



County of San Diego

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ALTERNATIVE FOR BACKFILLING LARGE DIAMETER GEOTECHNICAL BORINGS

The following is offered by the Monitoring Well Program (MWP) as an acceptable alternative to backfilling large diameter geotechnical borings (diameter of the boring is 12" or more):

1. Begin by placing one of the following approved sealing materials at the bottom of the boring:
 - a. High Solids Bentonite Grout
 - b. Sand-to-Bentonite Grout
 - c. Non-Slurry Bentonite
 - d. Neat Cement
 - e. Cement Grout

Note: Bentonite slurries are not approved for use in the unsaturated zone.
2. Six inches of an approved sealing material must be placed after every 5-feet of clean soil cuttings. In circumstances where the soil formation is well known, one foot of an approved sealing material can be placed after every 10-feet of clean soil cuttings.
3. The top section of the boring, between 5-feet and 10-feet below grade, shall also be filled with an approved sealing material.
4. The registered professional must determine by observation and/or analytical testing that the soil cuttings are clean before it is used as backfill.
5. Clean soil cuttings must be placed in a manner that there will be minimal differential settlement of the backfill and the approved sealing material relative to the surrounding undisturbed soil/formation material. If this cannot be accomplished by using the clean soil cuttings, suitable imported materials must be used.

There may be special circumstances where the registered professional does not feel the above-referenced procedure is appropriate. To seek a variance from this procedure, you must submit a detailed description of the variation and provide justification for the alternative procedure. You must allow five business days for the MWP to review the variance alternative.

Relevant Sections below are from Water Well Standards: State of California Bulletin 74-81, Section 23, B, 2.

"To prevent the vertical movement of water from the producing formation, impervious material must be placed opposite confining formations above and below the producing formations for a distance of 10 feet or more."

"When the boundaries of the various formations are unknown, alternate layers of impervious and pervious material shall be placed in the well."