

Chapter 8.09⁷

Potable Water Source and Supply

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8.09.010 Authority

These rules and regulations are established by the Island County Board of Health pursuant to its authority under Revised Code of Washington (RCW) 70.05.060 to:

- A. Enforce through the local Health Officer, the public health statutes of the state and the rules and regulations promulgated by the State Board of Health and Department of Health;
- B. Protect the public health within the jurisdiction;

⁷ Former chapter 8.09, Sanitation Facilities for Camping Vehicles, has been recodified as part of chapter 8.04.

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- C. Enact local rules and regulations as are necessary in order to preserve, promote and improve the public health, and provide for the enforcement thereof;
- D. Provide for the control and prevention of any dangerous, contagious, or infectious disease within the jurisdiction of the local Board of Health;
- E. Provide for the prevention, control, and abatement of nuisances detrimental to the public health; and
- F. Establish fee schedules for the issuing or renewing of licenses or permits, or for other services.

These rules and regulations are further established pursuant to RCW 19.27.031, RCW 19.27.97, and RCW 58.17.118. The Island County Board of Health finds that these rules and regulations are necessary to supervise the maintenance of all health and sanitary measures for the protection of the public health; to preserve, promote, and improve the public health and to provide for the enforcement thereof; to provide for the control and prevention of dangerous, contagious, or infectious diseases; to provide for the prevention, control, and abatement of nuisances detrimental to the public health; and, to govern potable water systems. Nothing contained in these rules and regulations shall be construed to prevent the Health Officer from requiring compliance with higher standards than those contained in these rules and regulations where such higher standards are essential to maintain a safe and sanitary condition.

(Res. HD-08-90, September 18, 1990)

8.09.020 Definitions

- A. **Adequate water supply** means a water supply which is capable of supplying at least four-hundred (400) gallons of water per connection per day, and meets siting criteria established by state and local regulations.
- B. **Best management practice (BMP)** means a method, activity, maintenance procedure, or other management practice for reducing the amount of pollution entering a water body.
- C. **Board of Health** means the Board of Health of Island County pursuant to the provision of RCW 70.05.
- D. **Critical aquifer recharge areas** means areas with a critical recharge effect on aquifers used for potable water, including sole source aquifer recharge areas designated pursuant to the federal Safe Drinking Water Act.
- E. **Health Officer** means the Health Officer of Island County or his authorized representative.
- F. **Potable water** means water which is satisfactory for drinking, culinary, and domestic purposes, and meets the requirements of the State of Washington and the Board of Health.

- G. **Individual water system** means a water system serving or proposed to serve a single-family residence exclusively.
- H. **Petroleum** means crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (sixty degrees Fahrenheit and 14.7 pounds per square inch absolute). The term petroleum does not include propane or asphalt or any other petroleum product which is not liquid at standard conditions of temperature and pressure.
- I. **Public water system** means any water system, excluding a system serving only one single-family residence, providing piped water for human consumption, including any:
1. Collection, treatment, storage, or distribution facilities under control of the purveyor and used primarily in connection with such system; and
 2. Collection or pretreatment storage facilities not under control of the purveyor primarily used in connection with such system.
- J. **Subdivision** means a division of land as regulated by RCW 58.17 or Island County Code (ICC) 16.15 including subdivisions, short subdivisions, planned residential developments, creation of parcels through site plan review, and any other creation of parcels of land.
- K. **Tank** means a stationary device designed to contain an accumulation of greater than 100,000 gallons of regulated substances and constructed of non-earthen materials (e.g., concrete, steel, plastic) that provide structural support. Facilities operated by and for the armed services for military purposes by other federal authority for the national defense are excluded from the provisions of this chapter.
- L. **Transmission Facility** means any of the following together with their associated facilities: Crude or refined petroleum or liquid petroleum product transmission pipeline for the transmission of these products. Facilities operated by and for the armed services for military purposes or by other federal authority for the national defense are excluded from the provision of this chapter.
- M. **Vulnerability** means the degree to which groundwater may become contaminated based on local hydrogeologic characteristics and the contaminant loading potential.
- N. **Well log** means a record of the construction or alteration of a well which is completed and filed with the Washington State Department of Ecology in accordance with RCW 18.104.
(Res. HD-08-90, September 18, 1990; amended by Res. HD-07-91, July 1, 1991; amended by HD-04-92, April 13, 1992)

8.09.030 Scope

The provisions of this chapter constitute minimum requirements of the Island County Health Department governing potable water source and supply and protection of groundwater resources.
(Res. HD-08-90, September 18, 1990; amended by Res. HD-07-91, July 1, 1991)

8.09.040 Applicability

These regulations shall apply to all potable water supply systems proposed to be used for building permits issued for buildings in Island County and subdivisions proposed within Island County, and groundwater resource protection from potentially contaminating activities.

(Res. HD-08-90, September 18, 1990; amended by Res. HD-07-91, July 1, 1991)

8.09.050 Building Permit Requirements

Prior to issuance of a building permit to any building requiring potable water, evidence of an adequate water supply must be provided by the applicant to the Island County Building Department. Improvements or additions to buildings which will not result in an increase in the water usage of the building are not subject to provisions of these regulations. To provide evidence of an adequate water system the applicant must provide:

- A. **For a public water system**, a letter from the water purveyor stating their ability and intention to provide water for the proposed building(s) and a verification from the Island County Health Department that records indicate that water system is approved by the appropriate agency and the proposed connection(s) conforms with the approved plans; or
- B. **For an individual water system with water right permit**, a copy of the water right permit issued by the Department of Ecology (an application for a water right permit or a well log is not sufficient); or
- C. **For an individual water system not requiring a water right**, a copy of the well site approval document issued by the Island County Health Department or a well site certification performed by a Washington State Department of Ecology licensed well driller pursuant to ICC 8.09.070.B; and
 - 1. A scaled plot plan of the project site including representations of structures (both proposed and existing), roads, sewage disposal systems, property lines, surface water, underground storage tanks, other possible sources of contamination, indication of North, and other prominent features;
 - 2. A well log;
 - 3. The written results of a bailer test, or air lift test, or pump test, any of which is performed for a minimum of one (1) hour, verifying a minimum well yield of four-hundred (400) gallons per day;
 - 4. Water quality results, analyzed by a Washington State Department of Health certified laboratory verifying compliance to standards listed in Washington Administration Code (WAC) 248-54 including bacteriological, nitrate, chloride, conductivity, and such other parameters the Health Officer deems significant based upon local trends of water quality;

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5. Provision of sanitary control area pursuant to ICC 8.09.070.D; and

6. Additional information deemed necessary by the Health Officer.

(Res. HD-08-90, September 18, 1990)

8.09.060 Subdivision Requirements

A. Prior to preliminary approval of a subdivision, the applicant must provide to the Island County Planning Department the following:

1. For a public water system, an Island County Health Department or Washington State Department of Health well site approval, or a letter of commitment from the water purveyor to supply water and documentation of compliance with WAC 248-56 (Public Water System Coordination); and
2. For an individual water system, an Island County Health Department well site approval or a well site certification performed by a Washington State Department of Ecology licensed well driller pursuant to ICC 8.09.070.B.

B. Prior to final approval of a subdivision, the applicant must provide the Island County Health Department evidence that the following has been accomplished:

1. For a public water system, the system must be approved by the appropriate agency or agencies for the ultimate number of anticipated hookups, including current connections, the proposed extension, and all outstanding water share certificates or any other agreements to supply water. Unless exempted by RCW 90.44, such approval shall include application for water rights filed with the Washington State Department of Ecology and a written commitment from the Department of Ecology that water rights will be granted. Any water system required by this section shall be installed, or appropriate bonds shall be provided and approved by the Island County Engineer and the Washington State Department of Health; or
2. For an individual water system, evidence of an adequate water supply must be provided by the applicant to the Island County Health Department to include:
 - a) A scaled plot plan of the project site including representations of structures (both proposed and existing), roads, sewage disposal systems, property lines, underground storage tanks, possible sources of contamination, indication of North, surface water, and other prominent features;
 - b) A well log;
 - c) The written results of a bailer test, or air lift test, or pump test, any of which is performed for minimum of one (1) hour, verifying a minimum well yield of four-hundred (400) gallons per day;

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- d) Water quality results, analyzed by a Washington State Department of Health certified laboratory, verifying compliance to standards listed in WAC 248-54 including bacteriological, nitrate, chloride, conductivity, and such other parameters the Health Officer deems significant based upon local trends of water quality;
 - e) Provision of sanitary control area pursuant to ICC 8.09.070.D;
 - f) Additional information deemed necessary by the Health Officer;
 - g) Except that proposed subdivision(s) where each resulting parcel is two and one-half (2.5) acres or larger will be exempt from the requirements to drill wells and determine water quality, as prescribed in section 8.09.060.B.2.b.c) and d). Those exempted parcels will be required to provide a scaled plot plan, sanitary control area and additional information deemed necessary by the Health Officer in accordance with ICC 8.09.060.B.2.a.e) and f).
- C. Minimum requirements prescribed in Island County Code 8.07B.100 must be met for any subdivision.

(Res. HD-08-90, September 18, 1990)

8.09.070 Well Site Approval

- A. Well site approval for public water systems must be performed by the Island County Health Department or the Washington State Department of Health.
- B. Well site approval for an individual water system must be performed by the Island County Health Department or a well driller who is licensed by the Washington State Department of Ecology. Documentation of well site approvals made by well drillers must include a written statement signed by the well driller which certifies that the well site conforms to ICC 8.09.070.C.D and E, and any other pertinent county, state, or federal regulations.
- C. All well sites must conform to the following siting criteria:
 - 1. The well site should be located on the highest ground possible, upslope from possible sources of contamination as per WAC 173-160-205; and
 - 2. Location of the well site should be protected from normal flooding, and surface or subsurface drainage capable of impairing groundwater quality as per WAC 173-160-205; and
 - 3. The following minimum distances must be maintained between the well and potential sources of contamination:
 - a) Well to septic tank--50 feet as per WAC 248-96-100 and ICC 8.07B.210;

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- b) Well to edge of septic system absorption field--100 feet as per WAC 248-96-100 and ICC 8.07B.210;
- c) Well to privies--100 feet as per WAC 248-96-100 and ICC 8.07B.210;
- d) Well to sewer line--100 feet as per WAC 173-160-205(a);
- e) Well to sewage or manure lagoon--100 feet as per WAC 173-160-205(a);
- f) Well to solid waste landfill--1,000 feet as per WAC 173-160-205(a);
- g) Well to county road or state highway right-of-way--100 feet⁸ as per ICC 13.03A.070;
- h) Greater setback distances may be required by the Health Officer based on geological and hydrological data or local water quality trends.

(Res. HD-08-90, September 18, 1990)

D. The sanitary control area shall conform with:

1. A minimum sanitary control area having a 100-foot radius around the well must be owned by the purveyor in fee simple, or the purveyor must have the right to exercise complete sanitary control of the land through other legal provision, such as recorded covenants, as per WAC 248-54-125.
2. Where the single-family structure to be served by an individual water system cannot maintain a 100-foot setback to the well, that structure is excluded from setback requirements when the lack of setbacks does not threaten public health. Nothing herein is intended to permit violations of existing Washington State or Island County Codes requiring wells be separated from known sources of contamination such as septic tanks, drain fields, chemical storage, or any other known source of contamination.
3. Wells drilled prior to July 23, 1990 for individual water systems are excluded from siting requirements when those requirements are beyond the control of the well site property owner and where the lack of sanitary radius does not threaten public health. Documentation, such as a well log, establishing the well drilling date must be provided. Nothing herein is intended to permit violations of existing Washington State or Island County Codes requiring wells be separated from known sources of contamination such as septic tanks, drain fields, chemical storage, or any other known source of contamination.

E. Any well site approval may require drilling test holes to prove the existence of an adequate water supply.

(Res. HD-08-90, September 18, 1990)

⁸ For a county road, the right-of-way shall be considered to be sixty (60) feet as a minimum, or as shown by deed when the deeded right-of-way is greater.

8.09.080 Cross-Connection

Cross-connection in water systems is prohibited as per WAC 248-54-285. Individual water systems shall not be connected to other water systems or expanded without the Health Officer's approval.

(Res. HD-08-90, September 18, 1990)

8.09.090 Well Construction

A. Well construction, capping, and abandonment shall conform to WAC 173-160.

B. A source flow meter will be installed on each potable water source at the well head.

(Res. HD-08-90, September 18, 1990)

8.09.095 Groundwater Resource Protection

A. Locational Standards.

1. Transmission facilities and/or petroleum storage tanks are prohibited in areas where groundwater is not protected by a one-hundred (100) foot protection zone from all edges of the transmission facility or petroleum storage tank by a four (4) foot thick, native layer of clay or other material with a permeability of no more than 1×10 cm/sec.
2. No wells, excavations, or other activities shall penetrate the one-hundred (100) foot protection zone as required by ICC 8.09.095.A.1.
3. No portion of the transmission facility or petroleum storage tank shall be located any less than ten (10) feet above the seasonal high level of groundwater in the uppermost aquifer.
4. Transmission facilities or petroleum storage tanks shall not be located closer than one-thousand (1,000) feet to a down-gradient drinking water supply well, unless the owner or operator can show that the transmission facility or petroleum storage tank is no less than ninety (90) days travel time hydraulically to the nearest down-gradient drinking water supply well in the uppermost aquifer.

B. Construction Standards.

1. Construction standards for transmission facilities or petroleum storage tanks in areas where it has been clearly established that the natural geology provides the degree of protection required by ICC 8.09.095.A.1-4, shall include:
 - a) An initial barrier made up of an impermeable liner or a concrete vault, constructed throughout the transmission facility or petroleum storage tank area.

- b) An initial barrier or vault designed so it can contain the entire volume of oil within the transmission facility or petroleum storage tank (i.e., secondary containment).
- c) Transmission facilities and petroleum storage tanks shall be constructed in conformance with all codes, standards, rules, or regulations cited or established in chapter 90.76 RCW, chapter 173-360 WAC, 40 Code of Federal Regulations part 280, chapter 80.50 RCW, chapter 463-42 WAC, chapter 29 Title 49 United States Code, part 195.

C. Monitoring Requirements.

- 1. In any case where a transmission facility or petroleum storage tank overlies groundwater:
 - a) Groundwater monitoring wells shall be installed every five-hundred (500) feet down-gradient from the transmission facility or petroleum storage tank. Monitoring wells shall comply with the minimum standards for construction and maintenance of wells specified in chapter 173-160 WAC. Groundwater quality parameters for continued and perpetual monitoring shall be determined by the Island County Health Officer and will be at least as stringent as the requirements of applicable state and federal regulations.
 - b) Monitoring of transmission facilities and petroleum storage tanks shall conform to all codes, standards, rules, or regulations cited or established in chapter 90.76 RCW, chapter 173-360 WAC, 40 Code of Federal Regulations part 280, chapter 80.50 RCW, chapter 463-42 WAC, chapter 29 Title 49 United States Code, part 195.

D. Compliance Certification.

- 1. Transmission facilities and/or petroleum storage tank facilities which have been permitted or are seeking permits for operation or construction or design or are in operation in Island County shall apply for, obtain, and maintain a certification from the Island County Health Department. In applying for said certification, the transmission facility and/or petroleum storage tank facility shall provide a specific report which addresses each of the requirements in ICC 8.09.095.A through C and information required by ICC 8.09.097.
- 2. A compliance certification shall be good for one quarter of one year. At the end of each quarter, the petroleum transmission or tank facility will apply for, and obtain, a new compliance certification.
- 3. Any time during design or construction or operation of a petroleum transmission or tank facility, that such facility does not have a valid compliance certificate for any

reason including failure to provide appropriate application or failure to provide appropriate fee or because of non-compliance with this code, the operation and/or construction of said facility shall cease activity within Island County immediately until said certification is obtained.

4. Fees for compliance certifications shall be set by the Island County Board of Health by resolution. Factors to be considered in fee establishment shall include cost of staff time and professional service expenses which are required to monitor compliance with ICC 8.09.095 and 8.09.097, administrative expenses and direct and indirect operations and maintenance expenses. The first quarterly compliance certification shall be accompanied by a set fee established by the Island County Board of Health. Subsequent quarterly compliance certification fees shall be based on costs incurred during the prior quarter's compliance certificate monitoring activity. The rates used to calculate expenses will be set by the Board of Health.
5. The Health Officer shall assure applications for compliance certificates conform to this code.

(Res. HD-07-91, July 1, 1991; amended by Res. HD-04-92, April 13, 1992)

8.09.097 Critical Recharge Area Protection

- A. Critical aquifer recharge areas include areas designated as sole source aquifer areas pursuant to the federal safe drinking water act and groundwater management areas established pursuant to WAC 173-100. Whidbey and Camano Islands have been designated as sole source aquifers and as a groundwater management area.
- B. All project actions with potential for groundwater contamination shall be evaluated by the Health Officer to determine their impacts on the groundwater resource.
- C. Best management practices shall be required for those activities for which best management practices are recognized and accepted by the Island County Health Officer. A list of currently accepted Best Management Practices shall be maintained by the Health Department. An updated list of BMP's will be provided to the Board of Health annually during the month of April for review.
- D. A hydrogeologic site evaluation shall be required prior to preliminary project approval of projects identified by the health officer as having the potential for groundwater contamination and where best management practices will not adequately prevent groundwater contamination.
- E. Based upon available information including that provided by the applicant pursuant to the requirements of this section, the Health Officer shall have discretion to impose conditions designed to prevent degradation of groundwater quality or quantity. Such conditions may

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include determining background water quality, quantity, and groundwater levels prior to approval and development of groundwater quality and/or quantity management plans. All conditions shall be based on all known, available, and reasonable methods of prevention, control, and treatment.

- F. A mitigation plan shall be required to address groundwater impacts identified in the hydrogeologic site evaluation. The Health Officer may require that the mitigation plan include monitoring, process controls, remediation, and discussion of alternatives.
- G. Project approval shall be based on the conditions and/or mitigation plan required by the Island County Health Department and the Department of Planning and Community Development.
- H. The following are subject to the foregoing requirements of 8.09.097.A, B, C, D, E, F, and G:
 - 1. Commercial, industrial, institutional, or other facilities or activities that include storage, use, handling, or production of hazardous substances or waste products as defined by WAC 173-303-101.
 - 2. Petroleum transmission facilities and/or petroleum storage tanks.
 - 3. Those land and subsurface sewage disposal systems as outlined below:
 - a) Sewage disposal systems designed to serve one or more homes on an off-site drainfield. Adherence to Island County Health Department BMP's are considered adequate to prevent groundwater contamination.
 - b) Sewage systems designed to serve more than two residential housing units. Adherence to Island County Health Department BMP's are considered adequate to prevent groundwater contamination.
 - c) Sewage disposal systems serving commercial and industrial projects, at the Health Officer's discretion. Adherence to Island County Health Department BMP's are considered adequate to prevent groundwater contamination.
 - d) Any sewage disposal system with design flows of more than 3,500 gallons per day.
 - 4. Surface mining operations requiring a permit from the State Department of Natural Resources.
 - 5. Other projects or activities as determined by the Health Officer.
 - a) Hydrogeologic Site Evaluation. A hydrogeologic site evaluation to determine aquifer vulnerability when required by ICC 8.09.097, shall be prepared by a professional who has training and experience in hydrogeology. The scope of the

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hydrogeologic site evaluation shall be in direct relationship to the scope of the project. The site evaluation shall address some or all of the following as specified by the Health Officer:

- (i) Hydrogeologic Setting:
 - (1) Description of the geologic setting of the site illustrated with geologic and soil maps.
 - (2) Discussion of geologic features which may influence groundwater movement such as faults, landforms, etc.
 - (3) Description of the occurrence and movement of groundwater in the area, including a general discussion of aquifer recharge and discharge, depth of groundwater and groundwater flow patterns. Illustrative materials such as water level maps or flow nets are recommended.
 - (4) General discussion of groundwater quality in the area.
- (ii) Site-Specific Hydrogeologic Data:
 - (1) Scaled map showing the location of wells (in use or inactive) and springs within 1,000 feet of the site or as required by the Health Officer.
 - (2) Depth to groundwater layer in the immediate vicinity.
 - (3) Hydrogeological cross-sections through the site and immediate vicinity with references to information used to prepare the cross-sections.
 - (4) Description of groundwater movement beneath the site with considerations for the following:
 - (a) Areal distribution, stratification, and hydraulic conductivity of the water-bearing formations.
 - (b) Probable migration pathways for contaminants.
 - (c) An estimate of the probable times of travel through the soil horizontally and vertically from a potential contaminant source.
 - (5) Description of how the contaminants of concern will be attenuated within the saturated zone.
 - (6) Estimate of the quantity and/or quality of water recharged to the saturated zone under anticipated operation.

(7) Water quality monitoring program for contaminants of concern.

(Res. HD-04-92, April 13, 1992)

8.09.100 Administration

The Health Officer shall administer these rules and regulations under the supervision of the Board of Health. The Island County Building Department and Planning Department shall require permits issued or subdivisions approved to comply with this chapter.

(Res. HD-08-90, September 18, 1990)

8.09.110 Waivers

Whenever a strict interpretation of these rules and regulations would result in extreme hardship, the Health Officer may, upon concurrence of the Board of Health, waive such rule or regulation or portion thereof, provided that the waiver is consistent with the intent of these rules and regulations and that no public health hazard will result. Waivers requested which would not vary substantially from this chapter and which would not require the review of the Secretary of the State Department of Health or Secretary of the State Department of Ecology will be processed administratively by the Health Officer.

(Res. HD-08-90, September 18, 1990)

8.09.120 Appeals

Any person aggrieved by a decision of the Health Officer or his designee may, within ten (10) calendar days, appeal the decision in writing to the Board of Health for hearing during regular session of said Board. The appeal requirements in ICC 8.01.120 may also apply.

(Res. HD-08-90, September 18, 1990; amended by Board of Health, Regular Meeting Minutes dated April 17, 2000)

8.09.130 General Provision and Penalties

General provision and penalties shall be in accordance with ICC 8.01. Additionally, if it is established that a licensed well driller certifies a well site which does not conform to this chapter or other pertinent regulations, the Board of Health may take appropriate action to appeal to the Washington State Department of Ecology to revoke that well driller's license.

(Res. HD-08-90, September 18, 1990)

8.09.140 Severability

Provisions of these rules and regulations are hereby declared to be separable, and if any section, subsection, sentence, clause, phrase, or portion of these rules and regulations is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of these rules and regulations.

(Res. HD-08-90, September 18, 1990)

8.09.150 Fee Schedule

Fees shall be set by the Island County Board of Health by resolution.

(Res. HD-08-90, September 18, 1990)

Chapter 8.10⁹

(Reserved)

Chapter 8.10B

Food Establishments and Food Service Workers

(Chapter 8.10B, Food Establishments and Food Service Workers, Rules and Regs. of Board of Health, November 9, 1981, December 13, 1982, July 14, 1986, and October 21, 1991, repealed by Res. HD-17R-93, December 13, 1993)

⁹ Former chapter 8.10, Definitions and General Provisions, has been recodified as chapter 8.01.