ENVIROTUBES™
by Industrial Fabrics, Inc.

Industrial Fabrics, Inc.
510 O' Neal Lane
Baton Rouge, LA 70819
P: 225-273-9600 • F: 225-273-0440
800-848-4500 • www.envirotubes.com

HANGING BAG INSTRUCTIONS

This test is designed to determine the final capacity of the Envirotubes by measuring the shrinkage factor of the material to be dredged.

To gather samples, we recommend a standard 10 quart pail. Remove the wire handle and replace it with a longer handle made of a much heavier material, such as re-bar of ¼ x 1 flat bar bolted to the pail to keep the handle rigid upright (bend into an arch so that it is approximately 12 inches high). Drill four ¼ inch holes in the bottom of the pail. Tie a rope to the handle and throw it out into a pond or lake in the area where you want to dredge (you may want to sample more than one area to get an average).

Items Required for testing
1 ENVIROTUBE Hanging Bag
10 Quart Pail with Heavy Handle
5 Gallon Bucket
⅜ inch Rope

The heavy handle will tip the pail bottom up, the holes in the bottom will let the air out and the pail will sink, and the heavy handle will sink in the mud or sludge. Pull the pail in. The holes in the bottom will let the water out and the pail will fill with insitu mud. Dump the sample pail into a five gallon bucket. Repeat the process until the five gallon bucket is full. Dump three full five gallon buckets into the hanging bag. The hanging bag can be suspended by the handles or sit on the ground using the handles to hold it up.

Allow the material to dewater and shrink. This takes a few hours or a few days, depending on the material and how dry you want it. When the material has dried to the desired consistency, dump it back into the five gallon pails; it will often fit into one pail. This gives you the shrink rate of the material so that the quantity of tubes may be estimated.

Because the material will always shrink after the last pumping, the full capacity of the tube cannot be used for the estimate. The tube must be pumped several times. Each time it is pumped and the material shrinks, the tube will be fuller and it will take less time to fill it to full height again.

Example: A 45' circumference tube will hold 4 y^2 per linear foot at full height. Filled with a material that has a 50% shrink factor, the tube would hold 8 y^2 per linear foot at full height. Because of the final shrinkage, 100% of the capacity cannot be used as an estimate. A final capacity of 7 y^2 per linear foot would be a better estimate.