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BioTUBE Your POME Alternative Desludging Technology



BioTUBE dewatering technology is a cost effective alternative to other mechanical processes. It reduces disposal cost by consolidating higher solids with very little maintenance. BOD, COD, sludge and other materials can be managed and handled cost-effectively with BioTUBE dewatering technology.



BioTUBE bag will separate and dewater the fines and allow disposal without expensive dredging and transporting operations. In some cases, conditioners or polymers are used to promote flocculation to improve solids retention and filtrate quality. BioTUBE bag containers can also be used to utilize the fines to build dikes and containment berms.

The harvested biosludge from POME application is a good source of green-fertilizers for field reuse.

PROCESS

Effluent can be pumped(1) directly from the process, or (2) if a clarifier/thickener is used, concentrated sludge from the underflow can be diverted through the BioTUBE container, eliminating the requirement for an expensive mechanical dewatering device. Bio-TUBE also can be used to capture fines, silts, and total solid from the effluent prior to discharge into the

Advantages of BioTUBE VS Conventional De-silting

DESCRIPTION	BioTUBE	CONVENTIONAL
Holding pond Construction	Νο	Yes
Weather Dependent	No	Yes
Solid Removal	90-95 %	50-70 %
River Contamination	No	Yes
Space requirement	Medium	High
Overall efficiency	High	Low



Proven Performance- No Guessing

BioTube dewatering technology has been used in water and wastewater treatment applications including lagoon, tank, and digester cleanouts. It can provide dewatering and containment in one operation, with 60% to 70% reduction of BOD in the effluent.



BioTUBE can be filled multiple times during the dewatering process.



Multiple bags filled at same time

Apparent Advantage-Simplicity

Because BioTUBE dewatering bag can be customsized to the application, they can be placed in available space between other structures, and removed once dewatering completes. BioTUBE technology is used for large and small projects, and there's good reason—simplicity and low cost.

No requirement of Energy Input

Dewatering and drying by gravitational force and heat from the sunlight



Filtered Supernatant







Sludge cake removal by mechanical means for disposal and reuse



Cake disposal from BioTUBE with excavator

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