

State Water Resources Control Board

Division of Drinking Water

Outlined below are the Division's requirements for processing an application for a drinking water supply permit for a new transient-non community (TNC) water system using groundwater as its source of supply.

1. **Senate Bill 1263 - Preliminary Technical Report**

Senate Bill 1263 became effective on January 1, 2017. The bill was created to prevent the creation of unsustainable public water systems (PWS). CHSC 116527 requires a person submitting an application for a permit for a proposed new PWS to first submit a preliminary technical report (PTR) to the State Board at least 6 months prior to any water-related construction. The PTR encourages connecting to existing public water system where feasible. The State Board is authorized to deny the permit of a proposed PWS if it determines that the proposed new PWS will be unable to provide affordable, safe drinking water in the future. Responses to FAQs are accessible here:

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/permits/170511_sb_1263_faq.pdf

For additional guidance, please reach out to the Yosemite District Office.

2. **Permit Application**

For all new water supply systems, an application must be submitted to the Division for a drinking water supply permit. The permit application that must be completed on the part of the applicant is provided in [Attachment A](#), which also includes the following data sheets that must be completed to provide technical information regarding your water system:

- ☒ [A1](#) - System Information Sheet
- ☒ [A2](#) - Administrative Programs Data Sheet
- ☒ [A3](#) - Well Data Sheet
- ☒ [A4](#) - Distribution Data Sheet
- ☒ [A5](#) - Reservoir Data Sheet (for storage facilities)
- ☒ [A6](#) - Chlorination Data Sheet
- ☒ [A7](#) - Filter Plant Data Sheet.

A document titled *Introduction to Regulatory Requirements for Public Water Systems* is provided as [Attachment B](#) to assist you in understanding the requirements for public water systems.

3. **Plans and Specifications**

- **New System** – Plans and specifications for any new construction project must be provided to our office for review. This must include specifications and drawings for the drilling and construction of the domestic water supply well, in addition to construction plans for any treatment, distribution system piping and storage reservoirs. Plans for distribution system mains must show the locations of sewer mains, recycled water mains, storm drains any other utility that may pose a hazard to the water supply such as oil or gas pipelines.
- **Existing System** - Plans and specifications provided to our office must include well completion reports, construction plans for any treatment, distribution system piping and storage reservoirs, if any. Include a schematic of the system with key elements (wells(s), treatment, distribution system piping, storage tanks, water system boundary, etc.).

4. **CEQA Compliance**

All water supply construction projects (includes wells, distribution systems and treatment facilities) requiring Division approval and permits must undergo environmental review that complies with the California Environmental Quality Act (CEQA). As an applicant for a water supply permit, you will be required to submit documentation (Notice of Determination) demonstrating that compliance with CEQA has been obtained, whether that compliance is by means of a Categorical Exemption, negative declaration or an EIR. Privately owned water companies, including businesses, mutual water companies and homeowners associations, must use the Southern California Branch, Drinking Water Field Operations (SCDWFOB) as the lead agency for CEQA clearance. Please contact the Yosemite District Office in the event that a water supply construction project is being planned for this water system. The minimum information needed by the Division to evaluate environmental clearance is provided as Attachment C.

CEQA Clearance for Existing Wells

Please contact the Yosemite District Office in the event that existing wells are being proposed as the source of water supply for this water system.

5. **Compliance with the California Waterworks Standards**
Distribution System Mains

The design and construction of all waterworks facilities must comply with the California Waterworks Standards. Of specific concern is the separation of any water mains from wastewater facilities. Water mains must be installed at least 10 feet horizontally from and one foot higher than sanitary sewers located parallel to the water main and one foot higher than sanitary sewers crossing them. Water mains must also be a minimum of 10 feet and preferably 25 feet horizontally from sewage leach field systems, cesspools, seepage pits, and septic tanks.

6. **Technical, Managerial and Financial (TMF) Requirements for New Public Water Systems or Change of ownership**

Enclosed is a document entitled “*TMF Assessment Form (E-Z)*” ([Attachment C](#)) that outlines the steps that must be taken to ensure the ongoing viability of public water supply systems. Please review this information closely and submit the

Mandatory documentation pertaining to non-community water systems with the permit application. A time schedule will be included in the permit for implementation of the *Necessary* elements that have not yet been developed. ***Special conditions may be specified in the permit if the water system owner cannot show adequate compliance with the technical, managerial and financial aspects of the on-going operation of the public water system.***

7. **Requirements for New and/or Existing Wells**

Site Plan and Construction Plan Requirements

In the past, a number of domestic wells have been poorly constructed and located near potential sources of contamination and pollution. These conditions threaten the safety of many domestic water supplies. To prevent this problem, the following steps are required by the Division:

- a) The water supplier shall evaluate the site of the proposed well for sources of contamination before deciding to drill the well.
- b) A Site Plan of a proposed well site and construction plans and specifications for the proposed well shall be submitted to the Yosemite District office far enough in advance of the planned construction date so they can be reviewed, and comments provide before final site selection and before drilling is commenced. A summary of the requirements for source site plans is provided in *Appendix D*.

Well Drilling Specifications

Preliminary plans must be submitted to our office for review and comment PRIOR TO THE CONSTRUCTION OF THE WELL. A Site Plan of the proposed well site must be submitted with a copy of the construction plans. Additional details on the requirements of the Site Plan are provided below. Once the project is completed, as-built drawings must be submitted to our office for the water system file.

All new wells are to be drilled and constructed as per the Department of Water Resources (DWR) California Water Well Standards, Bulletin 74-81 and its supplement, Bulletin 74-90. *Appendix C* presents typical construction features of a completed domestic water well. The California Water Well Standards Bulletin 74-90 requires a separation of domestic water supply wells from potential sources of contamination as follows:

Potential Pollution or Contamination Source	Minimum Horizontal Separation Distance Between Well and Known or Potential Source
Any sewer line (sanitary, industrial, or storm; main or lateral)	50 feet
Watertight septic tank or subsurface sewage leaching field	100 feet

Potential Pollution or Contamination Source	Minimum Horizontal Separation Distance Between Well and Known or Potential Source
Cesspool or seepage pit	150 feet
Recycled Water Use Area	50 – 150 feet depending on level of treatment of recycled water
Animal or fowl enclosure	100 feet

Information obtained from the DWR California Water Well Standards Bulletin 74-90.

These distances may have to be increased due to various geological formations, but in no case can lesser distances be accepted.

Based on the statewide advisory issued on September 2015 by the Department of Water Resources (DWR), bentonite slurries are no longer allowed as sealing material in the unsaturated zones. Bentonite slurries can shrink and crack when they dry out, they do not adequately hydrate and swell once the water is reintroduced to the seal. A copy of the statewide advisory is attached.

The following revisions to new public water supply wells should be adhered to as follows:

- New wells shall be constructed to conform with AWWA Standard A100-06 (Water Wells) and be plumbed and equipped with proper electrical hookups at the well site to allow for the installation of emergency disinfection equipment.
- AWWA Standards A 100-06 and DWR California Water Well Standards specify different thickness requirements for annular seals. To address this conflict, new wells shall be constructed with a minimum annular seal radial thickness of 3 inches unless the grouting for a smaller annular seal is performed in accordance with the AWWA Well Standards (Section 4.7.8.3). The radial thickness of the annular seal may be reduced to 2 inches if the pressure grouting from the bottom upward is performed using cement tubing or the Halliburton method. Based on experience with hardrock wells and subsurface geology, the Division may require an annular seal of 100 feet and/or at least 15 feet into solid/unfractured bedrock to prevent surface water intrusion. In some cases, we have accepted an annular seal that is less than 100 feet provided that the seal was poured at least 15 feet into the bedrock. If the well is to be open-bottomed (lower section uncased), the casing shall be seated in the sealing material.
- New wells must be equipped with a non-threaded down-turned sampling tap located on the discharge line between the wellhead and check-valve (it should have no screens or aerators if used for bacteriological sampling).
- Openings into the top of the new well which are designed to provide access to the well, i.e., for measuring, chlorinating, adding gravel, etc., shall be

protected against entrance of surface waters or foreign matter by installation of watertight caps or plugs. Access openings designed to permit the entrance or egress of air or gas (air or casing vents) shall terminate above the ground and above known flood levels and shall be protected against the entrance of foreign material by installation of down-turned and screened "U" bends. All other openings (holes, crevices, cracks, etc.) shall be sealed.

- A sounding tube, taphole with plug, or similar access for the introduction of water level measuring devices shall be affixed to the casing of all wells. For wells fitted with a "well cap" the cap shall have a removable plug for this purpose.
- New wells must be equipped with a production meter and flush-to-waste facilities, with the waste discharge line protected against backflow.
- The wellhead should terminate at least 18 inches above the finished grade and be protected against flooding.
- Wellhead and electrical controls should not be installed in vaults, and all equipment should be accessible for operation, maintenance, and removal.
- **All materials that come into contact with the water produced by the well must be certified under NSF/ANSI Standard 61** to ensure that nothing will leach out of the material into the water. This includes well casings, piping, valves, pumps, etc. For oil lubricated pumps, the oil used must be certified under NSF/ANSI Standard 60.
- Documentation shall be provided to the Division showing that a well site control zone with a 50-foot radius around the site can be established for protecting the source from vandalism, tampering, or other threats at the site by water system ownership, easement, zoning, lease, or an alternative approach approved by the Division based on its potential effectiveness in providing protection of the source from contamination.

DWR Well Completion Report

Section 13751 of Chapter 10 of Division 7 of the Water Code requires that any person who digs, bores, or drills a water well, cathodic protection well, or a monitoring well, or abandons or destroys any such well, or who deepens or re-perforates any such well shall file with the DWR a report of completion (Well Completion Report) of such well within 30 days after its construction or alteration has been completed. The report shall be made on forms furnished by DWR. A Well Completion Report is a document completed by the well driller at the time of construction. The Report includes the following information: owner, location, proposed use, equipment employed in the construction of the well, gravel pack, casing material and diameter, perforations, well seal, water levels, well tests, well log, date drilled and the name of the well driller.

A copy of the Well Completion Report must also be submitted to our office after the well has been drilled.

Drinking Water Source Assessment Requirements

As of April 1, 1999, all new sources must have an assessment completed and submitted with the permit application. This assessment must be conducted in accordance with the Division's Drinking Water Source Assessment and Protection Program (DWSAP). The assessment must include the following:

- A ***Delineation*** of protection areas/zones around the well (2 year, 5 year and 10 year time of travel).
- An ***Inventory*** of Possible Contaminating Activities (PCAs) that might lead to the release of microbiological or chemical contaminants within the identified delineated zones.
- A ***Vulnerability Assessment*** to identify the PCAs to which the source is most vulnerable.

To obtain detailed information on the procedures to complete a source assessment, you may contact the Yosemite District Office or access the Division's website at:

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/DWSAPGuidance.shtml

Source Capacity Information

Sufficient pump test information must be submitted that demonstrates the capacity of the source on a sustained basis.

- a) Estimated maximum day demand (MDD) and peak hour demand (PDD) of the proposed project must be provided using the criteria established in the California Water Works Standards.
- b) Sufficient pump test information on the existing well that is proposed as a source of water supply must be submitted to demonstrate the capacity of the source on a sustained basis. A 10-day capacity test on fractured rock wells is preferred and must follow the test criteria established in the California Waterworks Standards. Following completing of a 10-day test, the well shall be assigned a capacity no more than 50% of the pumping rate at the of the completed pumping test.

Information must also be provided that evaluates any potential impacts to nearby wells and surface water sources as required as part of the CEQA documentation.

Well Topographic Coordinates

Determine the topographic coordinates for each source and submit the information to the Yosemite District. The coordinates (latitude and longitude) in degrees, minutes and seconds may be determined from a Global Positioning System or from a U.S. Geological Survey Quad sheet.

9. **Water Quality Monitoring**

All public water systems are required to conduct monitoring of the water from each source, including surface water, and from the distribution system on an ongoing basis, as outlined below. In order to maintain the required monitoring schedule, all water quality records should be obtained from the previous owners, if the permit is for a change in ownership.

EXISTING SYSTEMS – All of the source monitoring and distribution system bacteriological monitoring indicated below shall be initiated during the month immediately following receipt of this letter.

PLANNED SYSTEMS – The minimum monitoring required to approve the operation of the water supply system for domestic use would be source monitoring from the domestic water supply well as outlined in [Attachment H Source Water Quality Monitoring Schedule](#). In addition, at least two rounds of testing from the distribution system and active wells with results that are absent for total coliform bacteria collected 24 hours apart are required.

Chemical Monitoring of the Source: Please refer to the attached Water Quality Monitoring Schedule for the required initial and on-going source monitoring.

Distribution System Bacteriological Monitoring: The bacteriological monitoring frequency is based on the population served by the system and will probably be one sample per month (actual frequency to be determined upon submittal of all documentation). Bacteriological samples must be collected from within the distribution system in accordance with an approved Bacteriological Sample Siting Plan (discussed further in Item 9). All bacteriological sample results shall be submitted to our office by the 10th day of the month following sample collection. Guidance on proper bacteriological sample collection, reporting and follow-up ([Attachment I](#)) is enclosed.

California Laboratory Intake Portal: Please note that all chemical water quality monitoring for all water systems must be submitted to the Division by the laboratory using our California Laboratory Intake Portal (CLIP) system. *Your water system will not receive any credit for data not submitted electronically by the analyzing laboratory. The information noted below needs to be provided to your laboratory in order for them to transmit the data successfully.*

Primary Station Codes (PS Codes) will be assigned to your sources for EDT by the Yosemite District Office at a later date.

Water quality data from distribution system monitoring for coliform cannot be transmitted electronically and must continue to be reported by submittal of hard copy laboratory reports to the Yosemite District Office.

10. Bacteriological Sample Siting Plan

A Bacteriological Sample Siting Plan must be developed and submitted prior to the final permit approval. This plan is to identify locations to be used for routine and repeat sample collection in conformance with the requirements specified in Title 22, California Code of Regulations (CCR), Sections 64421 to 64430. [Attachment F](#), *Guidelines for Completing a Bacteriological Sample Siting Plan* (rTCR_Small Water System BSSP Template) is provided to assist in developing a plan.

11. Operator Certification Requirements (If any treatment is provided)

Chapter 13, Title 22 of the CCR requires water systems to maintain certified water treatment operators (where treatment is provided other than chlorination) and water distribution operators of an appropriate grade. If disinfection treatment is provided, the water system will be required, at a minimum, to have on staff or under contract a **D1 certified distribution operator**. Responsibilities of the certified distribution operator are outlined in [Attachment K](#) - *Summary of Operator Certification Requirements for Public Water Systems*. If treatment is provided, the level of treatment plant operator will be evaluated upon submittal of your permit application. Please indicate how the water system will comply with the operator certification requirements in the *Administrative Programs Data Sheet* ([Attachment A2](#)).

A list of local certified contract operators can be obtained from our office on request.

12. Cross-Connection Control Program

The water system must be reviewed to assure that there are no cross-connections that may result in backflow into the drinking water system. A new public water system must submit the Cross-Connection Control Plan (CCCP) compliant with the Cross Connection Control Policy Handbook for review and approval prior to issuance of a domestic water supply permit.

Please submit a completed CCCP and hazard assessment carried out by a certified cross connection control specialist with the permit application.

13. Emergency Notification Plan

An Emergency Notification Plan must be provided to the Division prior to permit approval, specifying the responsible parties to be contacted in an emergency. The plan must also identify the method to be used to notify customers of water quality emergencies. Please use the [Attachment H](#) for providing us this information.

14. Annual Operating Fees

Please be advised that all transient noncommunity water systems are required to pay an annual operating fee to the Division for regulatory oversight of the system. The current Drinking Water Fee Schedule is found at this website: https://www.waterboards.ca.gov/resources/fees/drinking_water/.

The Division will conduct billing for the annual operating fee after the beginning of each new fiscal year.

The Division will charge at the current hourly billing rate for any enforcement actions that are necessary to be taken against the water system for violations of the Safe Drinking Water Act or any drinking water regulation, permit or order.

A system and/or well is not operate or serve any customers until the above documents have been submitted and approved by Yosemite District and a field inspection of the water system has been completed.

Attachments

Attachment A - Permit Application Form EH100

A1 - System Information Sheet

A2 - Administrative Programs Data Sheet

A3 - Well Data Sheet

A4 - Distribution Data Sheet

A5 - Reservoir Data Sheet

A6 - Chlorination Data Sheet

A7 - Treatment Plant Data Sheet

Attachment B - Introduction to regulatory requirements for Public Water Systems

Attachment C - TMF Capacity Assessment Form for New Non-community Public Water Systems

Attachment D - Drinking Water Source Assessment Program Guidance

Attachment E - Water Quality Monitoring Schedule for New Wells ([TNC1](#))

Attachment F - Guidelines for Completing a Bacteriological Sample Siting Plan

Attachment G - Operator Certification Requirements for Public Water Systems

Attachment H - Emergency Notification Plan