Group B Public Water Systems Handout

Group B public water systems serve fewer than 15 service connections and less than 25 people per day OR fewer than 15 service connections and 25 or more people per day for fewer than 60 days per year (WAC 246-291-005). Typically these systems are designed and approved during land division projects (short or long plats). Examples of a Group B system would include:

- A system serving a six lot subdivision with six single family residences with three of the lots having accessory dwelling units (nine total connections, 22.5 people)
- A business complex with 20 full time employees split between two buildings
- A system serving two duplexes and two single family homes (six total connections, 15 people)
- A system serving three single family homes with one home having a separate shop that is a place of employment for people from outside the home. The other two homes include separate structure with piped water that serves as a retail or commercial business open to customers or clients. This system serves three dwelling units plus three nonresidential connections for a total of six connections

The Health District can only approve new or expanding systems up to nine connections and cannot approve any waivers to the Group B code. For systems over nine connections and need waivers or variances, these systems need to be reviewed and approved by the Washington State Department of Health (DOH). Please call the Health District for more information.

All systems need to be designed by following the Group B Water System Design Guidelines (DOH publication 331-467) and the information submitted in the format of the Group B Design Workbook (DOH publication 331-468). Both publications can be found on our website or the DOH Group B website: https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/GroupB

Typically, a Professional Engineer will design the water system; however, the Health District can allow non-engineers to design some systems. Non-engineers can only design systems that have:

- No variable speed pumps
- No fire flow
- No special hydraulic considerations
- No atmospheric storage tanks in which the bottom elevation of the reservoir is below the ground surface
- No more than nice service connections

The steps required to complete a new or expanding Group B water system include:

1. Documentation of Well Site Inspection approved by DOH or Local Health. The Health District recommends doing this first before drilling the well point. You will need to own in fee simple control by Restrictive Covenant all the land within 100 feet of the well point. For expanding systems, we will
visit the site to document the existing well point and potential issues with the 100-foot sanitary control area around the well point. If there are issues with the sanitary control area, you may need a variance or waiver from DOH before proceeding with the Workbook.

2. A complete Group B Design Workbook. Other formats are acceptable but must have all the design elements of the Workbook. Rather than trying to fit everything into the small spaces in the Workbook, please attach:
   - Scaled service area map with accurate lot lines and dimensions including necessary water easements
   - Well and pump house detailed drawings and specifications
   - Distribution system detailed drawing and specifications

3. Please include with the Workbook copies of:
   - Property Title Disclosure Notice (Guidelines, Chapter 2.6 and Appendix C). Do not record the Notice at this time. For new systems, the owner or Health District will record this Notice to each parcel served by this system later before the system is put in use. For expanding systems, we will have the owner record the document to each existing and proposed parcel after we review the Disclosure. The Health District has a copy of this for
   - Written documentation that demonstrates compliance with PWS Coordination Act (Guidelines, Chapter 2.4)
   - For new systems only: written documentation that demonstrates compliance with Satellite Management Agency requirements (Guidelines, Chapter 2.5 and Appendix B). For a list of local SMAs please see the Department of Health’s Group B SMA website at:
   - Completed or updated Water Facilities Inventory (WFI)
   - Well Log
   - Well Pump Test results (Guidelines, Chapter 4.1 and Appendix F)
   - Well water quality sampling results (complete IOC and bacteria)
   - Well sanitary control area protective covenants (Guidelines, Chapter 4.3). Required in all cases even if the 100’ sanitary control area radius falls completely within the project boundaries
   - The locations and dimensions of easements for the water distribution piping, reservoirs, wells, and pumping station. Typically, this is shown on plats for new construction but existing systems may need to have these easements developed and recorded

4. More complex and larger systems may need:
   - Ground water withdraw Water Right permit or other Department of Ecology approval
   - Storage tank sizing, detailed drawings, and specifications
   - Booster pump sizing, detailed drawings, and specification
   - Fire Flow calculations (if required by the local fire authority)
   - Low Well Yield Water Supply Contingency Plan (if less than 5.0 gpm well yield)
   - Intertie agreement if your water system buys water from a larger water system
5. Optional:
   - Water user’s agreement (*Guidelines*, Chapter 2.8 and Appendix D). This document is recorded to each parcel of the system and contains information as to operating budgets, fees, recordkeeping, governing board, bylaws, etc. This may also be developed by the users of the system at a later date much like a Homeowners Association.

Once the system design package is deemed complete, the Health District will review the application and forward a copy of the design with our approval letter to the state Department of Health for a Public Water System (PWS) ID number. With the PWS number, we will issue the construction permit for the water system. The owner of the system will have 3 years to complete the system or the construction permit/approval expires. The Health District (or the engineer of the system if the project was designed by a Professional Engineer) will conduct a final “construction completion” inspection. If there were changes to the proposed/approved distribution system, we will require a scaled As-built drawing of the distribution system with the changes prior to approving the system for use.

After the system is installed, approved for use by the Health District, there are no requirements for continuing water quality sampling, however; we do highly recommend sampling the system for coliform bacteria once a year and for nitrates every three years. This helps ensure a safe water supply. The only time the owner of the water system will be required to contact the Health District are:

- When the owner of the system changes. We will update our files with the new owner’s name, mailing address, and phone number in case we need to contact that person during a public health emergency involving the water system.
- When someone requests permission to connect to the system for a building permit. We will instruct the applicant to contact the water system on file who will then indicate their approval of the connection in writing back to the Health District. We will update our files to reflect the new connection.
- When the owner or water system operator has any questions or needs Group B technical assistance.

If you have any questions about the Group B Public Water System Review approval process, please call Chelan-Douglas Health District as (509) 886-6400. We will make sure the Sanitarian assigned to your area assists you.