



Northeast Tri County Health District

Group B Design Application

Introduction

Completing this *Group B Design Application* will satisfy the design and planning requirements for a new or expanding Group B water system (WAC 246-291-120 and WAC 246-291-140, respectively). The department's review of your water system design will not confer or guarantee any right to a specific quantity of water. Our review will be based on your representation of available water quantity. If the Washington Department of Ecology, a local planning agency, or other authority responsible for determining water rights and water system adequacy determines that you have use of less water than you represent, the number of approved connections may be reduced commensurate with the actual amount of water and your legal right to use it.

All submittals must include all the information referenced in this application on page 4 and required by chapter 246-291 WAC.

Before sending your completed application to the reviewing agency, make copies of all plans, design drawings, worksheets, equipment information, operations and maintenance manuals, legal documents, and forms. Keep this information with your other project documents to help you and others successfully manage and operate your new water system.

Regulations

We suggest you become familiar with Washington's Group B water system rule (chapter 246-291 WAC) before you start your design. The local Group B ordinance, effective January 26, 2017, is online <http://www.netchd.org/index.php?id=41>.

Group B Water System Design Guidelines

Additional guidance can be found on the Department of Health website referencing Group B Water System Design Guidelines (331-467). The guidelines are online at doh.wa.gov/portals/1/Documents/pubs/331-467.pdf.

Qualified Well Designer

Most Group B water systems will require the use of a professional engineer. However, as a part of the NETCHD local ordinance, we allow the use of a person with demonstrated knowledge to submit a design. The systems must meet the criteria that they:

- (1) Do not use a variable speed pump,
- (2) Do not provide fire flow,
- (3) Do not have special hydraulic considerations,
- (4) Do not have atmospheric storage in which the bottom elevation of the storage reservoir is below the ground surface and
- (5) Serve fewer than ten service connections.

Demonstrated Knowledge Statement

To adequately assess potential impacts and design requirements of proposed development of Group B water systems, a person shall have documented expertise. Pursuant to Northeast Tri County Health District adopted Resolution 01-2017 Group B Public Water Systems Regulation, in the absence of a professional engineer, a signed statement must be provided by the designer of a Group B water system under the provisions listed in Section 9(4); attesting that the qualified designer has **demonstrated knowledge** of water system design. Below is a list of criteria to be used to evaluate the knowledge and expertise necessary to design a Group B water system:

(A) Elements of Knowledge

- i. Identify existing critical water supply service areas with a clear understanding of the Water System Coordination Act (246-293 WAC).
- ii. Determine water potential water sources that meet local qualifications for safe consumer use.
- iii. Identify factors that potentially lead to groundwater being under the influence of surface water infiltration.
- iv. Describe the proper elements for proper well-drilling and construction; including but not limited to: proper identification of soil layers, approved well construction materials and well placement with regards to sanitary protection.
- v. Describe when water treatment and monitoring is necessary and have familiarity with various available water treatment systems.
- vi. Identify proper applications of treatment systems for water sources that exceed primary MCL in Table 1 of NETCHD Resolution 01-2017.
- vii. Identify proper methods of operation and maintenance of public water systems.

(B) Demonstrable Elements of Competency

- i. Develop maps showing topography, distances from wells to property lines, buildings, potential sources of contamination and any other natural or man-made features that could affect the quality or quantity of water.
- ii. Establish groundwater source capacity by collecting pump test data.
- iii. Complete proper calculations regarding water demands, total dynamic head, well pump sizing, bladder tank selection, pipe sizing and design as well as integrating any necessary cross connection controls.

Please prepare a statement to be included in the submittal with this Group B application. This can be a resume of the person or persons preparing the design, including education and a list of any other relevant qualifications that document expertise in the requisite field.

Certain one and two-connection water systems are not regulated. Before submitting your Group B design application, see Section 2.1 of the [Group B Water System Design Guidelines \(331-467\)](#) to be sure your project design requires department approval.

Fees Charged for Design Reviews

A completed design application addresses the planning, design report, and construction documents required by NETCHD Resolution 01-2017. See our fee schedule posted on our website for the most current list of applicable fees.

Online Group B Resources

Department of Health developed online Group B resources to help you from the pre-submittal stage of your water system design through operation and maintenance.

The [Online Group B Resources](#) include:

- All the forms you need to meet the submittal requirements for a new or expanding Group B water system, including the [Well Site Evaluation Application](#) and [Water Facilities Inventory Form](#).
- Guidance to help you operate and maintain your small system. After you receive written approval of your water system design, you may begin construction of the distribution system, well house, tanks, treatment equipment, and so forth. We urge you to review this information before you begin operating your new or expanded system.

You can view the Group B resources at

doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/GroupB/Resources.

Group B planning and design submittal checklist for a new or expanding Group B water system

Check the appropriate box for each row and submit a completed checklist with application.

Planning and Design Submittal Element	Group B Design Guidelines Chapter	Yes, Included	No, Not Applicable
Completed project approval application form	Chapter 2.2		Always Applicable
Property title notice	Chapter 2.6		
Service area map	Chapter 2.3		
Demonstrate compliance with SMA requirement Applies to new systems only.	Chapter 2.5		
Demonstrate compliance with PWS Coordination Act	Chapter 2.4		
Completed Water Facilities Inventory (WFI) Completing a WFI will expedite the review process.	Chapter 2.9		
Water users' agreement (optional)	Chapter 2.8		
Water right permit or other needed Dept. of Ecology or County approval	Chapter 3.0		
Well log	Chapter 4.1		
Well pump test report and estimate of water demands	Chapter 4.1		
Well water quality including source of supply and sampling results	Chapter 4.2		
Documentation of well site approval	Chapter 4.3		
Well sanitary control area protective covenants	Chapter 2.7 and 4.3		
Intertie agreement	Chapter 4.4		
Well and pump house detailed drawings and specifications, including well pump, bladder tanks and pump house	Chapter 5.2 and 5.3		
Distribution system detailed drawing and specifications	Chapter 6.10		
Storage tank sizing, detailed drawings, and specifications	Chapter 7.6		
Booster pump sizing, detailed drawings, and specifications	Chapter 8.1		
Contaminant treatment design	NETCHD Resolution 01-2017		
Demonstrated Knowledge Statement	See pages 2 and 3 of this application		
Financial Viability Report	Chapter 10		
Completed Group B Design Report Application			

1.0 Designer and Owner

Failure to complete all applicable sections of this application or submit necessary design documentation will result in denial of your application or delay in its approval. Please print all information. If your system is not designed by a Professional Engineer, please attach the Demonstrate Knowledge Statement (see Pages 2 and 3 of this application).

1.1 Water System Designer

Design prepared by: _____

Mailing Address: _____

Company Name: _____

Day Phone: _____

Email Address: _____

If prepared by a Professional Engineer, apply seal here:

1.2 Water System Owner

Owner's Name: _____

Owner's Mailing Address: _____

Day Phone: _____

Email Address: _____

2.0 Basic Water System Information

2.1 Water system name and location.

System Name _____

Water System Location _____
(Town or City, County)

Public Water System ID# _____
(Applies only to existing systems seeking approval to expand.)

2.2 Connections and Population

See the requirements for establishing the design service population for each dwelling unit in WAC 246-291-200 (2). See Section 2.0 of the [Group B Water System Design Guidelines](#) for expectations on counting accessory dwelling units as separate connections.

Connections		Service Population	
Dwelling units	Nonresidential	Residential	Nonresidential

List the Parcel Numbers for which this Group B water system intends to supply:

****Systems with more than nine (9) service connections will need to be submitted to Washington State Department of Health for review and approval.**

Owner's / Representative Signature _____ Date _____