

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

<b>FOR OFFICE USE ONLY</b>	
<b><input type="checkbox"/> General</b>	
	<ol style="list-style-type: none"><li>1. Request an inspection by email (wellpermits@zone7water.com) at least 24 hours before the start of work.</li><li>2. 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.</li><li>3. Clear utilities prior to work commencement. Call 811 for more information.</li><li>4. Submit all analytical results including soil, vapor, and groundwater samples to Zone 7 within 60 days of collection.</li><li>5. California Well Standards and Alameda County Water Wells Ordinance apply unless otherwise required below.</li></ol>
<b>Borings</b> <span style="float: right;"><i>Must be sealed within 24 hours of drilling</i></span>	
	<b><input type="checkbox"/> GEOTECHNICAL</b> <ol style="list-style-type: none"><li>1. If groundwater is encountered, tremie cement grout from total depth to ground surface displacing water from hole. Hydrated bentonite granules/chips may be used in unpaved areas for boreholes of diameter of 4 inches or greater, using augers as tremie.</li><li>2. If groundwater is not encountered, fill borehole from total depth to ground surface with compacted cuttings, cement grout placed by tremie pipe, or hydrated bentonite granules/chips (minimum 4 inch diameter borehole) using augers as tremie.</li></ol>
	<b><input type="checkbox"/> CONTAMINATION INVESTIGATION</b> <ol style="list-style-type: none"><li>1. Fill open hole with neat cement placed by tremie pipe to ground surface. Hydrated bentonite granules/chips may also be used in unpaved areas for boreholes of diameter of 4 inches or greater, using augers as tremie.</li></ol>
<b>Wells</b>	
	<b><input type="checkbox"/> GENERAL</b> – Submit within 60 days of work completion: <ol style="list-style-type: none"><li>1. DWR Well Completion Report containing owner and Zone 7 well ID from drilling permit to both DWR and Zone 7 Water Agency.</li><li>2. Top-of-casing elevation and pump test results</li></ol>
	<b><input type="checkbox"/> SUPPLY WELLS</b> <ol style="list-style-type: none"><li>1. Borehole diameter shall be at least 4 inches greater than the well casing diameter.</li><li>2. Minimum seal depth must be 50 feet.</li><li>3. Cement grout shall be pumped through tremie pipe.</li><li>4. Plumbing<ul style="list-style-type: none"><li>▪ An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.</li><li>▪ A water spigot for sampling is required on the discharge pipe near the wellhead.</li></ul></li></ol>
	<b><input type="checkbox"/> MONITORING WELLS</b> <ol style="list-style-type: none"><li>1. Borehole diameter shall be at least 4 inches greater than the well or piezometer casing diameter.</li><li>2. Minimum seal depth of 20 feet.</li><li>3. Cement grout shall be pumped through tremie unless freefall exception is met.</li></ol>
<b><input type="checkbox"/> Destructions and Other Special Conditions</b>	
<b><input type="checkbox"/> Seal Requirements</b>	
	<p>Cement grout</p> <ul style="list-style-type: none"><li>▪ 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.</li><li>▪ Sand Cement – 10.3 sack mix. 94lb Portland Type I/II or II/V cement to maximum 188lbs sand, and maximum 7 gallons of water.</li></ul> <p>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.</p> <p>Freefall: 30 feet or less below ground surface in unsaturated zone only.</p>