protection area.

~~"Authorized agent"~~ means any person who:

~~Makes decisions regarding the operation and management of a public water system whether or not he or she is engaged in the physical operation of the system;~~

~~Makes decisions whether to improve, expand, purchase, or sell the system; or~~

~~Has discretion over the finances of the system.~~

~~"Coliform sample"~~ means a sample of water collected from the distribution system at or after the first service and analyzed for coliform presence in compliance with this chapter.

~~"Comprehensive system evaluation (CSE)"~~ means a review, inspection and assessment of a public water system, including, but not limited to: Source; facilities; equipment; operation and administration; maintenance; records; planning documents and schedules; and monitoring, for the purpose of ensuring that safe and adequate drinking water is provided.

~~"Confirmation"~~ means to demonstrate the results of a sample to be precise by analyzing a repeat sample. Confirmation occurs when analysis results fall within plus or minus thirty percent of the original sample.)) The definitions in this section apply throughout this chapter unless the context clearly indicates otherwise.

(1) "Acute" means posing an immediate risk to human health.

(2) "APWA/WASHDOT" means American Public Works Association/Washington state department of transportation.

(3) "AWWA" means American Water Works Association.

(4) "Board" means the Washington state board of health.

(5) "Certified laboratory (lab)" means an analytical lab

meeting certification requirements under chapter 246-390 WAC that has received an official scope of accreditation from ecology for one or more drinking water analytical parameters.

(6) "Coliform bacteria" means a group of rod-shaped bacteria found in the vertebrate gastrointestinal tract. The presence of coliform bacteria in water is an indicator of possible fecal contamination.

(7) "Contaminant" means a substance present in drinking water which may adversely affect the health of the consumer or the aesthetic qualities of the water.

(8) "Critical water supply service area" means a geographical area that is characterized by a proliferation of small, inadequate water systems, or by water supply problems which threaten the present or future water quality or reliability of service, as developed under chapter 246-293 WAC.

(9) "Cross-connection" means ((a physical arrangement connecting a public water system, directly or indirectly, with anything other than another potable water system, and capable of contaminating the public water system)) an actual or potential physical connection between a public water system or a consumer's water system and any source of nonpotable liquid, solid, or gas that could contaminate the potable water supply by backflow.

(10) "Cross-connection control plan" means a document that identifies the procedures the purveyor implements to protect the public water system from contamination from cross-connections.

(11) "Department" means the Washington state department of health ((or health officer as identified in a joint plan of operation in accordance with WAC 246-291-030(1))).

(12) "Disinfection" means the use of chlorine or other agent or process the department approves for killing or inactivating microbiological organisms, including pathogenic and indicator organisms.

(13) "Distribution system" means ((that portion)) all piping components of a public water ((supply)) system ((which stores, transmits, pumps, and distributes water to consumers)) that serve to convey water from transmission mains linked to source storage and treatment facilities to the consumer, excluding individual services.

(14) "Drilled well" means a well where the well hole is excavated by mechanical means such as rotary, cable tool, or auger drilling equipment.

(15) " Dwelling unit" means a structure, or unit within a structure, with independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation. A dwelling unit includes, but is not limited to:

(a) Single-family residence; or

(b) Each unit of a multiplex or apartment building.

(16) "Ecology" means the Washington state department of ecology.

(17) "Equalizing storage" means the volume of storage needed to supplement supply to consumers when the peak hourly demand

exceeds the total source pumping capacity.

(18) **"Expanding public water system"** means a public water system installing additions, extensions, changes, or alterations to their existing source, transmission, storage, or distribution facilities (~~(which)~~) that will enable the system to increase in size its existing service area (~~(and/)~~) or its number of approved service connections.

(19) **"Fire flow"** means the maximum rate and duration of water flow needed to (~~(fight)~~) suppress a fire(~~(s)~~) under WAC 246-293-640 or (~~(adopted city, town, or county)~~) as required under local fire protection authority standards.

(20) **"Generator disconnect switch"** means an electrical (~~(circuit arranged to allow connection of a generator to the power supply for the pumping equipment while prohibiting)~~) device that physically prevents electrical current from flowing back into the main service line.

~~(("Ground water under the direct influence of surface water (GWI)" means any water beneath the surface of the ground, which the department determines has the following characteristics:~~

~~Significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as *Giardia lamblia* *Cryptosporidium*; or~~

~~Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH closely correlating to climatological or surface water conditions.)~~

(21) **"Group A public water system"** is defined and referenced under WAC 246-290-020.

(22) **"Group B water system or Group B system"** means a public water system that is not a Group A public water system. A public water system is classified as a Group B system if it serves fewer than fifteen service connections, and:

~~(Constructed to serve less than fifteen residential services regardless of the number of people; or~~

~~Constructed to serve an average nonresidential population of less than twenty-five per day for sixty or more days within a calendar year; or~~

~~Any number of people for less than sixty days within a calendar year.)~~ (a) Fewer than an average of twenty-five people per day for sixty or more days per year; or

(b) An average of twenty-five or more people per day for fewer than sixty days per year provided the system does not serve one thousand or more people for two or more consecutive days.

(23) **"Guideline"** means a department document assisting (~~(the owner)~~) a purveyor in meeting a rule requirement.

(24) **"GWI (groundwater under the direct influence of surface water)"** means any water beneath the surface of the ground, that the department determines has the following characteristics:

(a) Occurrence of insects or other macroorganisms, algae, or larger-diameter pathogens such as *Giardia lamblia* or *Cryptosporidium*;

(b) Experiences significant and relatively rapid shifts in

water characteristics such as turbidity, temperature, conductivity, or pH closely correlating to weather or surface water conditions; and

(c) Located in a situation where natural conditions cannot prevent the introduction of surface water pathogens into the source at the point of withdrawal.

(25) "Health officer" means the health officer of the ((city,)) county, city-county health department or district, or an authorized representative.

(26) "Hydraulic analysis" means the study of the water ((system network evaluating water flows within the distribution system under worst case conditions such as, peak hourly design flow plus fire flow, when required. Hydraulic analysis includes consideration of all factors affecting system energy losses)) system's distribution main and storage network to determine present or future adequacy for providing service to consumers within the established design parameters for the system under peak flow conditions, including fire flow. The analysis establishes the adequacy of design for distribution system components such as piping, elevated storage, booster stations or similar facilities used to pump and convey water to consumers.

(27) "Local board of health" means the governing body of a county health department under chapter 70.05 RCW, or a health district under chapter 70.46 RCW.

(28) "Local health jurisdiction" means a county health department under chapter 70.05 RCW, city-county health department under chapter 70.08 RCW, or health district under chapter 70.46 RCW.

(29) "MCL (maximum contaminant level ((MCL)))" means the maximum permissible level of a contaminant in water ((delivered)) that a purveyor delivers to any public water system user that is measured at the source prior to entry to the distribution system.

((("Maximum contaminant level violation" means a confirmed measurement above the MCL and for a duration of time, where applicable.

"Owner" means any agency, subdivision of the state, municipal corporation, firm, company, mutual or cooperative association, institution, partnership, or person or any other entity that holds as property, a public water system.)) (30) "MDD (maximum day demand)" means the highest actual or estimated quantity of water that is, or is expected to be, used over a twenty-four hour period, excluding unusual events or emergencies.

(31) "mg/L" means milligrams per liter (1mg/L = 1 part per million).

(32) "ml" means milliliter.

(33) "mm" means millimeter.

(34) "Nonresidential out-building" means a structure that is not a dwelling unit and is:

(a) Sited on the same property and associated with a dwelling unit;

(b) Under the same ownership as the associated dwelling unit; and

(c) Not used by employees of the property owner.

A nonresidential out-building does not count as a separate service connection from the associated single-family dwelling unit.

(35) "Nonresidential service connection" means a service connection to a water system in which people do not live. It is not a dwelling unit or recreational connection as defined in this section. These connections include, but are not limited to:

(a) Commercial;

(b) Industrial;

(c) Municipal property; or

(d) Each unit of a hotel or motel.

(36) "PHD (peak hourly ((design flow) demand)" means the maximum rate of water use, excluding fire flow(, which) that can ((be expected to ever)) occur within a defined service area over a continuous sixty minute time period. PHD is typically expressed in gallons per minute (gpm).

(37) "Potable" means water suitable for drinking by the public.

((("Pressure zone" means a distribution system whereby an established minimum and maximum pressure range can be maintained without the use of ancillary control equipment (e.g., booster pumps, pressure reducing valves, etc.))-)) (38) "Potential GWI" means a source identified by the department or local health jurisdiction as possibly under the direct influence of surface water and includes, but is not limited to a:

(a) Well that has a screened interval fifty feet or less from the ground surface at the wellhead and is located within two hundred feet of a freshwater surface water body;

(b) Ranney well;

(c) Infiltration gallery; or

(d) Spring.

(39) "Primary ((standards)) MCL" means a standard((s)) based on chronic, nonacute, or acute human health effects.

(40) "psi" means pounds per square inch.

(41) "Public water system" means any system providing water for human consumption through pipes or other constructed conveyances, excluding a system serving only one single-family residence and a system with four ((or)) and fewer connections all of which serve residences on the same farm(, providing piped water for human consumption, including)). The term includes:

(a) Collection, treatment, storage, or distribution facilities under the control of a purveyor and used primarily in connection with ((such)) the system((.

"Repeat sample" means a sample collected to confirm the results of a previous analysis.)); and

(b) Collection, or pretreatment storage facilities not under the control of a purveyor, and primarily used in connection with the system.

(42) "Purveyor" means an agency, subdivision of the state, municipal corporation, firm, company, mutual or cooperative association, institution, partnership, or person or other entity owning or operating a public water system, or applying to create or

expand an existing public water system. Purveyor also means the authorized agents of these entities.

(43) "Recreational connection" means a water service connection to a campsite or recreational vehicle site.

(44) "Same farm" means a parcel of land or series of parcels ((which)) that are connected by covenants and devoted to the production of livestock or agricultural commodities for commercial purposes and does not qualify as a ((Group A)) public water system.

(45) "Sanitary survey" means a review, inspection, and assessment of a public water system by the department or local health jurisdiction.

(46) "SCA (sanitary control area)" is defined in WAC 246-291-125(5).

(47) "SMA (satellite system management agency)" means a person or entity approved by the secretary to own or operate more than one public water system on a regional or county-wide basis. The water systems owned or operated by an SMA do not need to be physically connected.

(48) "Secondary ((standards)) MCL" means a standard((s)) based on factors other than health effects ((such as taste and odor)).

((~~"Sell" means to bill separately for drinking water or to include drinking water as part of an itemized listing in a bill delivered to customers, where the amount billed is an increase over what the purveyor pays for water. The presence of centralized source or individual service meters does not affect whether the water is being sold.~~))

(49) "Service connection" means a connection to a public water system designed to provide potable water. Each dwelling unit, recreational connection, and nonresidential connection as defined in this section shall count as a service connection.

((~~"Special purpose sample" means a sample collected for reasons other than the monitoring compliance specified in this chapter.~~))

~~"Standard methods" means the 18th edition of the book, titled *Standard Methods for the Examination of Water and Waste Water*, jointly published by the American Public Health Association, American Water Works Association (AWWA), and Water Pollution Control Federation. This book is available through public libraries or may be ordered from AWWA, 6666 West Quincy Avenue, Denver, Colorado 80235.)~~

(50) "Simple system" means a public water system consisting of a well and only one pressure zone after an above-ground pressure tank, storage tank, or reservoir. A system with one pressure zone is one that an established minimum and maximum pressure range can be maintained without the use of ancillary control equipment, such as booster pumps, or pressure reducing valves.

A Group B system is not considered a simple system if it contains any of the following:

- (a) Treatment for a primary contaminant;
- (b) A variable speed pump;
- (c) Fire flow;
- (d) Special hydraulic considerations; or

(e) Atmospheric storage where the bottom elevation of the storage reservoir is below ground surface.

(51) "State board of health" and "board" means the board created by RCW 43.20.030.

(52) "Substantial contact" means the elevated degree that a material in contact with water may release leachable contaminants into the water so that levels of these contaminants may be unacceptable with respect to either public health or aesthetic concerns. It should take into consideration the total material/water interface area of exposure, volume of water exposed, length of time water is in contact with the material, and level of public health risk. Examples of water system components that would be considered to be in substantial contact with drinking water are storage tank interiors or liners, distribution piping, secondary treatment exchange or absorption media, or other similar components that would have high potential for contacting the water. Materials associated with components such as valves, meters, pipe fittings, debris screens, gaskets, or similar appurtenances would not be considered to be in substantial contact.

(53) "Surface water" means a body of water open to the atmosphere and subject to surface runoff, including captured rainfall.

~~((**"Volatile organic chemical (VOC)"** means a manufactured carbon-based chemical that vaporizes quickly at standard pressure and temperature.~~

~~**"Water facilities inventory form (WFI)"** means the department form summarizing each public water system's characteristics.~~

~~**"Well field"** means a group of wells one system owns or controls which:~~

~~Draw from the same aquifer or aquifers as determined by comparable inorganic chemical analysis; and~~

~~Discharge water through a common pipe and the common pipe shall allow for collection of a single sample before the first distribution system connection.)) (54) **"Water right"** means a right to make a beneficial use of public waters of the state.~~

(55) **"Well site inspection"** means a physical inspection of the area near the existing or proposed well location, and completion of a department or health officer-approved form that identifies the suitability of the site for a public water supply well.

AMENDATORY SECTION (Amending WSR 95-20-078, filed 10/4/95, effective 11/4/95)

WAC 246-291-020 Applicability. (1) The rules of this chapter shall apply to all Group B (~~public water~~) systems except those systems meeting all of the following (~~conditions~~):

(a) Consists only of distribution (~~and~~) or storage facilities and does not have any source or treatment facilities;

(b) Obtains all water from, but is not owned by, a public water system where the rules of this chapter or chapter 246-290 WAC apply;

(c) Does not sell water directly to any person; and

(d) Is not a passenger-conveying carrier in interstate commerce (~~;~~ and

~~(e) The distribution system is regulated under the Uniform Plumbing Code, chapter 51-26 WAC.~~

~~Examples of systems which shall not be exempt include, but are not limited to, water districts, public utility districts, cooperatives, mutuals and associations which serve residential short plats and subdivisions).~~

(2) A purveyor of a Group B ((public water)) system((s)) meeting all of the conditions under subsection (1) of this section may be required by the department or health officer to comply with ((such provisions)) the requirements of this chapter ((as are necessary to resolve a public health concern if the department determines)) if a public health threat exists or is suspected.

(3) A proposed system shall be classified as a Group A system, and shall meet requirements of chapter 246-290 WAC if:

(a) The system design proposes to supply water to another public water system; and

(b) The combined number of service connections or total population served meets the definition of a Group A system.

AMENDATORY SECTION (Amending WSR 95-20-078, filed 10/4/95, effective 11/4/95)

WAC 246-291-025 Bottled water and ice-making facilities. (1) ~~((Any))~~ Water sources used ((for bottling, regardless of size,)) by facilities that produce bottled water or ice shall meet the ((minimum)) requirements ((in accordance with)) under chapter 246-290 WAC.

(2) In addition to the requirements ~~((imposed by the department))~~ under chapter 246-290 WAC, the processing of bottled water and ice is regulated by the state department of agriculture under chapter 69.07 RCW, and the United States Food and Drug Administration under 21 CFR 165.110.

AMENDATORY SECTION (Amending WSR 95-20-078, filed 10/4/95, effective 11/4/95)

WAC 246-291-030 General administration. (1) Responsibility for administering this chapter shall remain with the department

unless:

(a) A local board of health adopts rules or regulations to implement this chapter that are at least as stringent as this chapter; or

(b) The department and the health officer for each local health jurisdiction ~~((may develop))~~ have developed a joint plan of ~~((operation))~~ responsibility (JPR). ~~((Responsibility for administering these rules shall remain with the department of health unless there is a joint plan of operation in place. This plan shall:~~

~~((a))~~ A JPR between the department and local health jurisdiction is an agreement that:

~~((i))~~ Lists the roles and responsibilities ~~((and specifically designate those systems))~~ for ~~((which))~~ the department and ~~((local))~~ health officer ~~((have primary responsibility;~~

~~((b))~~ Provide a list of water system requirements and procedures which the local board of health may waive for systems within its jurisdiction;

~~((c))~~ to review and approve water system designs;

~~((ii))~~ Provides for a level of water system supervision necessary to effectively achieve ~~((listed))~~ the responsibilities in the JPR;

~~((d))~~ ~~Be~~ ~~((iii))~~ Is signed by an authorized representative from the department and ~~((the))~~ local health department or district; and

~~((e))~~ ~~Be~~ ~~((iv))~~ Is reviewed at least once every five years, and updated as needed.

~~((Wherever in these rules the term "department" is used, the term "health officer" may be substituted based on the terms of this joint plan of operation.))~~

(2) The local board of health may adopt rules ~~((pursuant to))~~ under RCW 70.05.060 ~~((governing public water systems for which the health officer has assumed primary responsibility. Adopted local board of health rules))~~ and 70.46.060 that shall be:

(a) No less stringent, and may be more stringent than this chapter; and

(b) Revised, if necessary, within twelve months after the effective date of ~~((revised state board of health rules))~~ this chapter. During this time period, existing local rules shall remain in effect, except ~~((provisions of the revised state board of health rules which))~~ requirements of this chapter that are more stringent than the local board of health rules ~~((shall apply))~~.

(3) ~~((For residential systems with only two services, the department may eliminate any or all requirements of these rules.~~

(4) For any residential system, the department may eliminate all ongoing requirements of these rules, except for recordkeeping and reporting requirements under WAC 246-291-260, provided the system has been granted an initial approval or an existing system has been categorized as fully approved/adequate or provisionally approved.

(5) The health officer may approve design reports and water system plans which reflect good engineering practice such as those found in the department guideline titled *Group B Water System*

~~Approval, for those public water systems where the health officer has assumed primary responsibility.~~

~~(6) The health officer may allow system owners to substitute results of a calculated fixed radius method and a ten year time of travel criteria instead of using the six hundred foot radius prescribed in WAC 246-291-100 (2)(f) and 246-291-110 (3)(f).~~

~~(7)) Group B systems that serve two or fewer service connections are exempt from this chapter, except:~~

~~(a) For systems located in counties with requirements adopted by the local board of health under subsection (2) of this section that apply to Group B systems that serve two or fewer service connections; or~~

~~(b) For systems with a service connection to facilities or services permitted under one of the following state rules:~~

~~(i) Food service establishments under chapter 246-215 WAC;~~

~~(ii) Private psychiatric and alcoholism hospitals under chapter 246-322 WAC;~~

~~(iii) Private alcohol and chemical dependency hospitals under chapter 246-324 WAC;~~

~~(iv) Residential treatment facilities under chapter 246-337 WAC;~~

~~(v) Temporary worker housing under chapters 246-358, 246-359, and 296-307 WAC;~~

~~(vi) Cherry harvest camps under chapter 246-361 WAC;~~

~~(vii) Transient accommodations under chapter 246-360 WAC;~~

~~(viii) Boarding homes licensing rules under chapter 388-78A WAC;~~

~~(ix) Nursing homes under chapter 388-97 WAC;~~

~~(x) Minimum licensing requirements for childcare centers under chapter 170-295 WAC; and~~

~~(xi) Food inspection under chapter 16-165 WAC.~~

~~(4) The department may develop ~~((and distribute))~~ guidelines to clarify sections of ~~((the rules))~~ this chapter as needed.~~

~~((8) Fees may be charged by the department of health as authorized in RCW 43.20B.020 and by local health agencies as authorized in RCW 70.05.060 to recover all or a portion of the costs incurred in administering these rules.))~~

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-050 Enforcement. (1) When a system is out of compliance with ~~((these rules))~~ this chapter, the department may initiate ~~((appropriate))~~ enforcement actions ~~((, regardless of any prior approvals issued by the department, including, but not limited to:~~

~~(a) Issuance of a compliance schedule;~~

~~(b) Issuance of departmental orders requiring submission of~~

~~water system plans, design reports, and construction report forms;~~
~~(c) Issuance of departmental orders requiring specific actions or ceasing unacceptable activities within a designated time period;~~
~~(d) Issuance of departmental orders to stop work and/or refrain from using any public water system or improvements thereto until all written approvals required by statute or rule are obtained;~~
~~(e) Imposition of civil penalties as authorized under chapter 70.119A RCW or local authority where applicable; and~~
~~(f) Legal action by the attorney general or local prosecutor.~~
~~(2) When enforcing the MCLs under this chapter, the department shall enforce compliance with the primary MCLs as its first priority)) under RCW 70.119A.030 and 70.119A.040.~~
(2) A health officer may initiate enforcement actions as authorized under RCW 70.46.060 and 70.119A.050, and as authorized under local board of health rules.

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-060 ((Waivers-)) Variances. (1) ~~((The state board of health or the local health officer in those counties having a joint plan of operation, may grant waivers of the requirements of this chapter, provided that procedures used are consistent with WAC 246-290-060 (5)(b) and in the case where a local health officer is authorized to grant the waiver, procedures used shall be approved by the department of health as part of the joint plan of operation.))~~ A health officer or local board of health, may grant a variance to the standards of this chapter, provided that:

(a) The local health jurisdiction has accepted primary responsibility for administering this chapter under WAC 246-291-030;

(b) The health officer conditions the approval of a variance to include water quality treatment, monitoring, maintenance and oversight, as necessary, to ensure public health protection; and

(c) The health officer obtains sufficient evidence from a purveyor that a proposed Group B system will deliver drinking water that does not exceed a primary MCL under WAC 246-291-170, and will provide an adequate supply of water under WAC 246-291-125(4).

~~(2) ((Consideration by the board or local health officer of requests for waivers))~~ A request for a variance shall not be considered an adjudicative proceeding((s)) as ((that term is)) defined in chapter 34.05 RCW.

~~(3) ((Statements and written material regarding the request may be presented to the board or local health officer wherein the application will be considered.))~~ A variance shall not be granted for the residential population standard for each dwelling unit under WAC 246-291-200(2).

~~(4) ((The board or local health officer may grant a waiver if it determines the water system is unable to comply with the requirements and granting of the waiver will not result in an unreasonable risk to the health of consumers. No waivers may be granted for exceedance of a primary MCL.~~

~~(5)) A ((waiver)) variance granted under this section shall lapse ((two)) five years from the date of issuance ((unless the water system project has been completed or an extension is granted)) for incomplete Group B system construction projects.~~

NEW SECTION

WAC 246-291-090 Public Water System Coordination Act and satellite management. (1) A purveyor shall comply with the applicable coordinated water system plan created under chapter 246-293 WAC if a proposed Group B system is located within the boundaries of a critical water supply service area.

(2) The department or health officer shall not approve a design for a new Group B system within the boundaries of a critical water supply service area, unless the local health jurisdiction determines that existing purveyors are unable to provide the service in a timely and reasonable manner, as defined by the applicable coordinated water system plan. If such a determination is made, the department or health officer shall require the new Group B system to be constructed in accordance with the construction standards and specifications in the coordinated water system plan approved for the area.

(3) A new Group B system must comply with SMA requirements under RCW 70.116.134.

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-120 Design report approval. (1) A purveyor shall submit a design report~~((s shall be submitted))~~ to the department ~~((for))~~ or local health jurisdiction that meets the requirements of this chapter, and receive written department or health officer approval prior to:

(a) Installation of ((any)) a new public water system~~((, or water system extension or improvement with the following exceptions:~~

~~(a) Installation of valves, fittings, and meters));~~

~~(b) ((Repair of a system component or replacement with a similar component of the same capacity; and)) Providing service to~~

more than the approved number of service connections; or

~~(c) ((Maintenance or painting of surfaces not contacting potable water.))~~ Use of a new or modified water source.

~~(2) ((Design reports submitted for approval by owners of systems required to have a water system plan, will not be considered for approval unless there is a current approved water system plan and the plan adequately addresses the project.))~~ An existing Group B system that has not received a prior approval from the department or local health jurisdiction may obtain design approval by fulfilling the requirements of this chapter.

~~(3) A design report~~~~((s shall include))~~ must contain, at a minimum, all of the following information:

~~(a) ((Alternatives. Verify contacts with other water system owners as applicable in accordance with WAC 246-291-140(2);))~~ Documentation that creation of the Group B system does not conflict with any adopted applicable coordinated water system plan under chapter 246-293 WAC;

~~(b) ((Legal considerations. Identify legal aspects such as ownership, right of way, sanitary control area, and restrictive covenants;))~~ Documentation that a purveyor complies with the SMA requirements under RCW 70.116.134;

~~(c) ((Engineering calculations. Describe how the project complies with the design considerations;))~~ Groundwater source approval under WAC 246-291-125;

~~(d) ((Drawings. Include detailed drawings of each project component;))~~ Water system planning requirements under WAC 246-291-140(1) and a draft of the informational notice to the property title as required under WAC 246-291-140(2);

~~(e) A water system design, under WAC 246-291-200 including, but not limited to:~~

~~(i) Drawings of each project component, including location, orientation, and size;~~

~~(ii) Material specifications~~~~((List detailed material specifications))~~ for each project component;

~~((f))~~ ~~(iii) Construction specifications~~~~((List detailed construction specifications))~~ and assembly techniques ~~((for carrying out the project));~~

~~((g))~~ ~~(iv) Testing~~~~((Identify testing))~~ criteria and procedures ~~((for each applicable portion of the project)); and~~

~~((h))~~ ~~(v) Specific disinfection~~~~((Identify specific disinfection))~~ procedures ~~((which must conform with American Water Works Association standards or other standards acceptable by the department;~~

~~(i) Inspection. Identify provisions for inspection of the installation of each project component. See WAC 246-291-040 for construction reporting requirements; and~~

~~(j) Change orders. All changes except for minor field revisions must be submitted to and approved by the department in writing.~~

~~(4) Approval of design reports shall be in effect for two years unless the department determines a need to withdraw the approval. An extension of the approval may be obtained by submitting a status report and a written schedule for completion.~~

~~Extensions may be subject to additional terms and conditions imposed by the department)) that comply with requirements under WAC 246-291-220.~~

(4) The design report shall be prepared by a professional engineer that meets the following requirements:

(a) Is licensed in the state of Washington under chapter 196-23 WAC;

(b) Has specific expertise regarding design, operation, and maintenance of public water systems; and

(c) All documents must bear the engineer's seal and signature as required under chapter 196-23 WAC.

(5) Exceptions to the professional engineer requirements are limited to Group B systems that:

(a) Meet the definition of a simple system;

(b) Serve fewer than ten service connections; and

(c) Are located in counties in which the local health jurisdiction has accepted primary responsibility under a JPR, or the local board of health has adopted rules under WAC 246-291-030, that provide for an exception to the professional engineering requirement.

(6) A purveyor shall submit a "Construction Completion Report for Public Water System Projects" to the department or health officer on a form approved by the department or health officer within sixty days of completion of construction, and before use of any approved facility. The form must:

(a) Be signed by a professional engineer, unless the project is approved as a simple system accepted under conditions in subsection (5) of this section;

(b) Include a statement that the project is constructed and completed according to the design report requirements under this chapter; and

(c) Include a statement that the installation, testing, and disinfection of the system are completed according to this chapter.

(7) A purveyor shall meet the requirements of this section before the use of the water system for any completed project.

(8) The department or health officer may approve design reports that reflect good engineering practice such as those found in the department guideline titled *Group B Water System Design Guidelines*.

(9) A purveyor shall complete construction of work described in an approved design report within five years of the date of departmental or local health jurisdiction design report approval, unless the department or local health jurisdiction determines a need to withdraw the approval sooner.

(10) All design changes, except for minor field revisions, must be submitted to and approved by the department or health officer in writing.

NEW SECTION

WAC 246-291-125 Groundwater source approval. (1) General requirements.

(a) A purveyor shall obtain drinking water from the highest quality source feasible.

(b) All permanent sources submitted for design approval must be physically connected to the distribution system and be either:

(i) A drilled well constructed in accordance with chapter 173-160 WAC; or

(ii) An intertie with an approved public water system operating in compliance with chapter 246-290 or this chapter.

(c) All sources submitted to the department or local health jurisdiction for design approval must conform to water quality standards under WAC 246-291-170. The source:

(i) Must not contain coliform bacteria;

(ii) Must not exceed a primary MCL under WAC 246-291-170; and

(iii) If directed by the department or local health officer to conduct additional monitoring as required under WAC 246-291-170(8), the source must not exceed a primary MCL under WAC 246-290-310.

(d) The department or health officer shall not approve a design for a new or modified source that:

(i) Meets the definition of GWI; or

(ii) Meets the definition of a potential GWI, until a hydrogeologic evaluation is completed by a licensed hydrogeologist or engineer that determines the source is not GWI and is not in hydraulic continuity with surface water. All testing and evaluation required to make a GWI determination must be completed before the department or local health officer will review the Group B design report.

(e) Before developing or modifying a source, a purveyor shall contact the department or local health jurisdiction to identify any additional requirements.

(2) A purveyor shall not use a new source or modify an existing source as a drinking water supply without first obtaining department or health officer design approval.

(3) To obtain source approval for the use of a new or modified source, a purveyor shall provide a copy of the following to the department or health officer:

(a) The water right permit, if required, for the source, quantity, type, and place of use;

(b) A copy of the water well report (drilling log);

(c) A copy of the well site inspection report form completed by the department or local health jurisdiction, or designee;

(d) A map showing the project location and vicinity including a six hundred foot radius around the well site designating the preliminary short-term groundwater contribution area and a one hundred foot sanitary control area, as required in subsection (5) of this section;

(e) A map depicting topography, distances to the well from existing property lines, buildings, potential sources of contamination within the six hundred foot radius around the well, and any other natural or man-made features affecting the quality or

quantity of water;

(f) Copies of the recorded legal documents for the sanitary control area;

(g) Results from an initial analysis from a certified lab of raw source water quality, including the following analyses at a minimum:

(i) Coliform bacteria;

(ii) Inorganic chemical and physical parameters under WAC 246-291-170, Tables 2, 3, and 4;

(iii) Analysis for other contaminants, as directed by the department or health officer in areas where it determines that other contamination may be present.

(h) A purveyor shall provide well source development data establishing source capacity to the department or health officer. Data must include:

(i) Static water level;

(ii) Sustainable yield;

(iii) Drawdown;

(iv) Recovery rate; and

(v) Duration of pumping.

(i) The department or health officer may require additional pump testing in locations where there are water resource limitations or known seasonal groundwater fluctuations that may affect future reliability.

(4) Source capacity.

(a) Sources for Group B systems with service connections to dwelling units must be pump tested to determine whether the well(s) and aquifer are capable of reliably supplying water meeting the minimum requirements in Table 1 of this section.

(b) Sources for Group B systems with nonresidential service connections, or those that have a mixture of residential and nonresidential service connections, shall be pump tested to determine whether the well(s) and aquifer are capable of supplying water at the rate required to provide the water volume determined by the system design.

(c) Where a locally adopted watershed plan or ecology watershed rule establishes a higher MDD water supply requirement, the higher value must be used to assess the adequacy of the source of supply.

(d) Water use limitations established in locally adopted watershed plans or ecology watershed rules must not affect the sizing or design of a Group B system.

Table 1
Minimum Source Capacity and Minimum MDD

| County | Gallons per day per dwelling unit |
|--|--|
| Clallam, Clark, Cowlitz, Grays Harbor, Island, Jefferson, King, Kitsap, Lewis, Mason, Pacific, Pierce, San Juan, Skamania, Skagit, Snohomish, Thurston, Wahkiakum, and Whatcom | 750 |

| County | Gallons per day per dwelling unit |
|--|-----------------------------------|
| Adams, Asotin, Benton, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman, and Yakima | 1,250 |

(5) Sanitary control area (SCA).

(a) A purveyor shall establish an SCA around all sources to protect the source from existing and potential sources of contamination.

(b) The SCA must have a minimum radius of one hundred feet, unless engineering justification submitted by a licensed professional engineer to the department or health officer supports a smaller area. The justification must address geological and hydrogeological data, well construction details, and other relevant factors necessary to ensure adequate sanitary control.

(c) The department or health officer may require a larger SCA if geological and hydrological data support such a decision.

(d) A purveyor shall own the SCA, or the purveyor shall have the right to exercise complete sanitary control of the land through other legal provisions.

(e) A purveyor shall record a restrictive covenant to the title of each property that comprises the SCA to protect the SCA in perpetuity.

AMENDATORY SECTION (Amending WSR 95-20-078, filed 10/4/95, effective 11/4/95)

WAC 246-291-140 Water system planning and disclosure requirements. (~~((1) Water system plan:~~

~~(a) The water system plan shall:~~

~~(i) Identify present and future needs;~~

~~(ii) Set forth means for meeting those needs; and~~

~~(iii) Do so in a manner consistent with other relevant plans and local, state, and federal laws.~~

~~(b) Owners of the following categories of systems shall ensure the development and submittal of a water system plan for review and approval by the department:~~

~~(i) All systems as required by chapter 70.116 RCW the Public Water System Coordination Act of 1977 and chapter 246-293 WAC;~~

~~(ii) Any system experiencing problems related to planning, operation, and/or management as determined by the department and outlined in a departmental order;~~

~~(iii) Any proposed or expanding system as determined by the department; and~~

~~(iv) Any system which installs treatment, other than simple chlorination disinfection equipment, after the effective date of~~

~~these regulations.~~

~~(c) A department guideline titled *Group B Water System Approval* is available from the department to assist owners in developing this plan. Design reports may be combined with a water system plan. To the extent to which they are applicable, the water system plan shall address the following elements:~~

- ~~(i) Description of system management and ownership;~~
- ~~(ii) Description of appropriate water quality monitoring and reporting requirements;~~
- ~~(iii) Service area and identification of existing and proposed major facilities;~~
- ~~(iv) Maximum number of connections the system can safely and reliably support;~~
- ~~(v) Water conservation program. Systems which are developed or expanded after the effective date of this rule shall develop a conservation program;~~
- ~~(vi) Relationship and compatibility with other plans;~~
- ~~(vii) Description of water source(s) including compliance with applicable source approval and protection under WAC 246-291-100 and 246-291-110;~~
- ~~(viii) Source protection (including required protective covenants, wellhead protection and watershed control where applicable); and~~
- ~~(ix) Financial viability.~~

~~(2) Prior to developing a new water system, the developer of the proposed system shall follow the steps listed below as applicable:~~

~~(a) The developer shall ensure that the new system is owned or operated by a department-approved satellite management agency (SMA), or if a department-approved SMA is not available, that the proposed new system has a department-approved water system plan in accordance with WAC 246-291-140;~~

~~(b) Department approval of any system created after July 22, 1995, that is not owned or operated by a SMA shall be conditioned upon future management or ownership by a SMA, if such management or ownership can be made with reasonable economy and efficiency, or upon periodic review of the system's operational history to determine its ability to meet the department's financial viability and other operating requirements.~~

~~(c) If the proposed system is located within the boundaries of a critical water supply service area, the ability to develop an independent system shall be governed by the provisions of the Public Water System Coordination Act, chapter 70.116 RCW and chapter 246-293 WAC, and will be subject to the jurisdictional coordinated water system plan; or~~

~~(d) If the proposed system consists of a surface water or GWI source, ensure that the proposed system will be owned and operated by a department-approved satellite system management agency.~~

~~(3) For systems approved after the effective date of these rules, a summary of the following shall be recorded, by the system owner, on all affected property titles as a means of providing information about the system to property owners, lending institutions, and other potentially affected parties:~~

~~(a) Notice that the property is served by a public water system;~~

~~(b) The initial water system plan, planning section of the Group B Water System Guideline, or equivalent information from other documents as determined by the department;~~

~~(c) Notice that the system is subject to state and local rules;~~

~~(d) Recommendation to check with the jurisdictional regulatory authority on the current system status;~~

~~(e) Notice that fees may be assessed by the department for providing information on a public water system;~~

~~(f) Requirement for satellite management, if applicable;~~

~~(g) Notice of any waivers granted to the system; and~~

~~(h) Other information required by the department.)) (1) A purveyor creating a new or expanding Group B system shall complete the following water system planning elements and submit to the approving authority as a part of the design report, under WAC 246-291-120:~~

(a) Description of system management and ownership;

(b) Service area and identification of existing and proposed major facilities;

(c) Maximum number of service connections the system can safely and reliably supply;

(d) Relationship and compatibility with other locally adopted plans;

(e) Description of how much revenue is needed to operate and maintain the system, and a plan to meet revenue needs;

(f) A cross-connection control plan if any existing cross-connections are identified;

(g) Identify security measures to be provided to assure the water source, water storage facilities, and the distribution system are under the strict control of the purveyor;

(h) For sources with a well pump test showing a yield of 5.0 gpm or less, the design shall include a contingency plan describing short- and long-term measures to restore an adequate water supply in the event the well(s) cannot provide an adequate supply of water.

(i) Identify the procedures that will be implemented to notify consumers of any sample results that indicate the presence of *E. coli*, nitrate at a concentration of greater than 10 ppm, or when a circumstance exists that poses a threat of acute contamination.

(2) A purveyor shall record the following information on each customer's property title:

(a) The name of the water system and its public water system identification number;

(b) System owner name and contact information;

(c) The following statement: This property is served by a Group B public water system that has a design approval under chapter 246-291 WAC;

(d) The parcel numbers to be served by the Group B system;

(e) If the system is designed and constructed to provide fire suppression;

(f) A copy of any variances granted under WAC 246-291-060 to the Group B system;

(g) If service connections are metered or not;

(h) Indication if the purveyor intends to monitor the system for contaminants, how often monitoring will occur, and how the users of the system will be notified of the results;

(i) Contact information for the approving authority (department or local health jurisdiction);

(j) Source treatment provided for any contaminants that exceed secondary MCLs;

(k) How to obtain a copy of the systems' water users agreement, if one exists; and

(l) Other information, as directed by the department or local health officer.

NEW SECTION

WAC 246-291-170 Water quality requirements. (1) General water quality sampling requirements. All samples collected under this section must be:

(a) Collected without chlorine, ultraviolet light, ozone, or other disinfectant in use to treat the source;

(b) Collected after the well has been pumped sufficiently long to allow for collection of a representative sample of the aquifer; and

(c) Analyzed by a certified lab.

(2) To meet the requirements for design approval for a new or modified source under WAC 246-291-125, a purveyor shall obtain, at a minimum, the results from two raw source water samples analyzed for coliform bacteria, that are determined to be satisfactory.

(3) When an analysis documents a presence of coliform bacteria, a purveyor shall do the following in order:

(a) Request that the certified lab analyze the coliform bacteria sample for *E. coli*;

(b) Disinfect the source using procedures under WAC 246-291-220; and

(c) Collect two repeat samples under the conditions outlined in subsection (1) of this section.

(4) The department or health officer shall not approve the proposed source if a repeat coliform bacteria sample, collected under subsection (3) of this section, contains a presence of coliform bacteria.

(5) To meet the requirements for design approval for a new or modified source under WAC 246-291-125, a purveyor shall obtain, at a minimum, the results from one raw source water sample analyzed for the inorganic chemical and physical parameters in Tables 2, 3, and 4 of this section.

(6) When an analysis exceeds a primary MCL in Table 2 of this

section, a purveyor shall collect a confirmation raw source water sample and have the sample analyzed for each parameter that exceeded the MCL in the initial sample. If the average concentration from all samples exceeds a primary MCL in Table 2 of this section, the department or health officer shall not approve the proposed source.

(7) When an analysis exceeds a secondary MCL in Tables 3 and 4 of this section, a purveyor shall include treatment in the system design under WAC 246-291-120 so that the drinking water does not exceed the secondary MCL when delivered to consumers.

(8) In areas known, or suspected to have contaminants of public health concern, the department or health officer may require a purveyor to submit water samples to test for other contaminants not in Tables 2, 3, or 4 of this section. When any analysis exceeds a primary MCL under WAC 246-290-310, a purveyor shall collect a confirmation sample and have the sample analyzed for each parameter that exceeded the MCL in the initial sample. If the average concentration from all samples exceeds a primary MCL, the department or health officer shall not approve the proposed source.

**Table 2
Primary Inorganic Chemical Contaminants**

| Substance | MCLs (mg/L) |
|----------------|-------------|
| Antimony (Sb) | 0.006 |
| Arsenic (As) | 0.010 |
| Barium (Ba) | 2.0 |
| Beryllium (Be) | 0.004 |
| Cadmium (Cd) | 0.005 |
| Chromium (Cr) | 0.1 |
| Cyanide (HCN) | 0.2 |
| Fluoride (F) | 4.0 |
| Mercury (Hg) | 0.002 |
| Nickel (Ni) | 0.1 |
| Nitrate (as N) | 10.0 |
| Nitrite (as N) | 1.0 |
| Selenium (Se) | 0.05 |
| Thallium (Tl) | 0.002 |

**Table 3
Secondary Inorganic Chemical Contaminants**

| Substance | MCLs (mg/L) |
|----------------------------|-------------|
| Chloride (Cl) | 250.0 |
| Fluoride (F) | 2.0 |
| Iron (Fe) | 0.3 |
| Manganese (Mn) | 0.05 |
| Silver (Ag) | 0.1 |
| Sulfate (SO ₄) | 250.0 |

| Substance | MCLs (mg/L) |
|-----------|-------------|
| Zinc (Zn) | 5.0 |

Table 4
Secondary Physical Characteristics

| Substance | MCLs |
|------------------------------|----------------|
| Color | 15 color units |
| Specific conductivity | 700 umhos/cm |
| Total dissolved solids (TDS) | 500 mg/L |

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-200 Design standards. (1) ~~((Water system owners))~~ A purveyor of a new or expanding Group B system shall ((ensure that)) use good engineering practices ((are used in the design of all public water systems. Information on what is good engineering practice is available from)) in the hydraulic analysis and design of a public water system, such as those found in the department ((in the)) guideline titled *Group B Water System ((Approval)) Design Guidelines.*

(2) ~~((In addition, owners of new or expanding public water systems shall ensure the following factors are addressed:~~

~~(a) Local conditions, plans and/or regulations;~~

~~(b) Public Water System Coordination Act considerations where appropriate; and~~

~~(c) Other requirements as determined by the department.~~

~~(3) Any pipe, pipe fittings, solder, or flux used in the installation or repair of a public water system shall be lead-free. Within the context of this section, lead-free shall mean having no more than eight percent lead in pipes and pipe fittings, and no more than two-tenths of one percent lead in solder and flux. This prohibition shall not apply to leaded joints necessary for the repair of cast iron pipes.)~~ A purveyor of a new or expanding Group B system designed to supply one or more dwelling units shall:

(a) Calculate residential population by using an estimate that shall be no less than the office of financial management estimates of average household size under RCW 43.62.020 for the county in which the water system is proposed; and

(b) Apply full-time occupancy for each dwelling unit.

(3) A purveyor shall demonstrate that the source(s) of supply shall be capable of supplying at least the MDD to consumers through pipes or other constructed conveyances:

(a) For systems with service connections to dwelling units, the MDD used in the design of a Group B system must not be less

than as shown in WAC 246-291-125, Table 1 for the specific county in which the system is proposed.

(b) Where a locally adopted watershed plan or ecology watershed rule adopted under Title 173 WAC establishes a higher MDD per dwelling unit water supply requirement, the purveyor shall apply the higher value to the design of the water system.

(c) For systems with nonresidential service connections, or a mixture of residential and nonresidential connections, the engineer or system designer shall refer to Table 1 for the residential MDD, and shall estimate the MDD for the nonresidential MDD.

(d) Water use limitations established in locally adopted watershed plans or ecology watershed rules under Title 173 WAC shall not affect the sizing or design of a Group B system.

(4) A new or expanding Group B system must be designed with the capacity to deliver the PHD at 30 psi (210 kPa) under PHD flow conditions measured at all existing and proposed service meters, if installed, or along property lines adjacent to distribution mains if no meter exists under the following conditions:

(a) When all equalizing storage has been depleted, if the system is designed to supply PHD in part with equalizing storage; and

(b) At the source "pump-on" pressure setting if the system is designed to supply PHD without any equalizing storage.

(5) If the design PHD exceeds the total source pumping capacity, then sufficient equalizing storage must be provided.

(6) The total volume of atmospheric and pressurized storage must not exceed the volume equivalent of five days of the average day demand of the water system. Average day demand is measured as the total volume of water produced from all sources of supply over a calendar year divided by three hundred sixty-five.

(7) The minimum design flow and duration required for fire flow and fire suppression storage, if provided, shall be determined by the local fire protection authority, or as required under chapter 246-293 WAC for systems within the boundaries of a designated critical water supply service area. Fire suppression storage is the volume of stored water available during fire suppression activities to satisfy minimum pressure requirements under WAC 246-290-230.

(8) In the design of a new or expanding Group B system that does not have to comply with minimum fire flow standards, a purveyor shall coordinate with the local fire protection authority to ensure that any hydrants on the system do not create adverse pressure problems within the water system as a result of expected fire suppression activities.

(9) If fire flow is provided, the distribution system must be designed to provide the MDD for the entire system and the required fire flow at a pressure of at least 20 psi (140 kPa) at all points throughout the distribution system under the condition where the designed volume of fire suppression and equalizing storage has been depleted.

(10) The Group B system design must contain a water meter that measures the water use of the entire system (totalizing source meter) and a source sample tap.

(11) A purveyor shall not establish a connection between a Group B system and a source of water not approved by the department or health officer.

(12) A purveyor shall equip a new or expanding Group B system with a generator disconnect switch.

(13) A purveyor shall ensure that generally accepted industry standards and practices are used in the elimination or control of all cross-connections, such as:

(a) Manual of Cross-Connection Control, published by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California (USC Manual), Tenth Edition, October 2009; and

(b) Cross-Connection Control Manual, Accepted Procedure and Practice, published by the Pacific Northwest Section of the American Water Works Association, 1995.

(14) A pitless unit, pitless adaptor, and vented sanitary well cap must conform with the product, material, installation, and testing standards established by the Water Systems Council (WSC) for PAS-97(04).

NEW SECTION

WAC 246-291-205 Drinking water materials and additives. (1) In the design of a new or expanding Group B water system, all materials shall conform to the ANSI/NSF Standard 61 if in substantial contact with potable water supplies.

(2) Any chemicals specified for use in the design of secondary treatment, with the exception of commercially retailed hypochlorite compounds such as unscented Clorox or Purex, shall comply with ANSI/NSF Standard 60. The design dosage shall not exceed the maximum application dosage recommended for the product as certified by the ANSI/NSF Standard 60.

(3) The specification for pipes, pipe fittings, fittings, fixtures, solder, or flux used in the design of a new or expanding Group B system shall be lead-free. Within the context of this section, lead-free shall mean:

(a) No more than eight percent lead in pipes and pipe fittings;

(b) No more than two-tenths of one percent lead in solder and flux; and

(c) Fittings and fixtures that are in compliance with standards established in accordance with 42 U.S.C. 300g-6(e).

WAC 246-291-210 Distribution systems. (1) ~~((All distribution reservoirs shall have suitable watertight roofs or covers preventing))~~ Finished water storage facilities shall be designed to:

(a) Prevent entry by birds, animals, insects, ((and)) excessive dust ((and shall include appropriate provisions to safeguard against trespass, vandalism, and sabotage. All new distribution reservoirs shall be able to be drained by gravity to daylight)), and other potential sources of external contamination;

(b) Include provisions for:

(i) A weathertight roof;

(ii) A lockable access hatch;

(iii) A screened roof vent;

(iv) An overflow pipe with atmospheric discharge or other suitable means to prevent a cross-connection;

(v) Sample tap;

(vi) A drain to daylight, or an approved alternative that is adequate to protect against cross-connection;

(vii) A provision for tank isolation in order to perform maintenance procedures; and

(viii) Other appurtenances appropriate to the protection of stored water from contamination;

(c) Be above normal ground surface if possible; and

(d) If the bottom elevation of a storage reservoir must be below normal ground surface:

(i) The storage reservoir must be placed above the groundwater table; and

(ii) The top of a partially buried storage structure must not be less than two feet above normal ground surface.

(2) ~~((The owner shall ensure that the distribution system is sized and evaluated using a hydraulic analysis acceptable to the department.~~

~~(3))~~ Systems designed to ~~((provide))~~ supply fire hydrants shall have a minimum distribution main size of six inches (150 mm) supplying each hydrant.

~~((4) New water systems or additions to existing systems shall provide a design quantity of water at a positive pressure of at least thirty psi throughout the system under peak hourly design flow conditions measured at any customer's water meter or at the property line if no meter exists.~~

~~(5) If fire flow is to be provided, the distribution system shall be designed to provide the required fire flow at a pressure of at least twenty psi throughout the system during peak hourly design flow conditions.~~

~~(6))~~ (3) A purveyor shall not design a Group B system with individual service booster pumps needed ((for individual services shall be subject to review and approval by the department. Installation shall be made under the supervision of the owner to ensure cross-connection control requirements are met. Installation of booster pumps which are an integral part of the

~~system design shall be inspected and certified by the engineer)) to comply with the requirements under WAC 246-291-200.~~

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-220 Disinfection of system facilities. No portion of a ~~((public water))~~ Group B system containing potable water shall be put into service~~((, nor, if service has been terminated, shall service resume,))~~ until the facility has been effectively disinfected~~((.~~ ~~The procedure used for disinfection shall conform to the American Water Works Association standards or other standards acceptable to the department. In cases of new construction, drinking water shall not be furnished to the consumer until satisfactory bacteriological samples have been analyzed by a laboratory certified by the state))~~ as follows:

(1) The water system disinfection procedures to be referenced in the design under WAC 246-291-120 shall conform to the AWWA, APWA/WASHDOT, or other standards acceptable to the department or local health jurisdiction:

(a) Refer to AWWA C651-05 or APWA/WASHDOT (2010 revision) for water main disinfection;

(b) Refer to AWWA C652-02 for reservoir disinfection;

(c) Refer to AWWA C654-03 for well disinfection.

(2) A purveyor constructing new system facilities shall not supply drinking water to the consumer until coliform bacteria samples have been analyzed by a certified lab and have been determined to be satisfactory. All samples collected must be:

(a) Collected when residual disinfectant is no longer present, and no other treatment is being used;

(b) Collected after the well has been pumped sufficiently long to allow for collection of a representative sample of the aquifer; and

(c) Analyzed by a certified lab.

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-250 Continuity of service. ~~((1) No owner shall transfer system ownership without providing written notice to the department and all customers. Notification shall include a time schedule for transferring responsibilities, identification of the new owner, and under what authority the new ownership will operate. If the system is a corporation, identification of the registered~~

~~agent shall also be provided.~~

~~(2) The system transferring ownership shall ensure all health-related standards are met during transfer and shall inform and train the new owner regarding operation of the system.~~

~~(3) No owner shall end utility operations without providing written notice to all customers and the department at least one year prior to termination of service.~~

~~(4) Nothing in these rules shall prohibit an owner from terminating service to a specific customer if the customer fails to pay normal fees for service in a timely manner or if the customer allows or installs an unauthorized service connection to the system.~~

~~(5) Where this section may be in conflict with existing state statutes, the more stringent statute shall prevail.) A purveyor shall notify consumers in writing at least one year prior to ending water system operation. A purveyor shall provide a copy of the written notice to the approving authority (department or local health jurisdiction).~~

NEW SECTION

WAC 246-291-280 Adequacy of existing systems. (1) If a purveyor of an existing Group B system without design approval cannot attain full compliance with the requirements of this chapter, the health officer or local permitting authority may recognize the adequacy of the existing water system to serve existing connections without the purveyor obtaining a design approval of the water system.

(2) Without design approval meeting all requirements under this chapter, a Group B system shall not be considered adequate to satisfy a request:

(a) To a new service connection needing potable water; and

(b) For a new use of an existing service connection if that use is determined by the local permitting authority to require approved public water supply.

(3) Without design approval meeting all the requirements under this chapter, a Group B system created before the effective date of this chapter may be considered adequate for service to existing or replacement structures needing potable water.

(4) The minimum standards for determining the adequacy of the existing system without design approval shall be a water system that:

(a) Has a source that meets well construction standards, under chapter 173-160 WAC;

(b) Does not have a source of contamination in the sanitary control area that could cause a public health risk, under WAC 246-291-125(5), documented in a well site inspection;

(c) Meets all water quality standards under WAC 246-291-170;
and

(d) Is capable of maintaining a minimum 20 psi at all points throughout the distribution system during PHD conditions.

(5) The minimum requirements in this section do not limit the health officer or local permitting authority from adding requirements for determining the adequacy of an existing unapproved water system.

(6) A Group B system with a departmental or local health officer design approval prior to the effective date of this rule, may serve new service connections even if all the requirements of this chapter are not met, provided that:

(a) The expanded use is consistent with the Group B system design approval;

(b) The expanded use does not exceed the number of approved service connections; and

(c) The purveyor complies with all locally adopted requirements.

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-300 General monitoring requirements. (1) The department or health officer may require ~~((additional))~~ water quality monitoring when it determines ~~((contamination is present or))~~ a significant public health risk exists or is suspected ~~((in the water system or when it determines))~~ due to contamination in the water system, or if the source may be vulnerable to contamination.

~~(2) ((Special purpose samples shall not count toward fulfillment of the monitoring requirements of this chapter.~~

~~(3) The owner shall ensure samples required by this chapter are collected, transported, and submitted for analysis according to department-approved methods. The analyses shall be performed by the state public health laboratory or another laboratory certified by the department. Qualified water utility, certified laboratory, or department personnel may conduct measurements for pH, temperature, residual disinfectant concentration and turbidity as required by this chapter, provided, these measurements are made in accordance with *Standard Methods*.~~

~~(4) When one Group B water system sells water to another public water system and the cumulative number of services or population served meet the definition of a Group A system, the owner of the selling system shall ensure that source monitoring is conducted in accordance with the minimum requirements for Group A community systems found in chapter 246-290 WAC.)~~ The department may develop guidance for recommended Group B system operations and maintenance, design and operation of treatment, disinfection and testing after repairs or replacement, water quality monitoring, water use monitoring, and periodic inspections.

AMENDATORY SECTION (Amending WSR 94-14-002, filed 6/22/94, effective 7/23/94)

WAC 246-291-360 Public notification. (~~((1) Responsibility. Within fourteen days of the violation, the owner shall ensure that water system users are notified when the system has a violation of a primary MCL.~~

~~(2) Content. Notices shall provide:~~

~~(a) A clear, concise, and simple explanation of the violation;~~
~~(b) Discussion of potential adverse health effects and any segments of the population that may be at higher risk;~~

~~(c) A list of steps the owner has taken or is planning to take to remedy the situation;~~

~~(d) A list of steps the consumer should take, including advice on seeking an alternative water supply if necessary;~~

~~(e) The owner's and manager's names and phone numbers; and~~

~~(f) When appropriate, notices shall be multilingual.~~

~~The owner may provide additional information to further explain the situation.~~

~~(3) Distribution. Owners shall ensure that a written notice is distributed to all water system users within fourteen days of a violation unless otherwise directed by the department.~~

~~(4) When circumstances dictate the owner give a broader or more immediate notice to protect public health, the department may require notification by whatever means necessary.~~

~~(5) When a system is granted a waiver for reduction of water quality standards, the owner shall ensure that customers are notified. The owner shall provide a notice annually and send a copy to the department.)~~

(1) A purveyor shall notify all system consumers in writing within twenty-four hours when the purveyor obtains:

(a) A certified lab analysis from a water quality sample that indicates a presence of *E. coli*;

(b) A certified lab analysis from a water quality sample that indicates nitrate at a concentration above 10 ppm; or

(c) When circumstances pose a threat of acute contamination.

(2) The notification must include the following information:

(a) A description of the problem;

(b) What the purveyor is doing to resolve the problem;

(c) What the consumers should do to protect their health, including whether alternative water supplies should be used;

(d) When the purveyor expects the problem to be resolved; and

(e) Water system contact information, including address, phone number, and if available, an e-mail address.

(3) Sample public notification templates may be available from the internet on the department's web site.

REPEALER

The following sections of the Washington Administrative Code are repealed:

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|-----------------|---|
| WAC 246-291-040 | Requirements for engineers. |
| WAC 246-291-100 | Ground water source approval and protection. |
| WAC 246-291-110 | Surface water and GWI source approval and protection. |
| WAC 246-291-130 | Existing system approval. |
| WAC 246-291-230 | Treatment design and operations. |
| WAC 246-291-240 | Reliability. |
| WAC 246-291-260 | Recordkeeping and reporting. |
| WAC 246-291-270 | Cross-connection control. |
| WAC 246-291-310 | General follow-up. |
| WAC 246-291-320 | Bacteriological. |
| WAC 246-291-330 | Inorganic chemical and physical. |
| WAC 246-291-340 | Turbidity. |
| WAC 246-291-350 | Other substances. |
| WAC 246-291-370 | Severability. |