

ZERODAY®

## Zeroday Sludge Sack™ Products

Sludge Sack™ products provide very cost efficient, flexible solutions for many difficult solids management and environmental control applications. These are manufactured from permeable, high-strength woven polypropylene or polyester fabrics that, meeting exacting standards, are sewn into Sacks.

Once onsite, Sludge Sacks are filled by pumping sludge, mineral slurries or sand into the Sack that allows water drainage from the solids through the porous Sack fabric weave (typical 40 mesh) leaving the solids contained in the Sack which consolidate to higher % solids. When the sludge is fully dewatered, the material is cost effectively removed from the site or buried in the Sack on site.

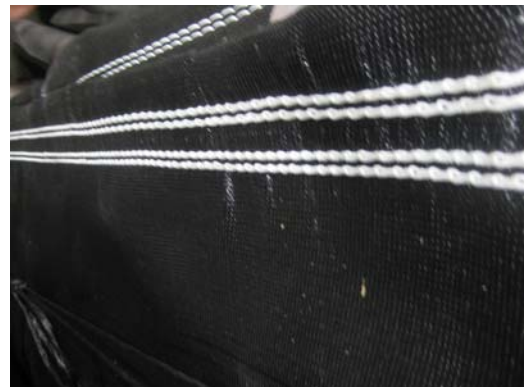
In coastal beach protection/creation and construction general solid erosion applications, strategically placed Sludge Sacks are filled to provide an effective beach and soil erosion alternative.

Numerous potential applications for Sludge Sacks include:

- Liquid waste and sludge dewatering and consolidation.
- Mineral slurry dewatering and containment.
- Dredge material dewatering.
- Coastal and wetland structures.
- Containment dikes.
- Breakwaters.
- Cow and hog manure for solids dewatering and odor control.

This unique technology meets solids handling and erosion control challenges very economically and effectively. Fast to setup, easy to use, specifically developed for convenient and effective solid waste management, Sludge Sack technology products offer incredible advantages in many situations including:

- Low cost.
- Easy setup, quick to be in operation time.
- Little to no surface area disruption.
- Effective solids-liquid separation.
- Excellent effluent clarities can be achieved.
- Little to no odor emanation from solids.



## Zeroday Sludge Sack™ Products

- Passive process requiring lower manpower.

Designing, installing and putting a Sludge Sack system to work for you is intuitively and practically simple:

- 1) Zeroday takes your specific application information, conducts an engineering analysis and generates an operation design, and provides you a proposal that includes an operational plan, Sack design requirements and projected costs. We work with you in developing a plan that works for you.
- 2) For sludges and slurries requiring flocculation for achievement of good water release and high effluent clarity levels, Zeroday will design a treatment program for your application using Z Flocc™ flocculants and Z ChemGear™ mixing-feed equipment packages. Sands often do not require flocculation.
- 3) In operation, flocculated sludge/slurry or untreated sands are injected into the Sludge Sack through sock-type ports located at the top of the sacks.
- 4) Almost immediately upon entering the Sack, water begins draining from the sludge/slurry through the fabric weave. This water is channeled away from the Sludge Sack to a collection sump and pumped away.
- 5) Upon fill completion, the contained solids are held in the sack for further consolidation as water continues to drain and the solids dry over time, providing high % solids.

### Standard sizes:

#### 30' circumference (15' flat width)

50 foot length	1 fill port
75 foot length	2 fill ports
100 foot length	2 fill ports

Capacity: 2.1 cubic yards/linear foot

#### 45 foot circumference (22.5' flat width)

50 foot length	1 fill port
75 foot length	2 fill ports
100 foot length	2 fill ports

Capacity: 3.9 cubic yards/linear foot

#### 60 foot circumference (30' flat width)

100 foot length	2 fill ports
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Capacity: 6.1 cubic yards/linear foot



Because Sludge Sacks have a lot of design flexibility, custom bag sizes and designs can be and are often developed for specific project requirements. If your application requires a different Sack dimension or configuration for optimum performance, Zeroday will develop a Sack for your site and situation.

the answer is clear.®

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## Zeroday Sludge Sack™ Products

Dump Sacks™ are designed for roll-off dumpsters that allow bag filling in the container with easy full sack dumping at the disposal site.

When lagoon and tank odors are a problem, Sludge Sacks dramatically reduce and even eliminate odors. This is of particular benefit to dairy and hog farmers as well as various municipalities and industries.

- The containment system absolutely minimizes exposed sludge surface area that cause emanations
- There is dead air space in the fabric weave that minimize air interchange, decreasing odors.
- Odoriferous and odor causing water is drained away from the solids and treated (use Zeroday's Z BugZ™ and Z Zymes™ for pond biological treatment).



Zeroday engineers the dewatering system for the application and process, tests the technology for your process and can supply parts or the entire and complete treatment process system ... Sludge Sack products, flocculant(s), polymer mix system, feed system and controls in addition to our application expertise.

Zeroday technical representatives work with you to ensure proper installation of the Sludge Sack dewatering system and then support your operational startup. Thereafter, Zeroday will continually support your efforts to maximize system and process performance and ensure problem resolution, cost minimization and attainment of peak system capabilities.

For more information, please contact Zeroday Enterprises, LLC at 503-582-9076 (877-582-9067) or email us at [Support@ZerodayLLC.com](mailto:Support@ZerodayLLC.com).