



San Mateo County Health System

SAN MATEO COUNTY ENVIRONMENTAL HEALTH DIVISION WATER WELL CONSTRUCTION PROCEDURES

The intent of these procedures is to expedite the water well drilling permit application process, inform potential clients of this Division's requirements for the completion of water well construction, and facilitate the water well construction process,

I. PERMIT PROCESSING

1. Applications must be filled out completely, to include:
 - a. Owner's name and telephone number.
 - b. Assessor's Parcel Number (APN) and address of well location.
 - c. Driller's name, c-57 license number, address and telephone number.
 - d. Completed signatures (of well owner or agent, and well driller) on the front and back of the application. A letter must be submitted notifying County staff that an individual is acting as an agent for the well/property owner.
 - e. Information on the front of the application correctly checked.
2. Application must be submitted with:
 - a. Scaled plot plan indicating:
 1. Well location
 2. Underground sewer line locations (laterals from the house or proposed residence, laterals from adjacent lots, mains in the street),
 3. Septic system
 4. Any other item that is covered by the setback requirements in the ordinance.
 - b. Coastal Development Permit or Exemption/Exclusion letter, if applicable.
 - c. Letter of agent authorization (signed by owner), in lieu of owner's signature on back of application.

II. DRILLING PROCEDURE

1. Wells shall not be drilled without a copy of the permit on hand at the site.
2. Permits are non-transferable. The permit issued allows only the water well driller on record to construct the water well. A change in well driller requires that a new permit be issued.
3. A minimum of 2 full working days notice shall be given to Division staff when the driller plans to move on-site to begin drilling.
4. Wells shall be drilled in the location proposed on the site plan, and approved by Environmental Health staff. All locations changes must be approved by staff prior to commencement of drilling.

5. A minimum of 2 full working days notice shall be given to Division staff for verification inspections on all:
 - a. Well water yield tests (pump tests)
 - b. Annular well seals,
 - c. Final inspection upon completion of well.
6. Contact the Environmental Health Specialist who has issued the permit. If he or she is unavailable, request to speak to a Land Use Team Member. Office hours are from 7:00–900 a.m.
7. Annular well seals shall be no less than 20 feet deep, and/or in conformance with Department of Water Resources Bulletin 74-90.
8. 50 feet deep well seals are highly preferred, and may be required by Environmental Health in certain cases (especially in urbanized areas).
9. Requests for variances to required setbacks, annular well seal depths, construction changes, etc., shall be requested prior to the commencement of drilling of the well. All variance requests shall be submitted in writing to this Division. The APN for the property must accompany all correspondence.
10. If there is water or mud at the bottom of the annular seal space (on top of the gravel pack), the sealing material shall be tremied, regardless of the seal depth. If the seal is to be deeper than 30 feet, the sealing material shall be tremied by pumping approved grouting material to the base of the annular seal, whether the annular seal space contains water (or mud) or not.
11. A copy of the driller's log (DWR Form 188) for the well shall be forwarded to Environmental Health staff no later than 30 days after drilling is complete. The APN for the property must accompany all logs.
12. Well water yield test logs shall be forwarded to Environmental Health staff no later than 7 days after the well water yield test is complete. The APN for the property must accompany all logs.
13. Water analysis results shall be submitted to Environmental Health staff as soon as they are complete and received by the driller. The APN shall accompany all results.
14. Be advised that the water well drilling permit fee covers:
 - a. Site examination
 - b. Annular well seal verification
 - c. Processing time.
15. Well water yield (pump test) verification requires an additional fee.

Extra time spent on each part of the well construction may be billed to the well drilling applicant. Such billing will be at the discretion of the Director of Environmental Health.

III. WELL WATER YIELD TEST

1. The static water level prior to the commencement of the well water yield tests shall be measured and recorded in feet and inches, to the nearest inch.
2. Water level readings shall be taken every fifteen (15) minutes.
3. For a dingle-family residence: A stabilized draw down water level is required for a period of four (4) hours, at a steady rate of pumping to determine adequate yield. For shared systems or community supply wells: A well water yield test shall be conducted in accordance with state regulations, or at the discretion of the Environmental Health Specialist.

4. A log of the water level readings shall be made, and will be available to the verifying inspector at the time of the well water yield test inspection. Such a log shall include the following:
 - a. The date the well water yield test was conducted.
 - b. The name and address of the driller.
 - c. The name of the person conducting the test.
 - d. The location of the water well, including the APN.
 - e. A complete listing of the time each water level measurement was taken.
 - f. A complete listing of the measurement (to the nearest inch) taken at that time.
 - g. A complete listing of the production rate (in gallons per minute) at the time of the test.
 - h. Field notes (i.e. clarity of water, oddities that occurred during the test, etc.).
 - i. A space for the inspecting Environmental Health Specialist to sign, as verification of test.
5. Use of the Theiss curve shall require a variance request. A statement from a registered geologist or hydrologist stating that the well water yield test meets the intent of the well water yield test required in San Mateo County Ordinance No. 03101. Accompanying the data and statement shall be the pumping yield and drawdown data over time.

IV. WELL FINALS

1. Domestic Water Wells:
 - a. No well final will be conducted without a complete file. Please inform your customers of this. A file is complete when the following has been submitted:
 1. Well driller's log.
 2. Well water yield test results (the original/field copy is preferred). If an official copy has been generated, please supply the field data sheet (signed by the witnessing inspector) to facilitate verification.
 3. Water analysis result from the well water yield test-prior to installation of the treatment system. The analyses conducted must conform to the specifications of the California Drinking Water Standards Test (Title 22), which includes both organic (bacteriological) and inorganic (chemical) analyses. (These analyses must be performed by a laboratory certified by the State of California to do such testing).
 4. Resample results (if required).
 5. In areas included in a sewer district, where a reverse osmosis (RO) system is necessary for treatment, a "can and will serve" letter from the sewer district accepting the RO system's discharge is required.
 - b. Arrangements must be made with an Environmental Health Specialist to perform a visual inspection of the well head, filtration/treatment equipment emplacement prior to obtaining a final for a completed well.
 - c. A "sign-off" for completed wells can be obtained once the above listed criteria have been met.

2. Agricultural Water Wells

- a. Arrangements must be made with the inspecting Health Specialist to perform a visual inspection of.
 1. The well head.
 2. The installation of an “approved” backflow prevention device.
- b. A “sign-off” for completed agricultural wells can be obtained once the above listed criteria have been met.

V. WELL ABANDONMENT/DESTRUCTION

1. Well abandonment destruction procedures shall be conducted according to Bulletin 74-90. Submit plans for the abandonment/destruction prior to obtaining the abandonment permit.
2. Non-functional wells may be abandoned/destroyed when the seal is poured in the replacement well.
3. An Environmental Health Specialist must witness all abandonment/destruction.
4. Old steel-cased wells shall be either abandoned or destroyed (if not intended for use), brought up to current code (if intended for use), or securely capped (if owner intent is uncertain). Securely capped means that the well covering cannot be removed by unauthorized persons, and access to the inside of the well is prevented.

For answers to any questions regarding installation, development and abandonment/destruction procedures, contact the San Mateo County Environmental Health Services Division at (650) 372-6200.

Environmental Health

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