

**PERMIT CONDITIONS**  
(Selected Permit Requirements Apply)

**FOR OFFICE USE ONLY**

**General**

1. Completed Application for Drilling Permit must be received by Zone 7 Water Agency 10 business days prior to proposed start date.
2. California Well Standards (Bulletins 74-81 and 74-90) apply unless otherwise required below.
3. Request an inspection by email (wellpermits@zone7water.com) at least 24 hours before the start of work.
4. Permit is void if project has not begun within 90 days of approval date. Applicant/Client/Owner assumes all liability associated with the execution of this permit. Violation of Permit Conditions may result in an order by Zone 7 to cease work, correct the violation, re-permit the work, and/or address other actions taken against Applicant/Client/Owner.
5. Clear utilities prior to work commencement. Call 811 for more information.
6. Submit all analytical results including soil, vapor, and groundwater samples to Zone 7 within 60 days of collection.

**Borings**

*Must be sealed within 24 hours of drilling*

**GEOTECHNICAL**

1. If groundwater is encountered, tremie cement grout from total depth to ground surface displacing water from hole. Hydrated bentonite pellets/chips may be used in unpaved areas for borehole depths less than 50 feet below ground surface (minimum 4 inch diameter borehole) using augers as tremie.
2. If groundwater is not encountered, fill borehole to from total depth to ground surface with compacted cuttings, cement grout placed by tremie pipe, or hydrated bentonite pellets/chips (minimum 4 inch diameter borehole) using augers as tremie.

**CONTAMINATION INVESTIGATION**

1. Fill open hole with neat cement placed by tremie pipe to ground surface. Hydrated bentonite pellets may also be used in unpaved areas for borehole depths less than 50 feet below ground surface (minimum 4 inch diameter borehole) using augers as tremie.

**Wells**

**GENERAL** – Submit within 60 days of work completion:

1. DWR Well Completion Report containing Zone 7 well ID from drilling permit to both DWR and Zone 7 Water Agency.
2. Top-of-casing elevation and pump test results if performed.

**SUPPLY WELLS**

1. Borehole diameter shall be at least 4 inches greater than the well casing diameter.
2. Minimum seal depth must be 20 feet for domestic wells and 50 feet for municipal and industrial wells.
3. Cement grout must be placed by tremie pipe.
4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
5. A water spigot or sample port is required on the discharge pipe near the wellhead.
6. Supply wells on remote sites must include a well tag with contact phone number.

**MONITORING WELLS**

1. Borehole diameter shall be at least 4 inches greater than the well or piezometer casing diameter.
2. Minimum seal depth of monitoring well is the maximum depth practicable or 20 feet.
3. Grout seals shall be placed by tremie pipe.

**CATHODIC**

1. Fill annular space above anode zone with sealing material placed by tremie pipe from at least 20 feet (50 feet if urban location) to surface.

**Destructions and Other Special Conditions**

**Seal Requirements**

**Cement grout**

- Neat Cement - 47lb Portland Type I /II or II/V cement to 3 gallons of water. Up to 5% bentonite powder by weight of cement.
- Sand Cement - 11 sack mix. 94lb Portland Type I/II or II/V cement to maximum 188lbs sand, and maximum 7 gallons of water.

**Tremie:** Grout shall be placed by tremie pipe. Bottom of tremie must remain submerged in grout until hole is filled. Upper 2 feet may also be restored with compacted material.

**Freefall:** 30 feet or less below ground surface in unsaturated zone only. Limited to geotechnical boreholes of 4 inches in diameter or greater.