## ANNULAR SEALING MATERIAL FOR WELL CONSTRUCTION

Orange County Well Standards Advisory Board decisions and recommendations regarding Statewide Advisory: Sealing materials for water wells, monitoring wells, cathodic protection wells, and geothermal heat exchange wells for Orange County well permitting:

1. Bentonite slurries (mixtures of bentonite suspended in water) will no longer be approved for use in the unsaturated zone of the annular seal.
2. Bentonite may be added to cement-based mixes (up to 6 percent by weight of cement used).
3. Bentonite pellets or chips may be installed by freefall for the annular seal down to 30 feet below ground surface.
4. Neat cement, 10.3 sack sand cement mix, and minimum 6-sack concrete can be used for the annular seal.
5. A short interval of fine-grained sand (finer than the filter pack sand) up to a foot or a foot and a half may be placed between the filter pack and the bentonite transition seal to prevent bentonite from entering the filter pack.
