

Small Public Water System Using Groundwater Application Instructions

No person may operate a public water system without having secured a State of **California Domestic Water Supply Permit** issued by ACEHD. The State water supply permit is a one-time permit that is issued prior to the operation of a drinking water system. You will also be required to pay an annual operating fee and receive an annual operating permit from ACEHD. The application packet for a public water system shall include all of the following, where applicable:

1. **Consider Consolidation.** Before moving forward in pursuing a CA Domestic Water Supply Permit, you need to consider consolidating with neighboring public water systems. In the TMF Assessment (see below), you will be required to identify all Public Water System's located within one mile of your proposed water system. If consolidation is determined to be not feasible, you will be required submit written justification.
2. Completed and Signed **State of California Application for Domestic Water Supply Permit**. This application must be signed by the owner of the proposed water system or someone who has legal authority to sign the application.
3. **\$192 Plan Check Fee**. This pays for two hours of the Department's time to review the application, conduct inspection(s) of the water system, and provide general assistance to the water system in obtaining its water supply permit.
4. **Source**. All public water supply wells shall be constructed in accordance with the California Well Standards and the California Waterworks Standards. For example, all public water supply wells must have a minimum 50 annular seal. There is a handout enclosed with this packet.
5. **Conduct water quality testing of the source(s)**. (See Table 1). Prior to putting a source into service, the water quality must be tested to verify that it meets Chapter 15, Title 22, California Code of Regulations standards. All samples must be analyzed by a CA Certified Laboratory. Your engineer will need these results in order to prepare the technical report.
6. **Technical Report**. (Refer "Technical Report Outline Guidance Document"). The technical report is the heart of the permit application and establishes the foundation upon which the Department makes the decision to grant or deny a water supply permit. The technical report sets forth all of the technical information; description of source(s); calculations; material descriptions; design parameters; details on any proposed treatment systems; etc., that are the basis for construction of the new water system. The technical report shall be prepared by a California **licensed engineer** with experience in the design of water systems (Title 22, Section 64552(b)). The Technical Report shall include detailed Water System Plans (See number 7).

7. **Water System Plans**. Must be prepared to scale per the “Guidelines for Water System Plans”. (Title 22, 64552(a)[3] and [4]).
8. **Cross Connection Control Survey**. This Department may require the applicant to retain the services of a California Certified Cross Connection Control Specialist to review the water system plans and/or perform an on-site cross connection control survey of the proposed water system. The specialist must assure approved methods are in place to protect the water system from backflow or back-siphonage of contaminants or pollutants. *Note: Proposed water systems operating in conjunction with, or on the same parcel as, a winery or agricultural irrigation systems WILL require review by a Cross Connection Control specialist.*
9. **Source Production Test**. Required for all new Community and Non-Transient Non-Community Water Systems. May be required for other systems when there is a lack of historical production data or for areas know for low well yields. (Refer to “Source Capacity Test Procedures”). Should a source production test be required it must be conducted by a licensed drilling contractor. This requires a source production test fee paid to ACEHD and the test must be witnessed by a representative of ACEHD.
10. **Technical, Managerial, and Financial (TMF) Assessment**. Any new public water system must demonstrate that the system has, or will have, adequate TMF capability to reliably operate a public water system in compliance with all drinking water requirements for the foreseeable future. ACEHD will assist you in selecting the proper form(s) to complete a TMF. For more information, visit the California Department of Public Health (CDPH) website at: <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/TMF.aspx> . The CDPH website also has helpful information on operation and maintenance plans, five year budget projections, and typical equipment life expectancy.
11. **Drinking Water Source Assessment and Protection (DSWAP) Program**. The DWSAP document is part of the **TMF Assessment** (See Section B of “Technical Capacity”) and must be conducted by a qualified consultant or engineer. Forms and guidance for preparing the assessment are available at: <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/DWSAP.aspx>
12. Completed “**Water System Information Sheet**.”
13. Completed “**Bacteriological Sample Siting Plan**.”
14. Completed Water “**Quality Emergency Notification Plan**.”
15. Completed “**Disinfection By-products Monitoring Plan**” (This is **ONLY** required for Community or Non-Transient Non-Community Water Systems that treat water with a chemical disinfectant or provide water that contains a chemical disinfectant).
16. **California Environmental Quality Act (CEQA)**. Be advised that new public water systems are subject to CEQA review.

17. **Other Agency Permits.** Check with the Amador County Planning and Building Department to determine what, if any, permits are required.
18. **Fire System Requirements.** Should a building permit be required to construct/improve the water system, the Amador County Fire Protection District will likely evaluate and approve fire storage capacity, site placement, and fire flow requirements.
19. **Regional Water Quality Control Board.** Be advised that disposal of waste from water treatment may be subject to approval by the Regional Water Quality Control Board. Visit the RWQCB website at :
www.waterboards.ca.gov/centralvalley/business_help/permit.html

This completes the list of required components of the Water System Application. The application, once received in its entirety, will be reviewed by ACEHD. Additional information, if needed, will be requested of you in writing. An inspection may also be scheduled by ACEHD, especially if you are trying to permit existing system components.

**TABLE 1. Required Initial Source Water Quality Monitoring
For Public Water Systems Using Groundwater**

California Code of Regulations, Title 22

Community Water System	Non-Transient Non-Community	Transient Non-Community
Bacteriological Coliform bacteria	Bacteriological Coliform bacteria	Bacteriological Coliform bacteria
Inorganic Chemicals (w/ Primary MCLs) <i>Two consecutive quarterly samples:</i> Aluminum Antimony Arsenic Asbestos Barium Beryllium Cadmium Chromium Cyanide Fluoride Mercury Nickel Selenium Thallium Nitrite as Nitrogen Nitrate and Nitrite (sum as Nitrogen) Nitrate as NO3 Perchlorate (2 samples 5-7 months apart)	Inorganic Chemicals (w/ Primary MCLs) <i>Two consecutive quarterly samples:</i> Aluminum Antimony Arsenic Asbestos Barium Beryllium Cadmium Chromium Cyanide Fluoride Mercury Nickel Selenium Thallium Nitrite as Nitrogen Nitrate and Nitrite (sum as Nitrogen) Nitrate as NO3 Perchlorate (2 samples 5-7 months apart)	Inorganics Nitrate as NO3 Nitrite as Nitrogen Nitrate and Nitrite (sum as Nitrogen) Fluoride
Secondary Constituents and General Minerals Bicarbonate, carbonate, & hydroxide alkalinity Calcium Chloride Color Copper Foaming Agents (MBAS) Iron Magnesium Manganese Odor - threshold pH Silver Sodium Sulfate Specific Conductance or TDS Thiobencarb Total Hardness Turbidity Zinc	Secondary Constituents and General Minerals Bicarbonate, carbonate, & hydroxide alkalinity Calcium Chloride Color Copper Foaming Agents (MBAS) Iron Magnesium Manganese Odor - threshold pH Silver Sodium Sulfate Specific Conductance or TDS Thiobencarb Total Hardness Turbidity Zinc	Secondary Constituents Bicarbonate, carbonate, hydroxide alkalinity Calcium Iron Magnesium Manganese pH Sodium Specific Conductance Total Hardness
Organic Chemical Analyses <i>Four consecutive quarterly samples:</i> Volatile Organic Compounds (Title 22, Table 64444-A [a]). Synthetic Organic Compounds (Table 6444-A[b]) – Atrazine & Simazine; possible waivers for others.	Organic Chemical Analyses <i>Four consecutive quarterly samples:</i> Volatile Organic Compounds (Title 22, Table 64444-A [a]). Synthetic Organic Compounds (Table 6444-A[b]) – Atrazine & Simazine; possible waivers for others.	Organic Chemicals Not Required
Radiological <i>Four quarterly samples:</i> Gross Alpha (GA) / Possibly Uranium, Ra-226, & Ra-228 (if indicated by GA results)	Radiological <i>Four quarterly samples:</i> Gross Alpha (GA) / Possibly Uranium, Ra-223, Ra-224, and Ra-226 (if indicated by GA results)	Radiological Not Required

Once the permit application is approved, the following will be required:

20. **Obtain the Services of a licensed Distribution and/or Treatment Operator.** Community and nontransient-noncommunity water systems are required to retain the services of a California Certified Distribution System Operator, Grade D-1 or above. All water systems with treatment are also required to have a California State Licensed Treatment Operator (except for chlorinators, which may be operated by a Distribution operator). Some water systems obtain the certification themselves. Others opt to hire an operator. Prior to being issued a water supply permit, the water system must submit the name, copy of the certificate, and if not employed by the water system, a copy of the contract.
21. **Annual Operating Fee.** Following inspection and prior to initiating operation of water system, submit required annual operating fee to ACEHD. This is an annual fee is based on the classification of the water system and is required of all water systems as authorized by the California Health & Safety Code. The fee will be billed at the time the water system is permitted and billed annually thereafter.
22. **Water System Inspection.** Once the system construction is complete and ready for operation, and prior to the water system permit issuance, a pre-opening inspection of the water system shall be conducted.
23. **Issuance of Permit .** Once the pre-opening inspection is complete and all required fees and information are received by ACEHD, then ACEHD will issue the *State of California Domestic Water Supply Permit*, as well as the *annual operating permit*. The State of California Domestic Water Supply Permit issued to you by ACEHD is issued on a “one-time” basis. It is not subject to expiration and does not have to be routinely renewed. The annual operating permit is issued annually.
24. **Routine Monitoring .** Once initial monitoring is completed (See Table 1). Your water system will be put on a routine monitoring program. All systems conduct routine bacteriological sampling (coliform), as well as monitoring for nitrate and nitrite. Community and Non-Transient Non-Community Water Systems will also have monitoring requirements for such constituents as inorganic chemicals, VOCs, radionuclides, lead and copper, and disinfection by-products. ***Failure to monitor and report on schedule will result in issuances of violations and monetary penalties.***
25. **Amendments to Permit.** (Amendment Application is attached). The CA Water Supply permit may need to be amended from time to time if changes in the water system occur. You should be aware that none of the following changes can occur unless a permit amendment has been issued:
 - Change in ownership of the water system
 - The addition of new water sources
 - Change in status of an existing source (active to standby or vice versa)

- Any changes in the method of treatment
- Altering a source (e.g. rebuilding a spring)
- The addition of any storage reservoirs
- A major expansion of the service area ($\geq 20\%$)
- Any change in the distribution system that does not comply with the waterworks standards
- Change in the classification of water system

If you are contemplating making any of these changes, you should submit a request to ACEHD for a permit amendment. Making these changes without an amendment to the original permit could subject your water system to citations and administrative fines.