

**Title**

This chapter shall be called the “Cowlitz County Group B Public Water System Code.”

**Purpose and authority.**

- 1) The purpose of these rules 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.
- 2) Pursuant to the authority of the Cowlitz County Board of Health as authorized by RCW 70.05.060 and WAC 246-291 these regulations are hereby established as minimum requirements for Cowlitz County Group B Public Water Systems.
- 3) It is the specific intent of this rule to place the obligation of complying with its requirements upon the owner or operator of any public water system within its scope.

**Administration**

- 1) The Cowlitz County Board of Health does hereby adopt as minimum requirements the rules and regulations set forth in Chapter 246-291 WAC as now codified or hereafter amended.
- 2) The Cowlitz County Health Department is authorized to adopt additional policies, standards, or take such other action deemed necessary to carry out the purposes of this chapter.
- 3) The Cowlitz County Board of Health may charge fees for the administration of this chapter pursuant to RCW 70.05.060.

**Definitions**

In addition to those contained in Chapter 246-291 WAC, for the purpose of this chapter, the following definitions shall also apply:

- 1) “Cowlitz County Health Officer” means the Health Officer of Cowlitz County; or an authorized representative.
- 2) “Highly Susceptible Population” means persons who are more likely than other people in the general population to experience waterborne disease because they are immunocompromised, preschool age children, or older adults
- 3) “Significant Deficiency” means a deficiency that has the potential for causing a health risk to consumers.
- 4) “Water System Modification Report” means a detailed report submitted to get approval for changes to a public water system. The report at a minimum will include discussion of reason for changes, schematics, specification sheets on any water system equipment including certifications, water samples and other information needed by the Cowlitz County Health Department to determine compliance with WAC 246-291 and this code.

**Access**

The Cowlitz County Health Department may inspect during reasonable times with prior notice given any Group B public water system for the purpose of conducting a sanitary water system survey, determining

conformance with construction documents, investigating a complaint about a system, collecting water samples, or carrying out any other activity necessary for the protection of the public health of the users of the water system.

### **Design Report Approval**

1. Design Reports shall be submitted in accordance with WAC 246-291-120. Water systems shall be designed by a person who has specific expertise regarding design, operation, and maintenance of public water systems.
2. Treatment systems required per WAC 246-291-170(6) shall be designed by a person with expertise in designing water treatment systems.
3. Design Reports shall be prepared, sealed, and signed in accordance with chapter 196-23 WAC by a professional engineer with the exception for systems that submit the reports to the Cowlitz County Health Officer and meet the following:
  - a. Do not use a variable speed pump;
  - b. Do not provide fire flow;
  - c. Do not have special hydraulic considerations;
  - d. Do not have atmospheric storage in which the bottom elevation of the storage reservoir is below the ground surface; and
  - e. Serve fewer than ten service connections

### **Building Permit and Lender Adequacy Responses**

Prior to issuing an adequacy for a building permit, loan or other request for an adequacy evaluation of a Group B Water System the following is required:

- 1) A full approval of the system was previously granted; or for existing systems created prior to the development of this code an adequate determination as specified in WAC 246-291-280(2).
- 2) The system is current with required water quality monitoring.
- 3) The system has a current Cowlitz County Group B Annual Operating Permit and the system is current with all fees owed to the Health Department.
- 4) The system has had a Sanitary Survey within the last 5 years with no uncorrected Significant Deficiencies.
- 5) A copy of the water availability letter submitted to Cowlitz County Building and Planning that is signed by the water system purveyor for building permit adequacies.

### **Water Quality Monitoring**

- 1) Owners shall ensure the collection and submittal of a routine sample for coliform analysis by a certified lab at least once every twelve months from the furthest end of the distribution system or as directed by the department.
- 2) The frequency of coliform sampling may be increased by the department based on any of the following factors:
  - a) History of unsatisfactory coliform samples

- b) A well or other source that is vulnerable to contamination from surface water or potential sources of contamination within the Sanitary Control Area
  - c) Disinfection treatment required
  - d) The population served is primarily a Highly Susceptible Population (see definition)
  - e) Facility has another permit through Health Department
- 3) When coliform bacteria are present in any sample the owner shall ensure that:
- a. The sample is analyzed for fecal coliform or E. coli;
  - b. The Cowlitz County Health Officer is notified within 10 days of notification by the laboratory; and
  - c. Two repeat samples are collected within 24 hours of notification by the laboratory unless directed otherwise by the department.
  - d. Further action is taken as directed by the Cowlitz County Health Department.
- 4) When fecal coliform or E. coli are present in any sample the owner shall ensure that:
- a. The Washington State Department of Health, Cowlitz County Health Officer and all systems consumers are notified in writing within 24 hours per WAC 246-291-360.
  - b. The written notification includes the information required in WAC 246-291-360(4).
  - c. Further action is taken as directed by the Cowlitz County Health Department.
- 5) Owners shall ensure the collection and submittal of a nitrate sample analyzed by a certified lab from each source every thirty-six months. The frequency of this sampling may be decreased by the department to once every 60 months at request of the water system if there is a history of three consecutive samples below 2.0 mg/L and the system has a 100 Foot Sanitary Control Area with drilled well(s) constructed per WAC 173-160. Systems with a reduced sampling schedule will be returned to a sampling frequency of once every 36 months if any sample has a result of 2.0 mg/L or higher of nitrate.
- 6) Other ongoing sampling maybe required by the Cowlitz County Health Officer for systems with treatment for primary MCLs. Systems with elevated primary MCLs or with other known or suspected contaminants in the area may also be required by the Cowlitz County Health Officer to take periodic samples for the chemical(s) of concern as determined by the Cowlitz County Health Officer.

#### **System Operation and Maintenance**

All public water systems under the jurisdiction of the Cowlitz County Health Department shall be managed and operated in a manner consistent with the following substantive requirements.

- 1) All changes in management or ownership shall be provided to the Cowlitz County Health Officer within 30 days of the change.
- 2) The water system should work to maintain financial viability through the collection of funds sufficient to maintain and operate the water system under normal demand and reasonable emergency repair conditions.
- 3) The water system shall remain in compliance with the requirements of this chapter, all original conditions of approval, and/or subsequent approved changes to water system. Water systems

failing to maintain the conditions of approval, or having an identified uncorrected Significant Deficiency shall be deemed an inadequate water supply.

- 4) Pursuant to RCW 43.20.240 complaints regarding the operation, maintenance, water quality or water quantity shall be addressed within a reasonable time frame to address public health. The water system owner or manager shall confer with Cowlitz County Health Department to establish a timeline and plan of action to resolve complaints.
- 5) A Water System Modification Report shall be completed by the water system owner, manager, or certified operator and submitted to Cowlitz County Health Department for approval if changes are made to the water system. Changes to the system that would normally require a professional engineer during the initial design would also require a professional engineer. Exceptions to this requirement include the following:
  - a. Installation of valves, fittings, and meters;
  - b. Replacement of a system component with another component of the same capacity;
  - c. Maintenance or painting of surfaces not contacting potable water.

### **Annual Operating Permit**

All Group B water systems located in Cowlitz County shall obtain an annual operating permit from the Cowlitz County Health Department as authorized by WAC 246-291 and RCW 70.119A.130. Fees for the annual operating permit will be determined by the Cowlitz County Board of Health.

### **Sanitary Surveys**

Sanitary surveys of Group B public water systems shall be conducted on a periodic basis to ensure compliance with WAC 246-291 and this code.

### **Waivers**

- 1) Waivers to the regulations established for Cowlitz County Group B Public Water Supplies will be considered for new or existing systems where complying with the regulations is not reasonably feasible and the issuing of a waiver does not endanger the health of the users.
- 2) Any waiver issued will be in compliance with WAC 246-291-060 and 246-291-140(2)(f).
- 3) Any waiver issued will need to be approved by the Cowlitz County Health Officer.
- 4) Any treatment system proposed to justify a waiver of a primary MCL must be designed by a licensed professional engineer with expertise in design, operation, and maintenance of public water systems.
- 5) Any waiver will be conditioned with requirements for sampling and reporting to the Cowlitz County Health Department.

### **Nonresidential Water System Design Requirements**

Nonresidential buildings/operations that meet the definition of a public water system but are not regulated by WAC 246-290 or WAC 246-291 will have the following requirements except as specified below for determining adequacy for a building permit:

- 1) Water is obtained from a drilled well that complies with WAC 173-160 Well Construction Standards.
- 2) A well site location with a 100 foot radius that has no potential sources of contamination or is otherwise approved by the Cowlitz County Health Department. Protective covenants will need to be recorded to permanently protect the well.

- 3) A satisfactory coliform bacteria test obtained from the source prior to any treatment.
- 4) A satisfactory Inorganic Chemical (IOC) Test. See Table 1 and 2 at the bottom of this section for IOC Parameters. Treatment may be required for secondary MCL's should the water system be reclassified as a Group A or Group B water system at any time.
- 5) Other water quality testing as determined necessary based on known or suspected contaminants of public health concern in the area.
- 6) The water flow minimum required will be 10gpm. The gpm required may be increased or decreased based on proposed water usage. Storage will need to be installed if unable to meet the required minimum.
- 7) The water flow will be determined based on a 2 hour pump test.
- 8) Except any nonresidential water system previously regulated as a Group B system prior to January 1, 2014 requiring adequacy under the Nonresidential Water System Design Requirements in this code must meet the following:
  - a. A satisfactory IOC test per Tables 1 and 2 below. Treatment required for chemicals exceeding primary MCL's listed in Table 1 of this section. Treatment may be required for secondary MCL's should the water system be reclassified as a Group A or Group B water system at any time.
  - b. A satisfactory coliform bacteria test obtained within the last 12 months.
  - c. A satisfactory nitrate test obtained within the last 36 months.
  - d. Documentation that the water system meets minimum flow requirements either in previously approved plans or it meets a 20psi minimum pressure requirement under peak hourly design flow conditions.

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**IOC Test Parameters for Non-Residential Water System Design Requirements**

**Table 1: Primary IOC**

Substance	MCLs (mg/L)	Substance	MCLs (mg/L)
Antimony (Sb)	0.006	Fluoride (F)	4.0
Arsenic (As)	0.050	Mercury (Hg)	0.002
Barium (Ba)	2.0	Nitrate (as N)	10.0
Beryllium (Be)	0.004	Nitrite (as N)	1.0
Cadmium (Cd)	0.005	Selenium (Se)	0.05
Chromium (Cr)	0.1	Thallium (Tl)	0.002
Cyanide (HCN)	0.2		

**Table 2: Secondary IOC**

Substance	MCLs (mg/L)	Substance	MCLs (mg/L)
Chloride (Cl)	250.0	Sulfate (SO4)	250.0
Fluoride (F)	2.0	Zinc (Zn)	5.0
Iron (Fe)	0.3	Color	15 color units
Manganese (Mn)	0.05	Specific Conductivity	700 umhos/cm
Silver (Ag)	0.1	Total Dissolved Solids (TDS)	500

**RV Parks and Campgrounds**

Any recreational vehicle park or campground required to obtain an operating permit under Cowlitz County Code section 18.56 where water is available to users of the recreational vehicle park or campground shall be served by an approved Group A or Group B public water system.

**Nonpublic Water  
(RESERVED)**

**Severability**

If any provision of this chapter or its application to any person or circumstances is held invalid, the remainder of this chapter, or the application of the provision to other persons or circumstances, shall not be affected.

September 18, 2013

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