



**WHATCOM COUNTY
HEALTH DEPARTMENT**
509 Girard Street
Bellingham, WA 98225
Phone (360) 676-6724

**WATER AVAILABILITY NOTIFICATION
CONTAMINATED SOURCE**

SECTION ONE – APPLICABILITY:

Contaminated well water is water that, through certified lab tests, shows a confirmed level of a contaminant that exceeds the DOH maximum contaminant level (MCL) allowed. After reviewing each item in your “Water Availability for a Building Permit” application, the Health Department may request you to take further samples for the specified contaminants. **Do not begin** this packet or do any water quality re-sampling unless you have submitted a completed Water Availability packet with all of the correct forms **AND** have been instructed by the Whatcom County Health Department that you need to resample and/or complete this packet.

SECTION TWO – INSTRUCTIONS:

Please read the attached information carefully for full instructions on how to proceed with obtaining contaminated source approval. Please submit this form and one copy of each document required to Whatcom County Health Department for review and approval. **Please allow at least 1 week for the approval process.** This information will be kept on file at the Environmental Health Division. **The documents required are:**

For Initial Building Permit Approval

1. Water Availability Notification (this form)
2. Public Water Denial Form (attached)
3. Evaluation of Alternative Sources (attached)
4. A pre-design study of water quality including water sample testing and a list of contaminates being treated for
5. 2 Affidavits before building permit approval (attached):
 - a. Affidavit of Owner/Operator (**signed, notarized, and recorded with the County Auditor**)
 - b. Affidavit of Designer (**signed, notarized, and recorded with the County Auditor**)
6. Water treatment system schematic designed by a qualified individual or organization
7. An Operation, Maintenance, and Monitoring plan for the treatment system

For Final Occupancy Approval (to be done after treatment system installation)

8. Affidavit of Installer (**signed, notarized, and recorded with the County Auditor**)
9. A final post-treatment water sample results (conducted by a State certified laboratory) showing adequate removal of contaminates

SECTION THREE – APPLICATION:

Building Permit Applicant’s Name _____

Current Mailing address _____

City _____ State _____ Zip _____ Phone _____ or _____

Project Type (check one): Single Family Residence ADU Commercial Plat

Tax Parcel Number (proposed home) _____ **Well Tag Number (if applicable)** _____

Proposed residence address _____

Notification: Call _____ Mail to _____

I certify that the attached water sample analyses were obtained from the proposed source.

Signature _____ Print Name _____ Date _____

APPROVALS:

Initial (Building Permit)

Approved Denied Date _____

By _____
Whatcom County Health Department

Comments _____

Final (Occupancy)

Approved Denied Date _____

By _____
Whatcom County Health Department

Approval Expires _____

Comments _____

Required Documents For Contaminated Source Application

► EVALUATION OF ALTERNATIVE SOURCES

The Health Department will only consider the use of contaminated water for a private water system if no suitable alternative is available. Preferred alternative sources include:

- Connection to an existing public water system.
- Connection to an existing or neighboring well.
- Drilling a new well.
- Developing a spring.

Examples of evidence of no alternative source include:

- An evaluation of well logs in the area showing lack of groundwater.
- Written statements from a licensed well driller indicating there is no groundwater in a particular area.
- Descriptions of the site limitations, such as setbacks to property lines, sewer lines or on-site septic systems.

► PRE-DESIGN STUDY

A Predesign study shall be required with the goal of establishing the most acceptable method to produce satisfactory finished water quality. Included in the predesign study will be:

- A review of the activities occurring in the vicinity of the well that may be causing the contamination.
- Methods of reducing or removing potential for future contamination.
- Sample collection and analysis by a DOH certified laboratory as appropriate to adequately characterize water quality.
- Reports or other information necessary to identify the sources of contamination.
- Results of the water quality testing and any other relevant predesign studies, such as comparison of various treatment techniques and pilot tests, shall be submitted to the Health Department along with a list of the contaminants the system is being designed to treat.

► TREATMENT SYSTEM DESIGN / SCHEMATIC

Important: It is the specific intent of this policy to place the obligation of complying with the requirements specified under the following sections entitled “Treatment System Design” and “Maintenance, Operation, and Monitoring” upon the owner or operator of the water system. No provision and no term used in these sections of the policy is intended to impose any duty whatsoever upon the Health Department. The Department will simply act to receive the documents and information in these sections.

- A detailed schematic of the treatment system and specifications of components must be submitted to the Health Department. All equipment and materials used by the treatment system must be certified by the most recent National Sanitarian Foundation (NSF) Listings: Drinking Water Treatment Units and Related Products, components and Materials. Where

NSF certified equipment or materials are not available to address contamination problems for a particular water supply, the Health Department may accept acceptable alternates designed by a licensed engineer. Ultraviolet light disinfection systems must conform to State Department of Health Guidelines for Ultraviolet Systems.

- The treatment system must be designed to treat 400 gallons per day for a single-family residence. All faucets must provide treated water. Plans for a storage tank must be included in the design submitted to the Health Department if the source cannot provide for peak household flows.

Finished Water Quality

Finished water quality from a proposed source of supply shall conform to the minimum quality standards established in the Whatcom County Drinking Water Ordinance and WAC 246-290-630 if there is bacteriological contamination due to the direct influence of surface water. If standards are not found in WAC 246-290 then Federal EPA Drinking Water Standards will be used. If you are required to treat for bacteria, minimum treatment for bacteria due to surface water influence must include filtration and disinfection. The treatment system must be designed, installed and operated to ensure at least 99.9% (3 log) removal and/or inactivation of Giardia lamblia, 99.99% (4 log) removal and/or inactivation of viruses and 99 % (2 log) removal of Cryptosporidium.

► MAINTENANCE, OPERATION AND MONITORING PLAN

A Maintenance, Operation and Monitoring Plan that specifies what must be done to ensure that the treated water will meet the quality standards for which the system was designed. This plan needs to include the following:

- A plan to provide for the monitoring of the operation of the water treatment equipment, including means to provide for the servicing, disinfecting, repairing and replacements for the system as frequently as necessary (taking into consideration the system's design, anticipated use, and the type and level of contaminants present).
- A schedule for on-going water quality monitoring.
- Provisions (which may include a contract) for the on-going servicing, repair and necessary replacements of the water treatment system as described in the plan must be provided by the owner or operator of the system.

► 2 AFFIDAVITS BEFORE BUILDING APPROVAL

- The system **owner/operator** must submit a signed, notarized and recorded (with the County Auditor) copy of an Affidavit of Owner/Operator (see attached form) indicating that they are the Owner/Operator of this treatment system. The applicant is stating that they understand the obligation to comply with treatment system design, installation, operation and monitoring lies with the applicant and not Whatcom County for the contaminant(s) listed as exceeding the Maximum Contaminant Level. The applicant also states that they understand that when a public water system becomes available, any person obtaining water from this contaminated source must provide current test results showing water treatment is adequately maintaining water quality below maximum contaminant levels (MCL). If the quality does not meet the MCL, the applicant may be required to hook up to a public system.

- The system **designer** must submit a signed, notarized and recorded (with the County Auditor) copy of an Affidavit of Designer (see attached form) indicating that the design is in compliance with the requirements specified in the Treatment System Design section of this application.

► **AFFIDAVIT OF INSTALLER**

- The system **installer** must submit a signed, notarized and recorded (with the County Auditor) copy of an Affidavit of Installer (see attached form) indicating that the installation is in compliance with the requirements specified in the Treatment System Design section of this application.

► **TREATED WATER TESTING REQUIREMENTS**

The following tests must be completed with satisfactory results obtained and reported to the Health Department prior to occupancy of the building. A Washington State certified laboratory must conduct all testing.

- Bacteriological:** If a disinfection system is required, a treated water sample must be taken following treatment and analyzed for total and fecal coliform. Satisfactory results require that no coliform bacteria be present.
- Inorganic Chemical and Physical:** Raw and treated water samples must be collected and analyzed for the parameter(s) that are to be removed through treatment such as arsenic, barium, cadmium, chromium, fluoride, lead, mercury, nitrate (as N), selenium, silver, and turbidity. Satisfactory results require: ① Compliance with the MCL's specified in the Whatcom County Drinking Water Ordinance, and ② System performance specified in the treatment system design.
- Other:** Additional sample(s) must be collected and analyzed for any other contaminants that were identified as requiring treatment in the predesign study. Satisfactory results require compliance with the MCLs specified in the Whatcom County Drinking Water Ordinance, or if not specified in the Ordinance, EPA Primary Drinking Water Requirements (40 CFR Parts 141 and 142).

► **ADDITIONAL REQUIREMENTS**

Additional requirements may be specified by the Health Officer.

► **SPECIFIC ARSENIC INSTRUCTIONS**

If you choose to resample and average the results using any of the following options, the WCHD must be on-site for at least one sample.

1. If you can wait 1 year prior to building:

Note: An Environmental Health Specialist needs to have reviewed your entire Water Availability packet and advised you before you begin this treatment packet or any resampling. Research indicates that there can be seasonal changes in the levels of Arsenic in water. If you are not trying to get your building permit in less than 1 year, you can resample every 3 months from the date of your original water availability for building permit application and submit these results to us to be averaged with your original sample to determine if your annual Arsenic level is above or below the MCL. If above the MCL, you will be required to complete this treatment packet at that time. If your averaged results are below the MCL, you will not be required to complete this packet.

2. If you want to move forward with your building permit now, choose one of the following options:

No Resampling

Note: An Environmental Health Specialist needs to have reviewed your entire Water Availability packet and advised you before you begin this treatment packet. If you are ready to move forward with your Water Availability for a building permit now, and your original Arsenic sample is over the MCL and you do not wish to resample for Arsenic, you can complete this treatment design packet. No further sampling is required prior to getting approval on your Water Availability for your building permit.

Resampling

Note: An Environmental Health Specialist needs to have reviewed your entire Water Availability packet before you begin any resampling or this treatment packet. The Whatcom County Health Department will accept 3 more sample results (taken a minimum of 24 hours apart) to be averaged (total of 4 sample results) in order to determine if you need to treat for Arsenic. It is recommended that you take the samples as far apart as possible in order to get a better representative of your Arsenic level since research indicates that Arsenic levels fluctuate over time.

3. In order to obtain final occupancy:

If you decide to move forward with your building permit now and you are required to complete this packet but will not need Final Occupancy in less than 1-year, you can resample for Arsenic quarterly over that year. These results will be reviewed by the Health Department. If the average of the 4 samples (one for each quarter) is less than the MCL, you will not be required to install your designed and approved treatment system. If this average is over the MCL, then you will be required to install your designed and approved treatment system for Final Occupancy.

Evaluation of Alternative Sources

The use of contaminated well water (or surface water) for private water systems will be considered only if no suitable alternative is available. Preferred sources include public water systems and uncontaminated groundwater and springs. Evidence must be provided to the Health Department indicating that no such alternative sources are available. Evidence could consist of a the “Denial for Public Water System” form (attached), an evaluation of adjacent well reports and water quality information, exploration of potential to share a neighbor’s uncontaminated well, or other descriptions of the site limitations.

Tax Parcel Number: _____

- o Can you connect to an existing public water system? _____
(If you are in the service area of an existing public water system please submit the “Denial for Public Water System” form in this packet).
- o Can you connect to an existing uncontaminated neighboring well or spring? _____
- o Can you drill a new well? _____
If not, do you have evidence of existing sources near your project that are also contaminated? __
Please submit any related information.
- o Please explain any other site limitations:

Applicant Signature

Date



WHATCOM COUNTY HEALTH DEPARTMENT
DENIAL FROM PUBLIC WATER SYSTEM

509 Girard Street
Bellingham, WA 98225
Telephone: 360-676-6724
Fax: 360-676-6771

If public water is available for your Land Use Application, please complete the Water Availability Notification Form for Public Water. Forms are available at our office.

SECTION ONE - APPLICABILITY:

Complete this form if you are applying for a Land Use Application and there is an existing public water system that may be able to serve your project.

SECTION TWO - INSTRUCTIONS:

After you have completed Section Three, take this form to the water system manager or authorized representative so they can complete Section Four. Then return this form to Whatcom County Health Department for review.

SECTION THREE - APPLICATION:

Completed by Land Use applicant:

Applicant's Name _____ Applicant's Phone _____

Project Name _____ Project Number _____

Project Type (check one): [] Single Family Residence [] ADU [] Commercial [] Plat

Tax Parcel Number _____

Contact Name _____ Contact Phone _____ or _____

Contact Address _____ City _____ State _____ Zip _____

SECTION FOUR - CERTIFICATION:

Completed by water system manager or representative.

Water System Name _____ State ID# _____ This water system is unable or unwilling to supply water to the above listed land use application.

Signature and Title _____ Date _____

Address _____ Phone _____

SECTION FIVE - REVIEW:

Completed by Whatcom County Health Department.

Date received _____

[] Accepted

[] Rejected

Reason _____

_____ Date _____

Whatcom County Health Department

RETURN DOCUMENT TO:

Whatcom County Health Department
509 Girard Street
Bellingham, WA 98225

Use dark black ink and print legibly. Documents not legible will be rejected per RCW.

Document Title(s):

Affidavit of Owner or Operator / Affidavit of Designer

Grantor(s):

Page number where additional grantor(s) can be found:

Grantee(s):

Page number where additional grantee(s) can be found:

Abbreviated legal description: (lot, block, plat name or; qtr/qtr , section , township & range or; unit, building and condo name).

Page number where complete legal description can be found:

Assessor's Parcel Number:

Affidavit of Designer

STATE OF WASHINGTON)
)
COUNTY OF WHATCOM) ss. Affidavit of _____

_____, being first duly sworn upon oath,
deposes and says:

I have designed a water treatment system for the building located at
_____ (address) with a legal

description as follows: _____

I have carefully reviewed the requirements of the Whatcom County Health Department's Water Availability Policy for design of water treatment systems. The water treatment system designed for the above building is in full compliance with the Health Department's Water Availability Policy and effectively secures a potable water supply for the building.

SUBSCRIBED and SWORN to before me this ____ day of _____, 20____.

NOTARY PUBLIC in and for the
State of Washington,
residing at:

My Commission expires:

RETURN DOCUMENT TO:

Whatcom County Health Department
509 Girard Street
Bellingham, WA 98225

Use dark black ink and print legibly. Documents not legible will be rejected per RCW.

Document Title(s):

Affidavit of Installer

Grantor(s):

Page number where additional grantor(s) can be found:

Grantee(s):

Page number where additional grantee(s) can be found:

Abbreviated legal description: (lot, block, plat name or; qtr/qtr , section , township & range or; unit, building and condo name).

Page number where complete legal description can be found:

Assessor's Parcel Number:

Affidavit of Installer

STATE OF WASHINGTON)
)
COUNTY OF WHATCOM) ss. Affidavit of _____

_____, being first duly sworn upon oath,
deposes and says:

I have installed a water treatment system for the building located at
_____ (address) with a legal

description as follows: _____

The water treatment system installed at the above residence is installed according to the design approved by the Whatcom County Health Department. All components and materials used in the water treatment system are as specified in the approved design. The attached treated water sample results verifying system performance were taken from the residence served by the treatment system.

SUBSCRIBED and SWORN to before me this ____ day of _____, 20____.

NOTARY PUBLIC in and for the
State of Washington,
residing at:

My Commission expires:



WHATCOM COUNTY HEALTH DEPARTMENT
LABORATORIES IN WHATCOM COUNTY
CERTIFIED BY THE STATE OF WASHINGTON
February 2007

509 Girard Street
Bellingham, WA 98225
Telephone: 360-676-6724
Fax: 360-676-6771

The following laboratories are certified by the Washington State Department of Ecology. Please contact the laboratory to verify correct sampling processes and associated fees.

Avocet Environmental Testing
1500 N. State Street, Suite 200
Bellingham, WA 98225
(360) 734-9033

Edge Analytical Inc. – Bellingham
805 W. Orchard Street, Suite 4
Bellingham, WA 98225
(360) 715-1212
(800) 755-9295

Exact Scientific Services, Inc.
3929 Spur Ridge Lane, Suite 1
Bellingham, WA 98226
(360) 733-1205

Please note, this list of laboratories is for Whatcom County only.

A complete list of State Certified Laboratories is available on the Department of Ecology's website at: <http://www.ecy.wa.gov/programs/eap/labs/search.html>