

Sludge Dewatering with Open Top BRT Liner

The Blue River Technologies Liner system is a good choice when the wastewater plant has very limited or low volume dewatering requirements. The liner is lower cost than our Container bags as the equipment required is simple and easy to use.

In most cases, the dewatered solids are taken to the landfill for disposal. In some cases, the solids can be used for composting operations. When the liner is dumped out at the landfill, it is left and the roll off can be returned for reuse.

This 20-yd landfill roll off is being prepped for a liner.



- Wooden pallets are used to line the bottom.
- Drainage netting is draped over the pallets and up the sides of the roll off. This is essential for proper dewatering of the liner.
- The netting and pallets can be installed and secured to remain in the roll off while dumping, to be returned for reuse.

- The liner is installed over the netting and draped over the top of the sidewalls of the roll off.
- Straps are used to tie the liner in place.



- A flocculant is required when dewatering with the liners. Here, we are setting up the Blue River Technologies 4" flocculator.
- A polymer solution is injected into the sludge stream and mixed with the sludge as it is pumped into the open top liner.



- A Blue River Technologies Port-A-Poly mixer is set up inside to make down the polymer solution.
- From here, it is pumped out to the flocculator set up in front of the roll off on the drying bed.
- The polymer solution separates the water from the solids.
- The solids stay in the liner and the water quickly drains away.



- The sludge is pumped from the waste water treatment plant digester up to the drying bed.
- This is sludge that is roughly 97% water and 3% solids.



- The sludge pump is turned on, the polymer pump is turned on and the flocculated sludge is pumped into the liner.
- In this picture, you can see the floc forming in the sludge in the bottom of the roll off.



- The water that drains from the roll off is clear.
- This type of dewatering process will remove 98% of the solids from the sludge leaving a cake that will easily pass landfill paint filter test.



- The liner may be pumped into several times depending on the plant situation.
- In general, in a 20 yd roll off you can put from 4000-6000 gallons of sludge in the first pumping.
- The roll off is allowed to dewater and then it can be refilled.



- Care must be taken not to overfill the roll off.
- When the truck comes to pick up the roll off, and the solids are too close to the top, it can spill out the back as the roll off is tipped up to be loaded on the transport truck.



- In this case, approximately 6500 gallons of sludge was dewatering in this 20 yard roll off.
- About 3 gallons of neat polymer was used to dewater this load.



- In this case, the solids, liner, pallets and netting were all dumped out at the landfill.
- In many cases, the pallets and netting would be secured in the roll off with a stop bar so they can be returned and reused. It all depends on the needs of the plant.
- Blue River Technologies has many different options for dewatering. Visit our web site at www.blueriverdewater.com for more information.



“The Leader In Geotextile Sludge Dewatering Systems”

1302 Garner St, New Castle, IN 47362 | 765-388-2161 | mconwell@nltc.net

www.blueriverdewater.com