Installation

Step by step installation

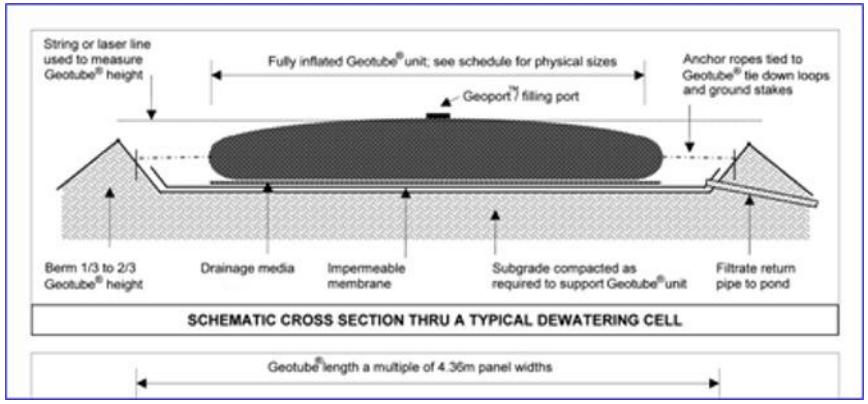
Installation

STEP 1:

Grade site to:

- Remove debris, sharp objects
- Important to avoid puncturing the impermeable membrane or Geotube® unit.

Installation



enlarge

STEP 1 (cont.):

Level from side to side, with no more than a 0.5% grade from end to end.

Installation

STEP 2:

Construct containment berm 1/3 to 2/3 the height of the Geotube® unit around the perimeter.

Installation

STEP 3:

Dig trench inside containment berm, sloped for positive drainage to lower end of cell.

Installation

STEP 4:

Place impermeable membrane over the entire dewatering cell including the interior trench and the perimeter berm.

Installation

STEP 5:

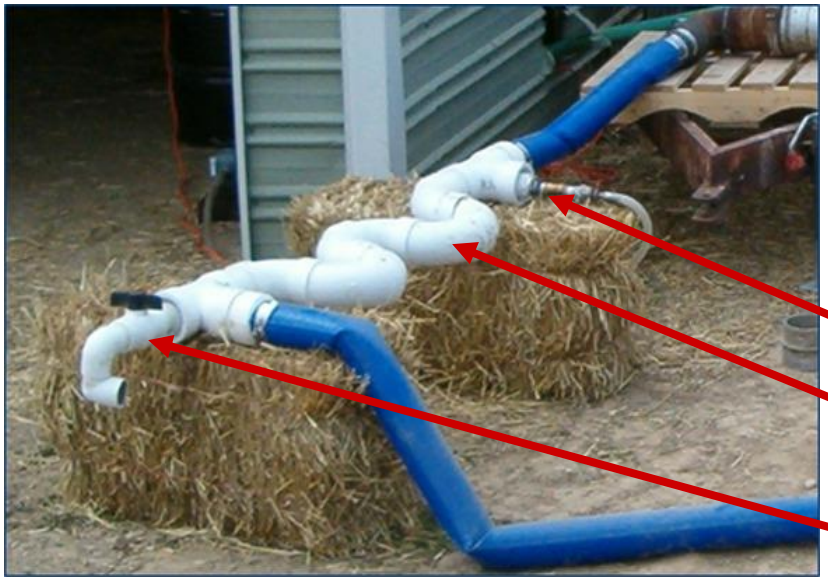
Place drainage media (such as free-draining granular material or drainage net) over entire site except for the interior trench and containment berm.

Installation

STEP 6:

Unroll Geotube® bag over drainage media on the upper end of the dewatering cell. Align using handling straps.

Installation



STEP 7:

Install an inline mixing manifold system.

Include:

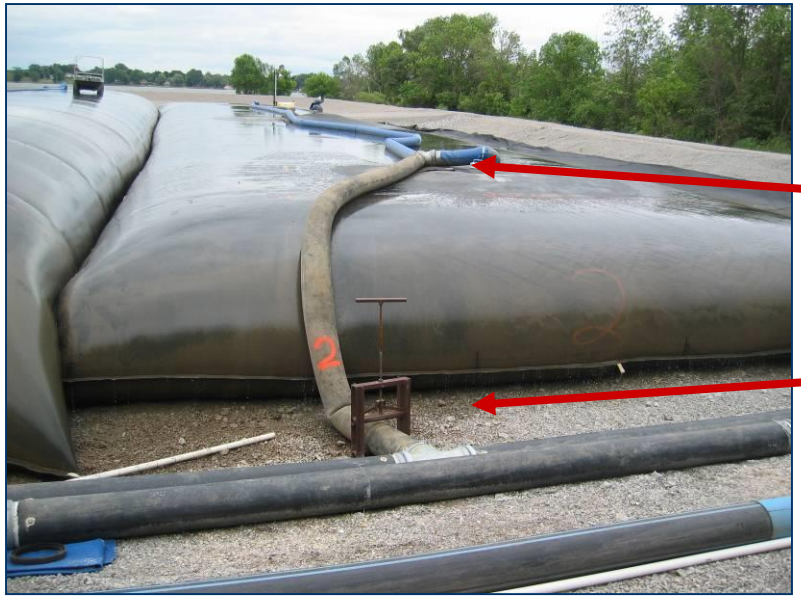
- Injection port
- 90-degree elbows for mixing
- Sample port

Installation

STEP 7 (cont):

Pump sludge through return line as a final floc check before pumping Geotube® unit.

Installation

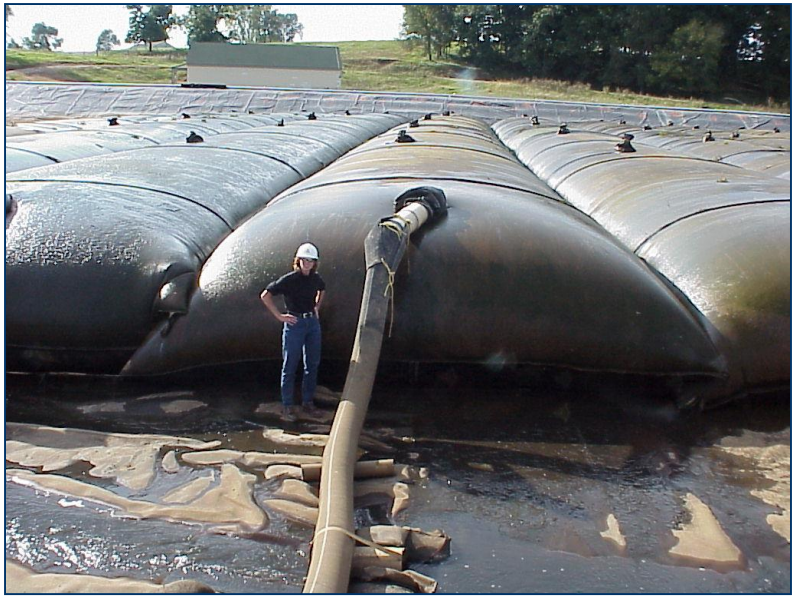


STEP 8:

Connect a flexible line to the filling port.

Pinch valves are the preferred method to control the waste stream.

Installation



STEP 9:

The circumference of the Geotube® unit determines the design pump height.

DO NOT exceed design fill height.

Installation

STEP 10:

The Geotube® unit can be filled multiple times during the dewatering process.

Installation

STEP 11:

Simply cut open and remove solid material.

End Of Section
Return to
Operations

Chemicals

Chemical use is encouraged to enhance the dewatering process in most applications.

Chemicals include:

- Coagulants
- Flocculants.

Chemicals

The right chemical conditioning improves:

- The rate of dewatering
- Retention of suspended solids and contaminants
- Clarity of effluent
- Percentage of dry solids
- Overall utility of Geotube® unit.

Chemicals

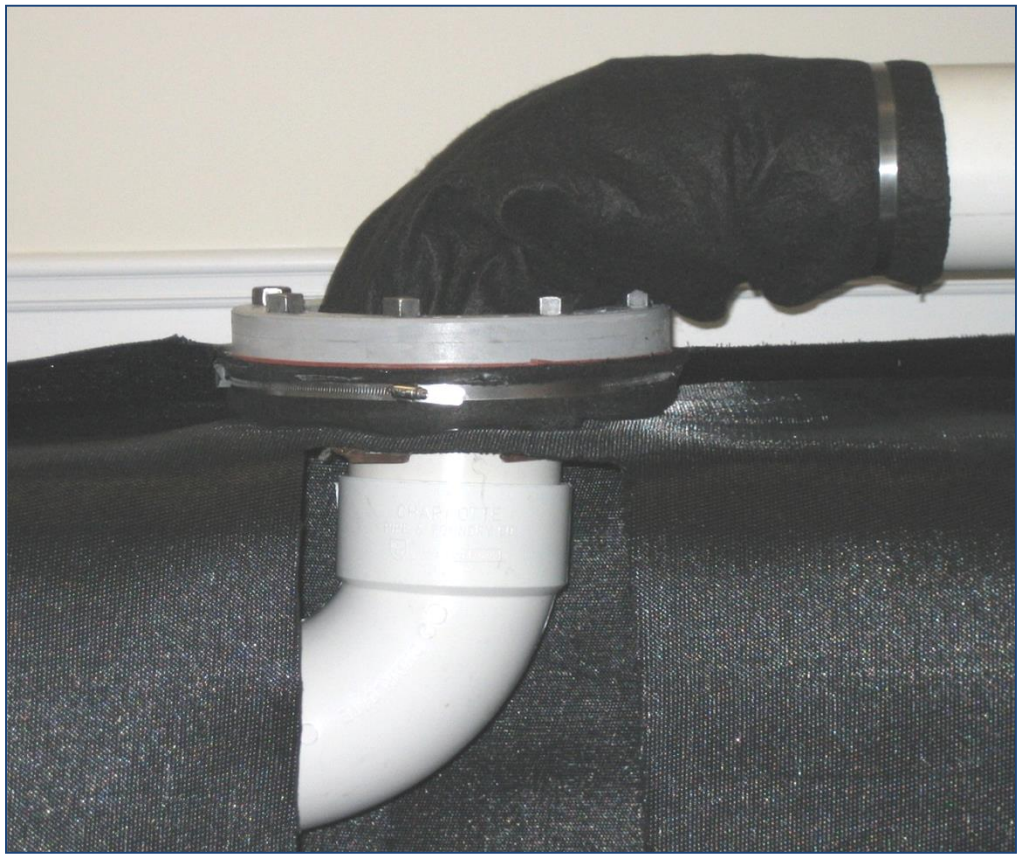
Without Proper Conditioning

With Proper Conditioning

- The right chemistry is critical
- Professional counsel strongly recommended to enhance performance
- Should be first step of process.

End Of Section
Return to
Operations

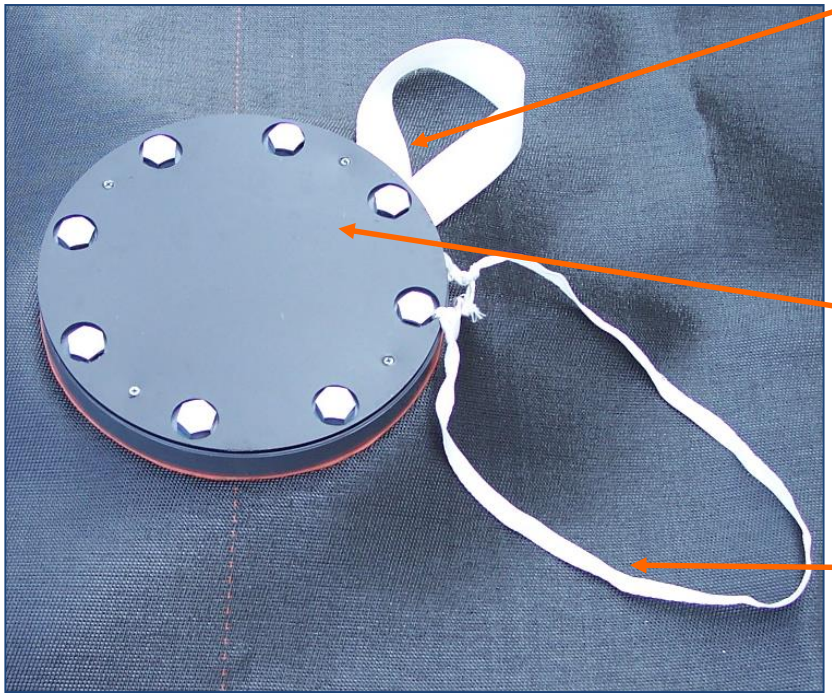
Filling and Ports



The GP filling system is a patent pending fill port designed for connecting lines up to 6” to a Geotube® container.

Installation is simple.

Filling and Ports



Feed Line Securing Loop

Secures the discharge pipe to the filling port and prevents it from blowing out of the port.

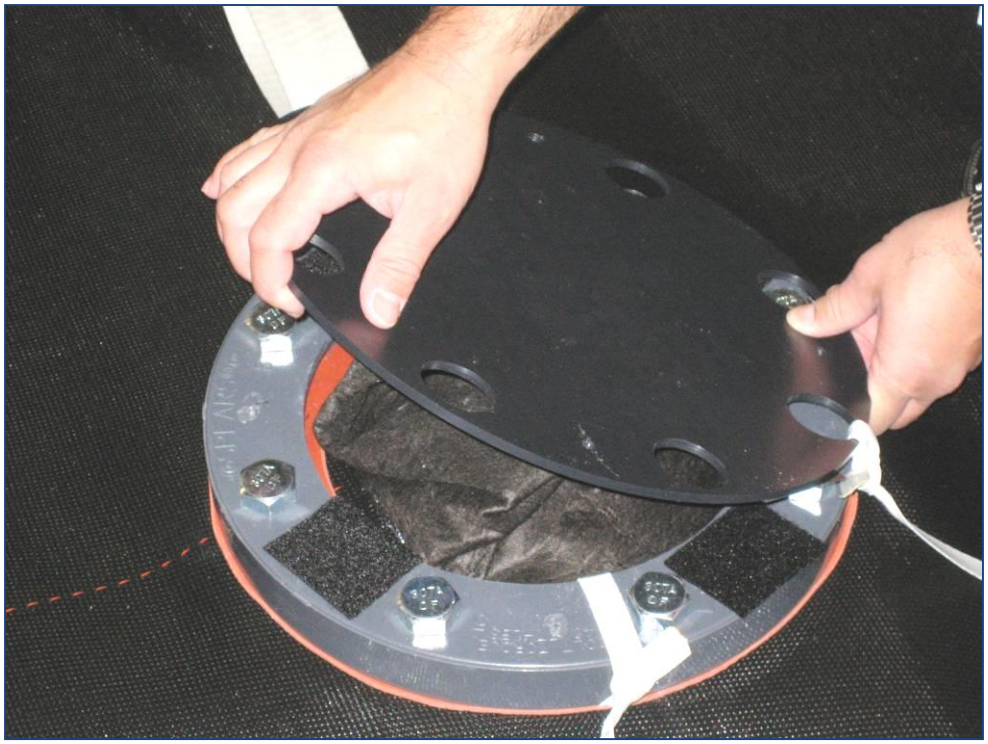
Cover Plate

Secured to the PVC flange ring with hook and loop tape.

Polyester Tether

Prevents cover plate from being misplaced during filling operation.

Filling and Ports



Step 1

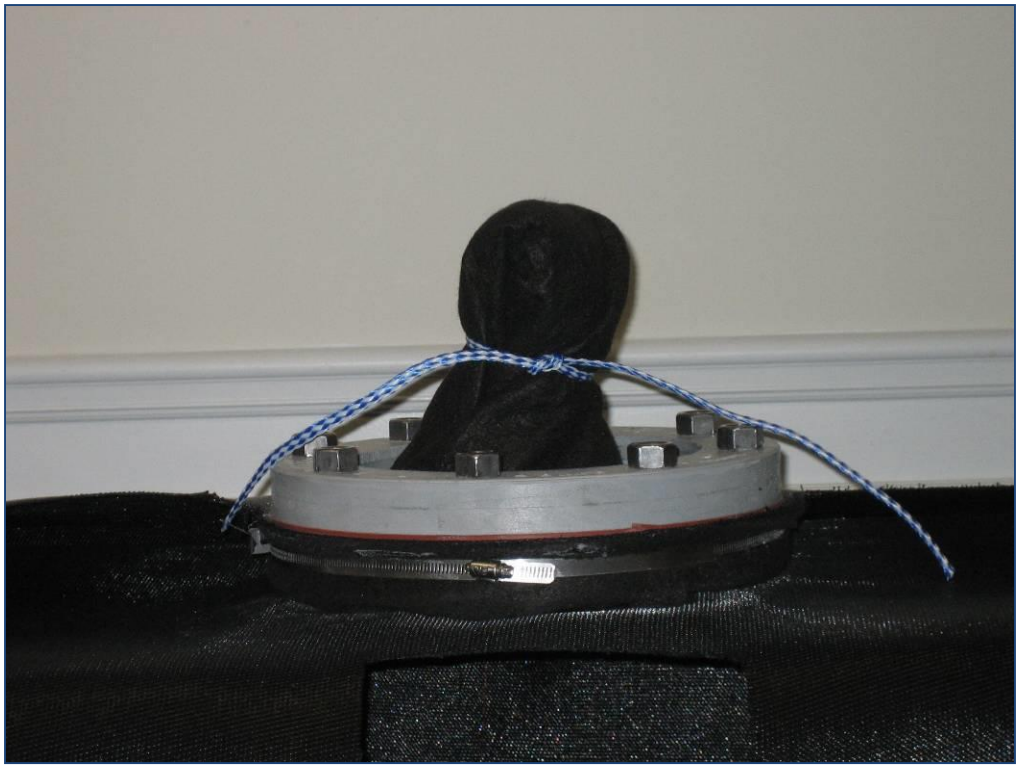
Remove all cover plates and set aside.

Filling and Ports

Step 2

Pull the flexible fabric sleeve out from inside each Geotube® GP filling port.

Filling and Ports



Step 3

Temporarily close all fabric sleeves with a rope before filling. (Rope not included).

Filling and Ports

Step 4

Assemble a 4” (10cm) or 6” (15cm) PVC fitting (not included) as shown. This accommodates connection to the feed line.

Filling and Ports

Step 5

Slide the assembled PVC fittings through the Geotube® GP filling port and secure the fabric sleeve to the PVC feed line with an adjustable hose clamp (not included).

Filling and Ports

Step 6

Attach security loop to feed line to prevent blowout during filling.

Filling and Ports

Step 7

After filling, place the HDPE cover plate over the top of the PVC outer flange ring and secure the cover plate with four Phillips head screws (not included).

End Of Section
Return to
Operations

Removal

Removing a filled Geotube® unit can be done by opening the tube and removing material with front end loader or backhoe.

Removal

Smaller Geotube® units can be emptied with a skid steer or tractor with backhoe.

Removal

Geotube® MDS units can be hauled off intact to a solid waste facility.

End Of Section
Return to
Operations