

# SNOHOMISH HEALTH DISTRICT SANITARY CODE

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# SNOHOMISH HEALTH DISTRICT SANITARY CODE

## CHAPTER 9.1 DRINKING WATER RULES AND REGULATIONS

RULES AND REGULATIONS OF THE SNOHOMISH HEALTH DISTRICT BOARD OF HEALTH GOVERNING MINIMUM STANDARDS, POLICIES, AND PROCEDURES FOR INDIVIDUAL WATER SYSTEMS.

The Board of Health Adopts the following "Supplemental Drinking Water Policies and Procedures for Individual Water Systems" to protect the public health:

**I. Title:** These administrative standards, policies, and procedures shall be known as the "Supplemental Drinking Water Policies and Procedures for Individual Water Systems" and are established pursuant to authority vested in the Snohomish Health District Board of Health by RCW 70.05.060. These rules and regulations are adopted for the protection of public health through the establishment of minimum drinking water standards and the policies and procedures by which to review same.

**II. Purpose:** These rules and regulations are enacted as an exercise of the powers and duties of the Snohomish Health District Board of Health to preserve, promote and improve the public health. The provisions herein shall be liberally construed for the accomplishment of the purposes.

Further, these regulations are intended to allow and support the Snohomish Health District (SHD) in carrying out the responsibilities and duties contained in Snohomish Health District Sanitary Code Chapters 8 and 9.

It is the specific intent of these rules and regulations to place the obligation of compliance upon the owner of a Individual Water System. No provision of, nor term used in, these rules and regulations is intended to impose any duty upon the Snohomish Health District or any of its employees.

**III. Definitions:** In addition to the definitions found in the Snohomish Health District Sanitary Code Chapter 9.2, Section 2 of the Guidelines for Determining Water Availability for New Buildings, Ecology Publication 93-27, April 1993 and WAC 173-160, the following shall apply:

A. "Adequate": Means meeting the source siting, construction and quantity requirements of the "Supplemental Drinking Water Policies and Procedures for Individual Water Systems".

B. "Individual Water Supply (IWS)": Consists of one source serving one Single Family Residence or one source serving two (2) Single Family Residence Structures or Units and is exempt from the State Board of Health Drinking Water Regulations WAC 246-291.

C. "Potable": Means meeting the water quality parameters as established in the "Supplemental Drinking Water Policies and Procedures for Individual Water Systems".

**IV. Drinking Water Rules and Regulations: Policies and Procedures:** The Snohomish Health District policy titled "Supplemental Drinking Water Policies and Procedures for Individual Water Systems" prescribes the minimum drinking water standards and the

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### CHAPTER 9.1 DRINKING WATER RULES AND REGULATIONS, continued

assessment procedures and standards therein applied for Individual Water Systems; prescribing data to be disclosed to and procedures to be followed by the Environmental Health Division concerning said water systems including:

- A. Assessments for Determining Water Availability and Acceptance for New Buildings: As applicable to RCW 19.27.097, and/or issuance of permits for installation of on-site sewage disposal systems for new residences shall include the following:
1. SHD approval of "Application for an Individual Water Supply Site Inspection".
  2. SHD approval of "Request for Review: Individual Water Supply"
  3. For IWS's consisting of more than one Single Family Residential Connection the following must be provided in addition to items 1 and 2 above: Recorded Declaration of Water Use Agreement(s), Easement(s), and Restriction(s).
  4. For IWS's consisting of more than one Single Family Residential Connection where the structures served **do not** exist on the same property the following must be provided in addition to items 1, 2 and 3 above: SHD approval of "Application for an Individual Water Supply Site Inspection" demonstrating potential well sites on **each** of the two properties.
- B. Operational Checks: Assessments of water supply source quality in response to "Request for Report on an Individual Water System" will include SHD testing of water quality parameters as established in the "Supplemental Drinking Water Policies and Procedures for Individual Water Systems".
- C. Well Sealing and Decommissioning: Pursuant to the "Memorandum of Agreement between State of Washington Department of Ecology and Snohomish Health District", delegating to SHD the authority to administer and enforce the well sealing and decommissioning portions of the water well construction program in accordance with the provisions of Chapter 173-160 WAC entitled Minimum Standard for Construction and Maintenance of Wells, notification to SHD must be received prior to sealing or decommissioning of any new or existing well in Snohomish County.

Nothing contained in the process shall be construed to prevent the Health Officer from requiring compliance with higher requirements than those contained herein where such higher requirements are essential to maintain a safe and sanitary condition. Revisions or modifications to the policy shall be approved by the Director of Environmental Health.

## **Supplemental Drinking Water Policies and Procedures for Individual Water Systems**

- I. In accordance with state and local regulations, the Snohomish Health District (SHD) performs assessments of proposed and existing Individual Water Supplies (IWS's) for adequacy and potability. These assessments are for the purposes of establishing proof of adequate and potable water as a part of the approval process for subdivisions, building permits and/or issuance of permits for installation of on-site sewage disposal systems. Further, assessments are requested in response to inquiries received from individuals, agencies, and other entities seeking information regarding IWS's.
- II. The following "Supplemental Drinking Water Policies and Procedures for Individual Water Systems" (supplemental procedures) are established pursuant of Snohomish Health District Sanitary Code Chapters 8 and 9, prescribing minimum requirements, standards, and procedures for assessment and use of IWS's, prescribing data to be disclosed to the Environmental Health Division concerning the use of IWS's and setting forth the information to be furnished to the Environmental Health Division prior to response by SHD to any request for assessment of a particular IWS. Nothing contained in this process shall be construed to prevent the Health Officer from requiring compliance with higher requirements than those contained herein where such higher requirements are essential to maintain a safe and sanitary condition and protect public health.
- III. Definitions: In addition to the definitions found in the *Snohomish Health District Sanitary Code* Chapter 9.2, Section 2 of the *Guidelines for Determining Water Availability for New Buildings*, Ecology Publication 93-27, April 1993 and WAC 173-160, the following shall apply:
  - A. "Adequate": Means meeting the source siting, construction and quantity requirements of these supplemental procedures.
  - B. "Individual Water Supply (IWS)": Consists of one source serving one (1) Single Family Residence or one source serving two (2) Single Family Residence Structures or Units and is exempt from the State Department of Health (DOH) Drinking Water Regulations WAC 246-291.
  - C. "Potable": Means meeting the water quality parameters as established in these supplemental procedures.
- IV. Individual Water Supplies: Assessments, Policies, and Procedures.
  - A. Assessments for determining water availability and acceptance for new buildings and/or issuance of permits for installation of on-site sewage disposal systems for new residences includes the following:
    1. SHD approval of "Application for an Individual Water Supply Site Inspection". Site criteria as established in WAC 173-160 and Chapters 8 and 9, Snohomish Health District Sanitary Code.

Supplemental Drinking Water Policies and Procedures for Individual Water Systems, Cont.

2. SHD approval of "Request for Review: Individual Water Supply" including the following minimum submittals:
    - a. Signed Declaration of Applicant;
    - b. Copy of Water Well Report (Well Drillers Log) verifying well construction per WAC 173-160;
    - c. Documentation of well yield testing per WAC 173-160-345(1) sufficient in detail to demonstrate a minimum 400 gallons per day per residential connection;
    - d. Satisfactory results of a bacteriological analysis; and,
    - e. Satisfactory results of inorganic chemical analyses for the following: arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, sodium, fluoride, and nitrate.
  3. For IWS's consisting of more than one (1) Single Family Residential Connection, the following must be provided in addition to items 1 and 2 above: Recorded Declaration of Water Use Agreement(s), Easement(s), and Restriction(s) including the following minimum information:
    - a. Identification of the supply as an Individual Water Supply;
    - b. Description of system management and ownership;
    - c. Identification of the property or properties served; and,
    - d. Recognition of system restrictions as determined by SHD.
  4. For IWS's consisting of more than one (1) Single Family Residential Connection where the structures served *do not* exist on the same property, the following must be provided in addition to items 1, 2 and 3 above: SHD approval of "Application for an Individual Water Supply Site Inspection" demonstrating potential well sites on *each* of the two (2) properties. Site criteria as established in WAC 173-160 and Chapters 8 and 9, Snohomish Health District Sanitary Code.
- B. Operational Checks: Assessments of water supply source quality in response to "Request for Report on an Individual Water System" will include SHD testing of water quality parameters as established in Section IV.A.2.d and e above.
- C. Well Sealing and Decommissioning: Pursuant to the "Memorandum of Agreement between State of Washington Department of Ecology and Snohomish Health District", delegating to SHD the authority to administer and enforce the well sealing and decommissioning portions of the water well construction program in accordance with the provisions of Chapter 173-160 WAC entitled Minimum Standard for Construction and Maintenance of Wells, notification to SHD must be received no less than 24 hours prior to sealing or decommissioning of any new or existing well in Snohomish County.
- D. Determining Maximum Contaminant Level (MCL) Violations for an IWS:
1. Coliform bacteria are not to exceed one per 100 ml. for any sample tested using the membrane filter method; nor are there to be any present using the Presence/Absence method of testing.
  2. The presence of any tested primary contaminant measured above the MCL, as defined in WAC 246-290-310, shall make that water supply initially

## Supplemental Drinking Water Policies and Procedures for Individual Water Systems, Cont.

unacceptable and subject to further sampling and testing to determine whether an MCL violation has occurred.

- a. Three (3) samples must be taken at the well. Prior to the taking of *each* sample, either a quantity of water equal to three (3) well volumes for drilled wells or two (2) well volumes for dug wells, pumped at the well's measured production rate, must be pumped.
- b. The water must be tested for the same contaminant(s) found in excess of the MCL in the initial sample and the results of the three samples will be averaged. The average of these three (3) sample results will be used to determine if an MCL violation has occurred. If any single sample exceeds double the MCL, then the violation will be considered confirmed.
- c. At least one of the three (3) samples must be collected by SHD personnel.
- d. No two samples used for averaging may be collected on the same day. There shall be a minimum of fifteen days between collection of the first and third samples used for averaging.

- E. Water Treatment: Pursuant to these supplemental procedures, as well as other guidelines presently in effect, when evaluating test results for primary contaminants, the MCL's cannot be exceeded and be in compliance with RCW 19.27.097, as a potable water supply. However, RCW 19.27.097 and the Department of Ecology (DOE) Guidelines have not provided specifics on the issue of treatment of such water to be in compliance with RCW 19.27.097. Therefore, for the sake of consistency in the evaluation by SHD and to provide commonality of standards for applicants, as well as standards by which the County can consider the recommendations of the SHD relative to the same, the following constitute what the SHD considers to be minimum acceptable standards for source treatment where primary contaminants exceeding MCL's are confirmed:

The SHD shall provide to the County a recommendation of general compliance to the DOE Guidelines and these procedures, even when test results for primary contaminants exceed the MCL's, provided that an applicant has demonstrated satisfactory treatment and provided the following conditions have been or shall be met:

1. Water treatment must be installed at or before the point of entry and provide for whole house treatment.
2. Point of use treatment devices shall not be considered to satisfy the requirements of these procedures.
3. The treatment system must be capable of producing a minimum of 400 gallons of treated water per residential connection per day. However, a daily volume of less than 400 gallons per residential connection may be considered adequate if such a reduced volume is combined with appropriate conservation or storage measures rendering the additional volume unnecessary. The treatment system plan shall not allow the plumbing arrangement to bypass the treatment system.
4. Treatment Proposals shall be designed by a State of Washington Licensed Professional Engineer and shall at a minimum include:

## Supplemental Drinking Water Policies and Procedures for Individual Water Systems, Cont.

- a. Expected yield of treated water.
  - b. Locations at which treated water will be supplied.
  - c. Other water quality parameters considered in the design of the treatment process.
  - d. Minimum Operation and Maintenance requirements for the treatment process.
  - e. Method of treatment process residuals management.
  - f. Minimum ongoing testing requirements.
5. The applicant/property owner, prior to issuance of county building permit, is required to record with the Snohomish County Auditor a statement containing the common and legal address of the property, the property legal description and tax parcel number, as well as the present owner's name and containing, as a minimum, the following additional information:
- a. The parameter that is found in the violation of the MCL and being treated for.
  - b. The concentrations of the parameter that exceeds the established MCL, both before and after treatment.
  - c. The type of treatment process installed.
  - d. The expected yield of treated water, expressed in gallons per day.
  - e. Locations at which treated water is provided.
  - f. That the treatment device must be properly maintained, along with periodic sampling, to insure continued safety of the water supply. (NOTE: Specific sampling frequency is to be set in accord with the designing engineer's recommendations, with a minimum of no less than once annually.)
  - g. A stated understanding and acknowledgment, by the property owner, that failure to sample and maintain the treatment system may result in adverse health effects to the users of the water supply and that any untreated water is considered unsafe for consumption.
  - h. The owner's obligation and responsibility to notify future property owners, heirs, successors, or tenants about the treatment device, proper maintenance and operations, sampling requirements, potential health risks, and most recent sample results of the water supply both before and after treatment.
  - i. That the SHD may conduct a site visit within the first two years of occupancy for the purpose of collecting a sample of the treated water for analysis and to provide owner/occupant education relating to individual water supplies.
6. SHD will charge fees for records maintenance, follow-up water testing, and owner education activities as set forth by the Board of Health in the current fee schedule.

Supplemental Drinking Water Policies and Procedures for Individual Water Systems, Cont.

7. All proposals for water treatment must be reviewed by SHD for consistency with these policies and procedures. Furthermore, the applicant shall execute a statement which provides that any such review shall not constitute an endorsement by SHD that such a treatment system in fact works, is reliable, or otherwise warranted or guaranteed to effectively treat the water to eliminate all health risks. In all respects, the applicant assumes full and complete responsibility and liability relative to the effectiveness, reliability and viability of a water treatment system.
- F. Lead Levels: Pursuant to these supplemental procedures, as well as other guidelines presently in effect, when evaluating test results for contaminants, in the absence of an established MCL, the following evaluation procedure for lead levels in drinking water applies:
1. SHD, in determining potability for compliance with the assessment procedures outlined in Sections A and B above, will apply the EPA 'Action Level' of 0.015 mg/l.
  2. For results in excess of 0.015 mg/l, the applicant is required to conduct additional testing to demonstrate that the source water is of adequate quality with lead levels less than 0.015 mg/l.
- G. Fluoride Levels: Pursuant to these supplemental procedures, as well as other guidelines presently in effect, when evaluating test results for contaminants, the primary MCL of 4.0 mg/l for fluoride cannot be exceeded and be in compliance with the potability requirements outlined in Sections A and B above. For results in excess of 4.0 mg/l, Sections D and E above will apply. For fluoride analyses with results less than or equal to 4.0 mg/l and greater than 2.0 mg/l, the following evaluation procedure apply:
1. The procedures outlined in Section D above will apply to determine the level.
  2. Upon confirmation of the level as being within the 2.0 mg/l to 4.0 mg/l range, written notification will be sent to the applicant outlining the test results with attached Toxics Fact Sheet for fluoride. Additionally, the notification will direct the applicant to sample quarterly for a two-year period to confirm stability of levels with reduced sampling frequency of one per year if stable within the 2.0 mg/l to 4.0 mg/l range.
  3. The owner/applicant must notify future owners, heirs, successors, or tenants of the presence of fluoride in the drinking water and record the notification letter outlined in item 2 of this section on the title of the property.
- H. Arsenic Levels: Pursuant to these supplemental procedures, as well as other guidelines presently in effect, when evaluating test results for contaminants, the following additional procedures for arsenic apply:
1. For the purpose of these "Supplemental Drinking Water Policies and Procedures" the MCL for arsenic shall be 0.010 mg/l (10 parts per billion [ppb]).
  2. For the purpose of satisfying section IV(E) of these Policies and Procedures, treatment will only be considered for contaminant levels less than or equal to 0.150 mg/l (150 ppb).

Supplemental Drinking Water Policies and Procedures for Individual Water Systems, Cont.

3. For arsenic levels greater than 10 ppb and less than or equal to 50 ppb, compliance with Section IV(E.5) of this policy is required prior to SHD acceptance of the onsite sewage system “As-built” drawing for the structure to be served with treated water.
4. Sections IV(E.1, E.2 and E.3) of this policy do not apply to arsenic levels less than or equal to 50 ppb.
5. In addition to the requirements listed in Section IV(E), for Individual Water Supplies with treatment to remove arsenic the following US Environmental Protection Agency “Health Effects Statement” shall be recorded onto the property title: “Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer” (40 CFR 141.154(f) and 141.153(d)(6)).
6. For Individual Water Supplies with arsenic detected at or below the MCL, a statement must be recorded onto the property title prior to issuance of building permit, containing at a minimum the following:
  - a. The results of each known arsenic analysis as well as any average used to determine compliance with the MCL.
  - b. That arsenic concentrations in groundwater can vary over time.
  - c. That there is variability in laboratory reporting.
  - d. The following US Environmental Protection Agency (EPA) “Informational Statement”: “While your drinking water meets EPA’s standard for arsenic, it does contain low levels of arsenic. EPA’s standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems” (40 CFR 141.154(b)(1)).
7. When averaging samples per Section IV(D)(2), if any single sample exceeds 0.050 mg/L (50 ppb) arsenic then the MCL violation will be considered confirmed. Averaging per Section IV(D)(2) may be completed to determine the type of treatment required.

This policy is effective this date.

\_\_\_\_\_ Date \_\_\_\_\_  
Robert A. Pekich, Director  
Environmental Health Division

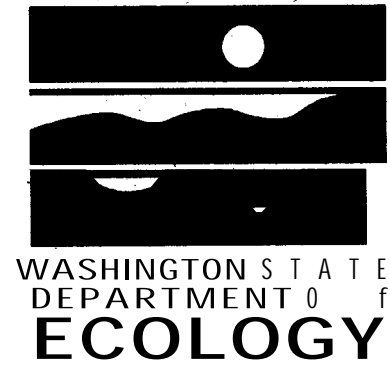
# SNOHOMISH HEALTH DISTRICT SANITARY CODE

## CHAPTER 9.2

## WATER QUALITY STANDARDS

The Board of Health of Snohomish Health District adopts the attached document entitled: "***Interim Guidelines for Determining Water Availability for New Buildings***", issued July 6, 1990, from the Washington State Department of Ecology, or the latest revision thereof (Guidelines for Determining Water Availability for New Buildings, April 1993), and subsequent State regulations adopted pursuant to such guidelines; and establishes the following fees:

- 1) Application for an Individual Water Supply Site Inspection:  
*\$ 175.00, or as stated per the current Fee Schedule.*
  
- 2) Application for Individual Water Supply Site Inspection, Concurrent with Application for Onsite Sewage Disposal Permit:  
*\$ 125.00, or as stated per the current Fee Schedule.*



# **Guidelines for Determining Water Availability for New Buildings**

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April 1993  
Ecology Publication 93-27 .



*printed on recycled paper*

# **GUIDELINES FOR DETERMINING WATER AVAILABILITY FOR NEW BUILDINGS**

## **EXECUTIVE SUMMARY**

The following guidelines are intended to assist local governments with the implementation of RCW 19.27.097, the requirement that building permit applicants provide proof of an adequate supply of potable water. The three means of proof specified in the statute are: 1) a water right permit from the Department of Ecology, 2) a letter from an approved purveyor stating the ability and willingness to provide water, and 3) another form (such as the water availability notification suggested here) sufficient to verify the existence of an adequate water supply.

The Departments of Ecology and Health will notify local permitting authorities if they know of potential problems with water sources and supplies. Local governments with concerns about a particular source or type of source may request participation in Ecology's water right permitting process.

Individual water supplies may be considered adequate if they can supply 400 gallons per day of potable water for building use, including limited irrigation. Local authorities are encouraged to adopt aggressive water conservation programs.

Use of water from surface water sources is generally discouraged but, if a surface water source is used, that use must be authorized by a water right permit and the water treated to meet potability criteria. Other conditions may need to be met to ensure the continuing adequacy of the supply for current and future water users.

Ground water from wells provides a more desirable source for individual water supplies. Larger ground water uses must be authorized by a water right permit. New and existing wells should also be tested to ensure that suitable quantities of potable water are available. Based upon test results, treatment and other conditions on use may be merited.

Individuals may obtain water from alternative sources of supply provided that they secure water right permits, when required, and based upon locally developed waivers which provide for the protection of the public health and safety.

Counties may propose areas where individual water systems would be exempted from the provisions of RCW 19.27.097 and the guidelines. Counties interested in pursuing such exemptions should work cooperatively with Ecology and Health to determine if an area qualifies. If agreement cannot be reached, the Department of Community Development may be asked to mediate and, for counties which are not planning under the Growth Management Act (Chapter 36.70A RCW), make a determination.

Public water systems are already regulated by the Department of Health. Local permitting authorities need to verify that expansions of public water systems comply with local comprehensive plans, regulations and ordinances as well as the state water code and the State Board of Health Drinking Water Regulations.

## ADVISORY COMMITTEE MEMBERS

Mr. Gordon L. Aleshire  
Pierce County Building Department

Mr. Scott Kirkpatrick  
Skagit County Planning and Community  
Development Department

Mr. Dale Bambrick  
Yakima Indian Nation

Mr. Jim Matsuyama  
Northeast Tri-Counties Health District

Mr. Gary Cline  
South King County Regional Water  
Association

Ms. Teresa Osinski  
Washington Utilities and Transportation  
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Mr. Richard Cyr  
Clark Public Utilities

Mr. Kim Rogers  
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Mr. Dave Jones  
Stevens County Building Department

Mr. Dave Williams  
Association of Washington Cities

# GUIDELINES FOR DETERMINING WATER AVAILABILITY FOR NEW BUILDINGS

April 1993

Section 1. PURPOSE. The purpose of these guidelines is to assist local governments in implementation of the provisions of RCW 19.27.097. Local governments would be best served by developing their own ordinances incorporating those portions of these guidelines which best reflect the circumstances which occur within their jurisdictions.

Section 2. DEFINITIONS. As used in these guidelines:

- (1) "Approved water purveyor" means a water purveyor whose public water system is in compliance with the state surface and ground water codes (Chapters 90.03 and 90.44 RCW) and is in substantial compliance with the State Board of Health Drinking Water Regulations as determined by either the Department of Health or the local health authority.
- (2) "Ground water" means all waters that exist beneath the land surface or beneath the bed of any stream, lake or reservoir, or any other body of surface water within the boundaries of the state, as defined in RCW 90.44.035.
- (3) "Group A public water system" means a system:
  - (a) With fifteen or more service connections, regardless of the number of people; or
  - (b) Serving an average of twenty-five or more people per day for sixty days within a calendar year, regardless of the number of service connections. (NOTE: The State Board of Health regulations, Chapter 246-290 WAC, has a more extensive definition.)
- (4) "Group B public water system" means a public water system which is not a Group A water system. This would include a water system with fewer than fifteen service connections and serving:
  - (a) An average of fewer than twenty-five people for sixty or more days within a calendar year; or
  - (b) Any number of people for fewer than sixty days within a calendar year.
- (5) "Ground water under the direct influence of surface water" means ground water which has:
  - (a) Significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as *Giardia lamblia*, or
  - (b) Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH closely correlating to climatological or surface water conditions.
  - (c) For purposes of determining treatment options, the following shall be treated as "ground water under the direct influence of surface water":
    - (i) All water supply wells or sand points where the minimum sealing requirements of the Water Well Construction Standards (Chapter 173-160 WAC) cannot be met.
    - (ii) All water supply wells or sand points which were constructed prior to the adoption of the Water Well Construction Standards (Chapter 173-160 WAC) and exhibit any or all of the characteristics identified in subsections (5)(a) and (5)(b) above.
- (6) "Individual water supply system" means any water supply system which is not subject to the State Board of Health Drinking Water Regulations, Chapter 246-290 WAC. An individual water supply system generally provides water to one single-family residence or, in the case of family farms, four or fewer connections on the same farm.
- (7) "Local permitting authority" means that local agency or department with the responsibility for verifying the adequacy of water supplies prior to the issuance of new building permits.
- (8) "Potable" means suitable for drinking.
- (9) "Public water system" means any system subject to the State Board of Health Drinking Water Regulations, Chapter 246-290 WAC, excluding a system serving only one single-family residence or a system with four or fewer connections all of which serve residences on the same farm, providing piped water for human consumption, including:
  - (a) Any collection, treatment, storage or distribution facilities which are under the control of the purveyor and used primarily in connection with the system, and

- (b) Any collection or pretreatment storage facilities which are not under the control of the purveyor but are primarily used in connection with the system.
- (10) "Registered water right claim" means a statement of the existence of a water right generally vesting prior to 1917 for surface water and 1945 for ground water. The beneficial use of water must have been initiated prior to 1917 for surface water and 1945 for ground water. Evidence must be shown that there has been no relinquishment (cessation of use for five or more years, per RCW 90.14.140).
- (11) "Surface water" means any body of water, whether fresh or marine, flowing or contained in natural or artificial depressions for significant periods of the year, including natural and artificial lakes, ponds, rivers, streams, springs, swamps, marshes and tidal waters.
- (12) "Water purveyor" means any agency or subdivision of the state or any municipal corporation, firm, company, mutual or cooperative association, institution, partnership, or person or any other entity that owns or operates a public water system. It also means the authorized agents of any such entities.

Section 3. GENERAL CRITERIA. An applicant for a building permit for any building necessitating potable water must provide evidence of an adequate water supply for the intended use of the building, *Unless* the proposed building will receive its water from an individual water supply system which is located within an area exempted under Section 5 of these guidelines.

Evidence of an adequate water supply may be in the form of one of the following:

- (1) A water right permit from Ecology. Water right permits are required for all surface water diversions and those ground water withdrawals which are in excess of 5000 gallons per day or where the area of lawn or noncommercial garden to be irrigated is greater than one-half acre. A water right permit establishes the legal availability and right to use water in terms of quantity and priority. Users of 5000 gallons per day or less of ground water are exempted from having to obtain a water right permit by RCW 90.44.050, but are subject to all other pertinent water resources laws and regulations. Applicants alleging rights based upon registered water right claims should be directed to the appropriate regional office of Ecology to verify the existence of the claim and its possible validity. An application for a water right permit is not sufficient proof of an adequate water supply.
- (2) A letter from an approved water purveyor stating the ability and willingness to provide water. The purveyor providing such a letter must be in compliance with the state Surface and Ground Water Codes, Chapters 90.03 and 90.44 RCW, and the state public water supply regulations. For Group A public water systems, adequacy criteria are contained in Chapter 246-294 WAC, Drinking Water Operating Permits. Similar criteria should be used for determining the adequacy of Group B public water systems.
- (3) A water availability notification filed by the applicant verifying that potable water is available in the amount necessary for the purposes of the building. Such a notification must be accompanied by any supporting documentation required by the local permitting authority. The basic documentation which may be required is described in Section 4 of these guidelines.
- (4) Exceptions:
  - (a) Buildings which do not require potable water are not subject to the provisions of RCW 19.27.097 or these guidelines.
  - (b) Replacement structures or improvements or additions to buildings which will not result in an increase in the water usage of the building generally need not be subject to the provisions of these guidelines, except local permitting authorities with concerns about the adequacy of existing systems may choose to review all building permit applications.
- (5) Ecology regional offices will notify local permitting authorities about areas where water is no longer available for appropriation or areas where Ecology is investigating problems concerning water availability. The local permitting authority must consider this information before proceeding with issuance of additional building permits within such an area.
- (6) Regional drinking water operations offices of Health will notify local permitting authorities about areas where the water supplies are of such poor quality that they should not be used for

domestic water supply without treatment. The local permitting authority must consider to this information before proceeding with issuance of additional building permits within such an area.

(7) A local permitting authority with concerns about a water source or type of water source the use of which requires a water right permit may participate in Ecology's water right permitting process. Upon receipt of a written request from the appropriate local legislative body, Ecology will.

(a) Refer applicants for permits proposing to use water from that source or type of source to the appropriate local permitting authority for consultation prior to processing the application.

(b) Provide copies of applications for permits to use water from that source or type of source to the local permitting authority for review and comment prior to making a decision on the application.

#### Section 4. INDIVIDUAL, WATER SUPPLY SYSTEMS.

(1) A water supply for a building which requires potable water, including some limited irrigation, may be considered to be adequate if it:

(a) Is capable of providing water to a residential dwelling in the amount of 400 gallons per day. If additional uses of the same water source are contemplated, the local permitting authority should determine the amount necessary to satisfy those additional uses at the time of evaluating the adequacy of the supply. Consideration should be given to a program of aggressive water conservation, including effective implementation of the Water Conservation Performance Standards (Uniform Plumbing Code amendments for plumbing fixtures and fittings).

(i) If a source appears to be only marginally adequate, either in terms of quantity yielded or quality of the water, the local permitting authority may wish to attach a note to the property title advising future owners of that fact.

(ii) The local permitting authority may require additional testing at the time of resale of the property to verify the continued adequacy of the water supply.

(b) Meets any and all siting criteria established by state regulations and local ordinances, and is constructed in compliance with state and local regulations.

(c) Does not cause any detrimental interference with existing water rights and is not detrimental to the public interest. Investigation and identification of well interference problems and impairment to senior rights is the responsibility of Ecology. If the possibility of a problem is suspected, the local permitting authority should contact Ecology.

(2) Systems which obtain water from surface water sources.

(a) The use of surface water sources for individual water supplies is generally discouraged due to their potential for contamination. For purposes of determining treatment options, surface water as used in this subsection includes ground water which is under the direct influence of surface water, but does not include springs which have been developed to preclude surface contamination.

(b) Any use of surface water, including water from salt water sources, must be authorized by a water right permit or covered by a valid registered water right claim.

(c) Water from the source should conform to water quality standards contained in the State Board of Health Drinking Water Regulations and, at a minimum, must be tested for bacteriological quality and nitrates.

(d) The water used should be treated using a system designed by a licensed professional, using equipment which meets Department of Health certification for point-of-use/point-of-entry treatment systems and is installed in accordance with the approved design.

(e) An operations and maintenance (O & M) manual for the treatment system may be required by the local health authority for review and approval. A copy of the manual must be provided to the property owner for the treatment system.

(f) A notice should be attached to the property title which states the requirement for a treatment system. This notification should include a recommendation that the water system be inspected and retested any time the property ownership changes. The notice should include

information regarding the potential health risks associated with utilizing surface water as a drinking water source.

(g) The local health authority may require the property owner to contract with a Department of Health-approved Satellite System Management Agency for system operation.

(3) Systems which obtain water from ground water sources.

(a) If the total amount of water to be used from the ground water source is in excess of 5000 gallons per day or the area of lawn or noncommercial garden to be irrigated is greater than one-half acre, the use must be authorized by a water right permit or covered by a pre-1945 water right for which a registered water right claim has been filed.

(b) If the source is a well which does not require a water right permit, i.e. those which use 5000 gallons per day or less or irrigate one-half acre or less of lawn or noncommercial garden, the water availability notification should be accompanied by a water well report (drilling log) and, at a minimum, the results of a one-hour bailer or air lift test indicating the yield of the well.

(i) In many cases, the water well report plus results of a test verifying well yield will provide all the necessary supporting evidence of physical availability of water. However, in areas where other concerns about water availability may exist (e.g. impact on instream flows and senior surface water rights or known well interference), Ecology and/or the local permitting authority may require additional testing to verify the existence of an adequate amount of water.

(ii) The water well report and test indicate *only* the *physical* availability of water. They do not indicate the legal availability of water. Such wells, while exempt from the water right permitting process, are still subject to regulation by the Department of Ecology.

(c) Additional supporting documents which may be required by the local permitting authority include, but are not limited to, the following:

(i) A water quality laboratory analysis report.

(ii) A copy of recorded notification if public disclosure of a problem is required.

(iii) A copy of an operation and maintenance (O & M) manual (if required).

(iv) Copies of any other documents which may be required by the local permitting authority.

(d) The well must be constructed in conformance with the Water Well Construction Standards, Chapter 173-160 WAC.

(e) Water from the source should conform to water quality standards contained in the State Board of Health Drinking Water Regulations and, at a minimum, must be tested for bacteriological quality and nitrates.

(i) A lab certified by Health must perform the analyses.

(ii) If the local health authority suspects that a problem may exist in a specific area, the local health authority may also require testing for trihalomethanes, pesticides, radionuclides, volatile organic chemicals and/or other chemical or physical water quality parameters.

(iii) If the well is newly constructed, prior to sampling it should be properly developed (i.e. flushed for a minimum of one hour or until such time as the water runs clear and all chlorine residuals are undetectable, whichever is longer).

(iv) Water samples should be collected by a "qualified individual" as determined by the local health authority.

(v) Follow-up sampling may be required to provide additional data on the level of a specific contaminant in question. If the local health authority determines that several consecutive follow-up samples indicate that the water supply is in compliance with the maximum contaminant levels, treatment and public notification requirements may be waived.

(f) Continuous effective treatment should be recommended, and may be required, for any water supply which fails to meet bacteriological or primary chemical or physical quality parameters.

(i) Continuous effective treatment may be recommended or required, at local health authority discretion, for any other contaminant found in the water.

- (ii) Treatment should generally be whole house rather than point-of-use. Water used in any portion of the system, such as the irrigation system, laundry, or other non-contact plumbing fixtures, which is isolated from the drinking water system does not have to be treated.
  - (iii) All home treatment equipment should be certified by the Department of Health and must be installed in accordance with the approved design.
  - (iv) In cases where treatment is recommended, a notice recommending treatment should be attached to the property title. This notification should recommend that the water system be inspected and retested any time the property ownership changes. The notice should include information regarding the potential health or aesthetic effects associated with exceeding the maximum contaminant level.
- (4) Alternative sources of supply.
- (a) Individuals may obtain water from alternative sources of supply under the following conditions:
    - (i) Hauling water should be allowed only if the applicant can demonstrate that the proposed system will comply with the water quality and quantity criteria specified in these guidelines.
    - (ii) Rooftop collection systems should be allowed only if the applicant can demonstrate that the proposed system will comply with the water quality and quantity criteria specified in these guidelines.
    - (iii) Desalination systems should be allowed only if the applicant either has or obtains a water right permit and can demonstrate that the proposed system will comply with the water quality and quantity criteria specified in these guidelines.
    - (iv) Other alternative water supply systems should be allowed only if the applicant either has or obtains a water right permit, when required, and can demonstrate that the proposed system will comply with the water quality and quantity criteria specified in these guidelines.
  - (b) A local health authority wishing to permit the use of alternative systems should develop a process to grant waivers from these guidelines which provides for the protection of the public health and safety.
    - (i) Supply systems using alternative sources of supply may need to be accompanied by any necessary plans and specifications verifying that the system is capable of providing water for the purposes of the building equivalent in quantity and quality to the criteria specified in these guidelines.
- (5) Local permitting authorities may require additional information concerning the adequacy of a water supply, including potability information, beyond that listed above.

Section 5. DETERMINATION OF EXEMPT AREAS. A local government may seek to exempt new building construction in an area from complying with the provisions of RCW 19.27.097(1) through the process outlined below. Such an exemption would apply only to individual water systems. (NOTE: The Department of Ecology intends to adopt this section as an administrative rule. The remainder of the guidelines may be adopted as rules at a later date.)

- (1) A local government seeking an exemption should assess the potential of the area for exemption and prepare a proposal to be submitted to the Departments of Ecology and Health for review and comment. The local government should consult informally with both Ecology and Health to minimize the effort needed to prepare such a proposal. The proposal need include no more than the following elements:
  - (a) A map of the area proposed to be exempted. Such an area should probably be either a watershed or a discrete hydrologic unit.
  - (b) An inventory of current water rights in the area.
  - (c) A summary of existing water well report information for the area.
  - (d) A summary of water quality information for the area.
  - (e) An examination and discussion of other water uses, apart from domestic supply, in the area.
  - (f) An assessment of all land uses, including the population and building density, of the area to be proposed.

- (g) An evaluation of the zoning and growth potential of the area.
  - (h) Some form of local review or public hearing process.
  - (i) A plan for tracking and reporting information about future development in the area.
- (2) Ecology and Health will review the proposal and provide copies to other potentially affected parties, such as Indian tribes and fisheries and wildlife agencies. Criteria for review include the following:
- (a) The proposal is consistent with any applicable water resources plans developed by either Ecology or Health.
  - (b) The area has no history of water-related regulatory problems.
  - (c) Water appears to be available to sustain additional development.
  - (d) Additional development and water use in the nominated area would not post a significant threat to existing water rights, including instream flows.
  - (e) Additional development and water use in the nominated area would not significantly harm fish or wildlife habitat.
  - (f) Additional development and water use in the nominated area would not cause degradation of the present quality of water.
  - (g) There is no indication that use of the water in any portion of the designated area would pose a health risk to potential users.
- (3) Ecology and Health will inform the local government that they:
- (a) Agree with the proposal,
  - (b) Suggest specific changes, or
  - (c) Cannot accept the proposal.
- (4) If the proposal cannot be accepted by Ecology or Health, the local government may pursue mediation with the Department of Community Development. If agreement still cannot be reached, local governments which are not planning under RCW 36.70A.040 may request that the Department of Community Development make a final determination.
- (5) Areas will only be exempted for a specified period of time. Such an exemption should not be construed to be verification by Ecology and Health that water is available for any individual applications for water right permits or that the water is of suitable quality for drinking. A growth-related trigger mechanism or a specified period for review should be established for any exempted area.
- (6) Local governments may carry out a program to monitor impacts on water supply and water quality in exempted areas.

Section 6. PUBLIC WATER SYSTEMS. If the operators of a public water system desire to provide water to one or more new buildings, they should ensure that such an expansion of service is:

- (1) Consistent with adopted State Board of Health Drinking Water Regulations.
- (2) Consistent with adopted county land use plans, development regulations and ordinances.
- (3) Within the scope and conditions of the system's water rights, including authorized place of use, limitations on quantity of water allowed for use, and number of connections authorized to be served. If the system is currently exempt from water right permitting requirements, the operators should determine whether the proposed expansion of service will cause water use to exceed 5000 gallons per day or the area of lawn or noncommercial garden irrigated to exceed one-half acre, thereby requiring a water right permit.
- (4) Consistent with Department of Health regulations and procedures, including system design standards.

# SNOHOMISH HEALTH DISTRICT SANITARY CODE

## **CHAPTER 9.3**

## **DRINKING WATER RULES & REGULATIONS; ARSENIC TESTING**

### **I. TITLE**

These rules and regulations shall be known as "Drinking Water Rules and Regulations; Arsenic Testing" and are established pursuant to authority vested in the Snohomish Health District (SHD) Board of Health by RCW 70.05.060. These rules and regulations are adopted for the protection of public health through the mechanism of arsenic sampling of water supplies.

### **II. PURPOSE AND POLICY DECLARED**

These rules and regulations are enacted as an exercise of the powers and duties of the SHD Board of Health to preserve, promote and improve the public health. The provisions herein shall be liberally construed for the accomplishment of these purposes.

It is the specific intent of these rules and regulations to place the obligation of compliance upon the owner of a private water supply or the purveyor of a public water supply. No provision of, nor term used in, these rules and regulations is intended to impose any duty, other than notification as identified herein, upon the SHD or any of its offices or employees.

### **III. DEFINITIONS**

- A. Health Officer: The Health Officer of the SHD or an authorized representative.
- B. On-Site Sewage Disposal Permit: Any system of piping, treatment devices, or other facilities that convey, store, treat, or dispose of sewage on the property where it originates or an adjacent or nearby property under the control of the user where the system is not connected to a public sewer system.
- C. Individual Water Supply: As defined in Chapter 9.1 of the Snohomish Health District Sanitary Code.
- D. Public Water Supply: Any system or water supply intended or used for human consumption or domestic uses, including source treatment, storage, transmission and distribution facilities where water is furnished to any community, collection or number of individuals, or is made available to the public for human consumption or domestic use, but excluding a water system serving one single family residence.
- E. State Approved Laboratory: Any laboratory approved by the Washington State Department of Health or Washington State Department of Ecology to perform arsenic analysis for public water systems.
- F. Well: Any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of the well is for the location, diversion, artificial recharge, or withdrawal of groundwater.
- G. Water Well Report: A complete record on the construction or alteration of the well as specified in WAC 173-160-141.

# SNOHOMISH HEALTH DISTRICT SANITARY CODE

## CHAPTER 9.3

## DRINKING WATER RULES & REGULATIONS; ARSENIC TESTING (Cont.)

### **IV. WATER ANALYSES**

Arsenic analyses of a water supply, by a state approved laboratory, shall be required when:

- A. A new individual water supply is developed; or
- B. A water supply operational check is conducted by the SHD on an individual water supply which has not been sampled and tested for arsenic during the previous 36 months; or
- C. A public water supply has not been tested for arsenic during the previous 36 months.

### **V. WATER WELL REPORTS**

It shall be the responsibility of the property owner to furnish the SHD with a copy of the water well report.

### **VI. ON-SITE SEWAGE DISPOSAL SYSTEM PERMIT**

No on-site sewage disposal system permit shall be issued for a new residence without complying to Sections IV and V above, as well as the SHD "Supplemental Drinking Water Policies and Procedures for Individual Water Supplies" Sections IV(E) and IV(H) when an Individual Water Supply is proposed as the source of potable water.

### **VII. FEES**

The Board of Health shall set and collect fees for the gathering, transportation, and analysis of water samples and other such incidental services as might be required by the enforcement of these regulations.

### **VIII. NOTIFICATION**

When the SHD is notified that a well, within its jurisdiction, has yielded a well water sample with an arsenic level above 0.01 mg/l, the SHD shall attempt to notify the owner of the property on which the well is constructed and any persons who are living on said property, or using the water supply of such well water sample results.

### **IX. WAIVER**

The Health Officer may waive any portion of these rules and regulations, provided that the waiver is consistent with the intent of these rules and regulations, and no public health hazard is likely to result, and the waiver will not be in conflict with the requirements of WAC 246-290 and the Federal Safe Drinking Water Act.

SNOHOMISH HEALTH DISTRICT SANITARY CODE

CHAPTER 9.3

DRINKING WATER RULES & REGULATIONS;  
ARSENIC TESTING (Cont.)

**X. SEVERABILITY**

Should any part of these rules and regulations be declared unconstitutional or invalid for any reason, such declaration shall not affect the validity of the remainder.