

Bishop Solids Management Solution for dewatering and reuse of excess soil



Eliminate the need to truck muddy construction slurry from hydrovac trucks to distant sites for dewatering or disposal. The **Bishop Solids Management Solution** provides an easy-to-use, affordable process for onsite collection and dewatering of excess soil excavated during urban construction activities.

This automated, low-energy system can be quickly set up at, or nearby, most construction sites in just a few hours and is fully customizable to fit the available space and dewatering requirements.

Onsite dewatering saves time, money and reduces greenhouse gas emissions

The **Bishop Solids Management Solution** uses Geotube® geotextile containers and specially selected polymers to achieve high levels of dewatering and water treatment in a single step. The passive dewatering process requires little energy and provides economic and operational benefits that include:

- Over 50% dry solids in just a few hours, so fewer trucks are required to move excess soil offsite.
- Treated effluent with TSS below 50 ppm. This water may be suitable for discharge without further treatment or can be reused for excavation by hydrovac trucks.
- Geotube® containers can be stacked in layers to hold large quantities of excess soil until ready for removal or onsite reuse.
- For smaller dewatering projects, Geotube® containers can be set up in roll off bins to make removal of dewatered soil faster and easier.
- The combination of onsite dewatering, water treatment and reuse of dewatered solids can assist hydroexcavation companies to comply with new regulations to reduce greenhouse gas emissions from the transportation of excess soils.

Achieve many business and community benefits with onsite dewatering of excess soil:

- Decrease or eliminate transportation of soil for disposal or dewatering—reduce costs for fuel, labour, and vehicle maintenance.
- Avoid weight-based tipping fees for unnecessary landfill disposal of muddy slurry.
- Reduce traffic, noise and dust in communities and transport corridors.
- Avoid obtaining permits to relocate excess soil.
- Create a source of soil and fill material for onsite or local reuse.
- Protect the environment from contaminated or untreated water release.

The VEPAS activates polymer in a single pass with no mechanical agitation needed.



A simple, low-energy dewatering process that achieves over 50% dry solids in just a few hours



The combination of polymer and Geotube® filtration produces high quality water that may be suitable for discharge or non-potable reuse.

How it works

Slurry from hydrovac trucks is first screened to remove large debris. The slurry is then pumped directly into a Geotube® container, which is made of a high strength, woven polypropylene fibres. As the slurry is pumped to the Geotube® containers, a specially selected polymer is added.

Bishop Water uses a unique Venturi Emulsified Polymer Activation System (VEPAS), which injects and activates polymer in a single pass and requires no mechanical agitation. This eliminates the need for bulky mix tanks, associated equipment and additional maintenance.

The polymer helps retain fine particles within the Geotube® container and also accelerates dewatering. Water flows out through the microscopic pores of the Geotube® container and is collected on a membrane-lined lay-down area beneath the container. Depending on the permitting requirements and local regulations, the high-quality filtrate can be used in several ways. It can be discharged to a municipal sewer, released to a water body or reused onsite for non-potable applications such as washing out and refilling hydrovac trucks.

Begin dewatering quickly with Bishop Water's mobile Environmental Compliance Approval

For construction sites in Ontario that require permits to treat and discharge water, Bishop Water's mobile Environmental Compliance Approval enables rapid mobilization and startup, while eliminating the need for a site to undergo a lengthy regulatory application and review process. This helps your project to start sooner, stay on schedule and ensure that all wastewater or groundwater from the site is collected, treated to the required standard and safely discharged.

Purchase or rent your Bishop Solids Management Solution

Contact us to discuss your dewatering and system procurement needs. The **Bishop Solids Management Solution** can be purchased for long-term use at a dedicated dumping and dewatering site for hydrovac trucks.

Short-term rental systems are also available for onsite or local use during construction excavation activities. In either case, the system is highly portable and can be quickly and easily relocated to accommodate dewatering, containment and reuse of excess soil at virtually any construction site.



Geotube® containers can be placed in roll-off bins to make removal of dewatered solids fast and easy.



Bishop Water Technologies

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