



CETCO'S Recommended Procedures for Pond Lining with Bentonite

1. Determine the soil conditions present in the pond area. Remove any large rock. If the soil contains an excessive amount of rock or gravel, a clay soil may need to be brought in before additions of bentonite can be effective.
2. Select the bentonite to be used. CETCO recommends granular bentonite such as CS Granular. Granular bentonite has much less dust than a powdered bentonite making the application more dust free which results in less loss due to wind erosion during the application.
3. Calculate the bentonite application rate. The rule of thumb for the rate is between 3 Lbs. to 6 Lbs. per square foot depending on soil conditions. Three pounds may be adequate for good clay soil, but if there is a significant amount of sand and silt, six pounds may be required. The soil can be tested to determine the proper application rate if necessary.
4. Once the application rate is determined, the granular bentonite can be spread at the calculated rate over the area to be sealed.
5. After the bentonite is in place, it should be roto-tilled in to the top six inches of soil. This insures good mixing with the soil.
6. The next step is to compact the bentonite and soil. This can be done with a smooth drum roller or by the tires of a piece of heavy equipment.
7. CETCO also recommends that in a pond where there may be swimmers, livestock, or wild life, a cover be placed over the bentonite soil mix for protection of the liner. This could be soil, gravel or rock and can be 6" or more. When this protective cover is in place, the soil/bentonite liner can be hydrated.