



Getting a Municipalities Dredge Operation Back on Track

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The Challenge

This municipality had a technician dredging its lagoons. He didn't have the proper equipment or the proper training on how to flocculate the biosolids in a geotextile dewatering process. The challenge was to provide the proper equipment, chemistry, and training to have the technician properly capture the biosolids.

Chemical Conditioning

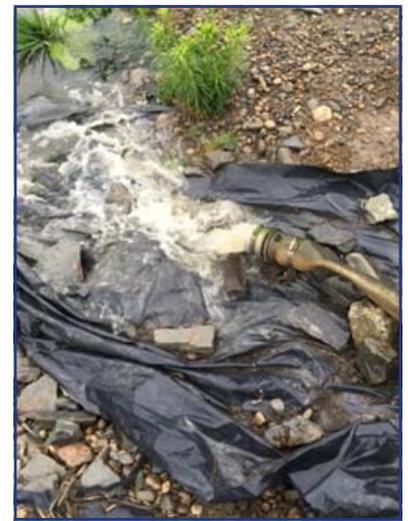
A sample of the biosolids on this municipality's lagoon was sent to the WaterSolve lab. Solve 216D was determined to have the best water release, clarity, and flocculation at the lowest dose.

Geotube® Container Sizing

Geotube® containers are manufactured from high strength polypropylene fabric and designed to allow effluent water to escape through the pores of the fabric while retaining the chemically-conditioned solids. The space provided on site for dewatering allowed for 60' circumference by 100' long Geotube® container.

The Result

As a result of a site visit WaterSolve put together a proposal for the proper equipment and supplies to get this dewatering system back on track and operating effectively. A new manager took over the plant and ordered the package of equipment and supplies. He also requested a WaterSolve technician come to the site to assemble the system and train the dredge operator on how to manage the system. The WaterSolve technician assembled a polymer make-down unit with a 3" mixing manifold. An electric floating pump was provided to set on top of the lagoon to supply water to the make-down unit. This equipment was plumbed into the 3" dredge pipeline that delivered the biosolids to the geotextile tube. A sample port was also placed in the pipeline prior to the tube to provide visual observation of the flocculation. Adjustments were made to the polymer dose based on these observations. The dredge operator was amazed at the clean water exiting the geotextile tube when he attained the proper treatment. The plant operator was thrilled with the results of the upgrade.



Look at the difference in the water returning to the lagoon when the proper equipment, polymer, and training are combined in the photo on the right.



This sample demonstrates the proper flocculation with great water release.

A polymer make-down unit is assembled to inject the Solve 216D polymer into the 3" dredge pipeline.

