



# PERMIT APPLICATION CATHODIC PROTECTION WELLS/ SHALLOW ANODES

### OFFICE USE ONLY

LMWP PERMIT #: \_\_\_\_\_  
SITE PERMIT #: \_\_\_\_\_  
DATE RECEIVED: \_\_\_\_\_  
FEE PAID: \_\_\_\_\_

**A. RESPONSIBLE PARTY\*** \_\_\_\_\_ Phone \_\_\_\_\_  
 Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Contact Person \_\_\_\_\_ Phone \_\_\_\_\_ Ext. \_\_\_\_\_ E-mail \_\_\_\_\_  
 (\*The person, persons, or company responsible for the construction, maintenance, and destruction of the proposed borings and/or wells.)

**B. CONSULTANT/CONTRACTOR** \_\_\_\_\_ **LIC. #** \_\_\_\_\_  
 Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Contact Person \_\_\_\_\_ Phone \_\_\_\_\_ Ext. \_\_\_\_\_ E-mail \_\_\_\_\_

**C. DRILLING COMPANY** \_\_\_\_\_ **C57#** \_\_\_\_\_ Phone \_\_\_\_\_  
 Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Contact Person \_\_\_\_\_ Phone \_\_\_\_\_ Ext. \_\_\_\_\_ E-mail \_\_\_\_\_

**D. SITE INFORMATION**

**1. ASSESSOR'S PARCEL NUMBER** \_\_\_\_\_  
 Site Name \_\_\_\_\_  
 Site Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

**PROPERTY OWNER** \_\_\_\_\_ Phone \_\_\_\_\_  
 Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**2. ASSESSOR'S PARCEL NUMBER** \_\_\_\_\_  
 Site Name \_\_\_\_\_  
 Site Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

**PROPERTY OWNER** \_\_\_\_\_ Phone \_\_\_\_\_  
 Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

E. CONSTRUCTION INFORMATION																							
<p><b>TYPE AND NUMBER OF CATHODIC PROTECTION WELLS TO BE CONSTRUCTED</b></p> <p style="text-align: right;"># of beds</p> <p><input type="checkbox"/> Deep Well Ground Bed (&gt;50') _____</p> <p><input type="checkbox"/> Shallow Anode (&gt;20'/&lt;50') _____</p> <p><input type="checkbox"/> Other _____</p> <p><b>NUMBER OF CATHODIC PROTECTION WELLS TO BE DESTROYED #</b> _____</p>	<p><b>MATERIALS TO BE USED</b></p> <table border="0"> <tr> <td><b>CASING</b></td> <td><b>SEAL</b></td> </tr> <tr> <td>Type _____</td> <td><input type="checkbox"/> Neat Cement</td> </tr> <tr> <td>Gauge _____</td> <td><input type="checkbox"/> Cement &amp; Bentonite</td> </tr> <tr> <td>Diameter _____</td> <td><input type="checkbox"/> Sand-Cement</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Bentonite</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Other – specify _____</td> </tr> <tr> <td colspan="2">Borehole diameter _____</td> </tr> <tr> <td colspan="2"><b>Drilling Method</b></td> </tr> <tr> <td><input type="checkbox"/> Auger</td> <td><input type="checkbox"/> Air Rotor</td> </tr> <tr> <td><input type="checkbox"/> Mud Rotary</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Percussion</td> <td><input type="checkbox"/> Other</td> </tr> </table>	<b>CASING</b>	<b>SEAL</b>	Type _____	<input type="checkbox"/> Neat Cement	Gauge _____	<input type="checkbox"/> Cement & Bentonite	Diameter _____	<input type="checkbox"/> Sand-Cement		<input type="checkbox"/> Bentonite		<input type="checkbox"/> Other – specify _____	Borehole diameter _____		<b>Drilling Method</b>		<input type="checkbox"/> Auger	<input type="checkbox"/> Air Rotor	<input type="checkbox"/> Mud Rotary		<input type="checkbox"/> Percussion	<input type="checkbox"/> Other
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<p><b>PROPOSED CONSTRUCTION</b></p> <p>Estimated groundwater depth _____ ft.</p> <p>Proposed depth of well _____ ft.</p> <p>CONCRETE SURFACE SEAL _____ to _____</p> <p>ANNULAR SEAL _____ to _____</p> <p>NONCONDUCTIVE PACK _____ to _____</p> <p>CONDUCTIVE FILL _____ to _____</p> <p>TYPE OF ANODE(S) _____</p> <p>Attach a CPW construction diagram</p> <p>PROPOSED DRILLING DATE _____</p>																							

**F. SUPPLEMENTAL INFORMATION**

1. Proposed life expectancy of well \_\_\_\_\_
2. Purpose of well \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. Indicate any known past, current, or proposed storage or handling of hazardous substance on site (please explain) \_\_\_\_\_  
\_\_\_\_\_
4. For destruction; provide a description of method and attach a cross-section of the CPW (well construction diagram; attach separate sheet of paper) \_\_\_\_\_  
\_\_\_\_\_
5. What procedure will be used to prevent the Cathodic Protection Well (CPW) from providing an avenue to contamination during construction (if applicable)? \_\_\_\_\_
6. Are you proposing a variation from the methods and/or procedures presented in the State and County of San Diego requirements for the construction of CPWs? If yes, specify these variations \_\_\_\_\_  
\_\_\_\_\_
7. Are the proposed cathodic protection wells (CPWs) located within 100 feet of known or potential sources of pollution or contamination? \_\_\_\_\_
8. Are the CPWs located in an area(s) prone to flooding? \_\_\_\_\_
9. Does the ground surface surrounding a CPW slope away from the well? \_\_\_\_\_
10. Are the CPWs proposed to be located less than 10 feet from any buildings or proposed buildings? \_\_\_\_\_
11. How is the annular seal going to be placed? \_\_\_\_\_  
(Note: The annular space must be effectively sealed to prevent it from being a preferential pathway.)
12. The conductive backfill, nonconductive backfill, and annular seal must not be subject to decomposition or consolidation after placement, and must be free of pollutants and contaminants. Provide a list of the materials to be used. Annular Seal, Nonconductive Backfill, Conductive Backfill \_\_\_\_\_  
\_\_\_\_\_
13. Is it anticipated that poor quality groundwater zones will be encountered? \_\_\_\_\_
14. What methods are you going to be using to identify poor quality water zones in the field? \_\_\_\_\_
15. When poor quality water zones are identified, proper seals must be placed to prevent cross-contamination between zones. At a minimum, the seal must extend through the poor quality stratum at least 10 feet into the confining layer. Explain how you propose to seal off poor water quality zones. \_\_\_\_\_  
\_\_\_\_\_
16. A minimum of 2 inches of sealing material must be maintained between all casings and the borehole wall within the interval to be sealed? Are you proposing a modification to this Standard? \_\_\_\_\_
17. Are you proposing a variance to the surface completion standards? The surface completion standards are found at CA Well Standards Bulletin 74-90, pgs 57-74. \_\_\_\_\_
18. Does the sealing material surround the vault from the top of the annular seal to the ground surface? \_\_\_\_\_
19. Are you proposing a variance to the placement of seals as outlined in Section 9 or the Bulletin 74-90 Cathodic Protection Wells? If yes, explain: \_\_\_\_\_  
\_\_\_\_\_

20. Are you proposing a variance to the casing materials as outlined in Section 12 of the Bulletin 74-90 Cathodic Protection Wells? If yes, explain: \_\_\_\_\_
21. Does the proposed surface construction have:
- Positive surface drainage away from the security structure to avoid surface ponding on or around the well? Provide details on the surface completion if it is to be different from that presented in the SAM Manual, Appendix B, Section IV, B, r. or Appendix B, Section IV, B, s? \_\_\_\_\_
  - A locking cover? \_\_\_\_\_
  - A casing watertight cap, "U" bend or equivalent device to prevent the entry of water? \_\_\_\_\_
  - A casing that terminates above ground surface and known levels of flooding? \_\_\_\_\_
  - A concrete base or pad that is at least 4" thick and slopes to drain away and is in contact with the annular seal? \_\_\_\_\_

**NOTE:**

1. The surface completion well cover or vault must be labeled "Cathodic Protection Well."
2. Any tubular materials, such as a vent pipe or anode access tubing passing through the interval to be sealed must meet the requirements for casing materials of Section 12 of Bulletin 74-90.
3. The casing of the CPW shall at least have a 2-inch internal diameter to facilitate eventual well destruction.

**G. APPLICATION SUBMITTAL, PLAN APPROVAL, PERMIT ISSUANCE, AND REQUIRED INSPECTIONS**

Submit one (1) original of this application package, including a proposed well diagram and the required fee, to the Monitoring Well Permit Desk with the Department of Environmental Health & Quality (DEHQ), Site Assessment and Mitigation Program (SAM), 5500 Overland Avenue, Suite 110, San Diego, CA 92123; or mail to P. O. Box 129261, San Diego, CA 92112-9261.

**Checks should be made payable to the County of San Diego.**

A permit will be issued by the Monitoring Well Program (MWP) upon review and approval of the application and plans. The required fees must be submitted with the application package. Information in addition to that presented in the application package may be needed in order to obtain final approval. **No work is to begin on the proposed project until a permit has been issued.** Once the permit has been issued, it is the responsibility of the permittee to notify the Monitoring Well Desk at (858) 505-6688 at least two (2) working days in advance of any drilling activity.

**MULTIPLE ASSESSORS PARCELS (APN#) MAY BE INCLUDED ON ONE APPLICATION IF THE PARCELS ARE ADJACENT OR CONTIGUOUS.**

- The well driller must have an active C-57 license.
- Provide a signed copy of the Property Owner Consent form for each property (APN#) listed in Section "D".
- Provide a copy of the application for an encroachment/excavation permit and/or traffic control permit for work to be done in street or public right of way.

Additional Information (such as SAM Manual, Property Owner Responsibility Acknowledgement form, or other applications and forms) may be found at the MWP web site at [http://www.sdcountry.ca.gov/deh/water/sam\\_monitoring\\_well\\_page.html](http://www.sdcountry.ca.gov/deh/water/sam_monitoring_well_page.html).

I agree to comply with the requirements, ordinances and laws of the County of San Diego and the State of California, pertaining to CPW or Anode construction and destruction. I certify the design of the well is in accordance with the CA Well Standards and DEH SAM requirements. Within 60 days of completion, I will furnish the monitoring well permit desk with a complete and accurate well log, as-built diagram, and well location site map (to scale).

\_\_\_\_\_

DRILLER'S SIGNATURE

\_\_\_\_\_

DATE