

Hydrovac Processing

Introduction

Hydro excavation has become a rapidly expanding solution for land development and industrial projects due to its safe process, low impact, and accuracy.

The byproduct of this process is a slurry of mostly water and reclaimed earth. This material, although often inert is disposed of at landfill and treated as an environmental liability. The process of material disposal is costly and inefficient.

In almost all excavation, once the work is completed the required "back fill" material is then trucked in to replace that removed during the hydro-vac process.



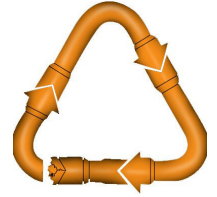
The Solution

This in-situ solution is simple, recycle the material on the excavation site for reuse. When the process of hydro excavation generates slurry, it can then be deposited into contained bins for live processing. By processing on site, you eliminate significant vac truck travel and waste disposal, while reusing the native material and recycling the water required for excavation.

This solution is effective, economical, and environmentally efficient.

The Process

Step 1 – Trommel



The introduction of hydro-vac slurry to the trommel.

This initial process will efficiently wash and remove all gravel material larger than 1" where its falls into a bin for stock piling.

The large gravels may carry a small percentage of moisture contained within any large clay pieces and organics.



The Process

Step 2 - Dryer

The material is further processed in the centrifugal dryer system where the water is removed for further processing where the small aggregate, dirt and fine material recovered for reuse. The adjustable moisture content of this material discharged is as low as 5%.



The Process



Step 3 – Shaker

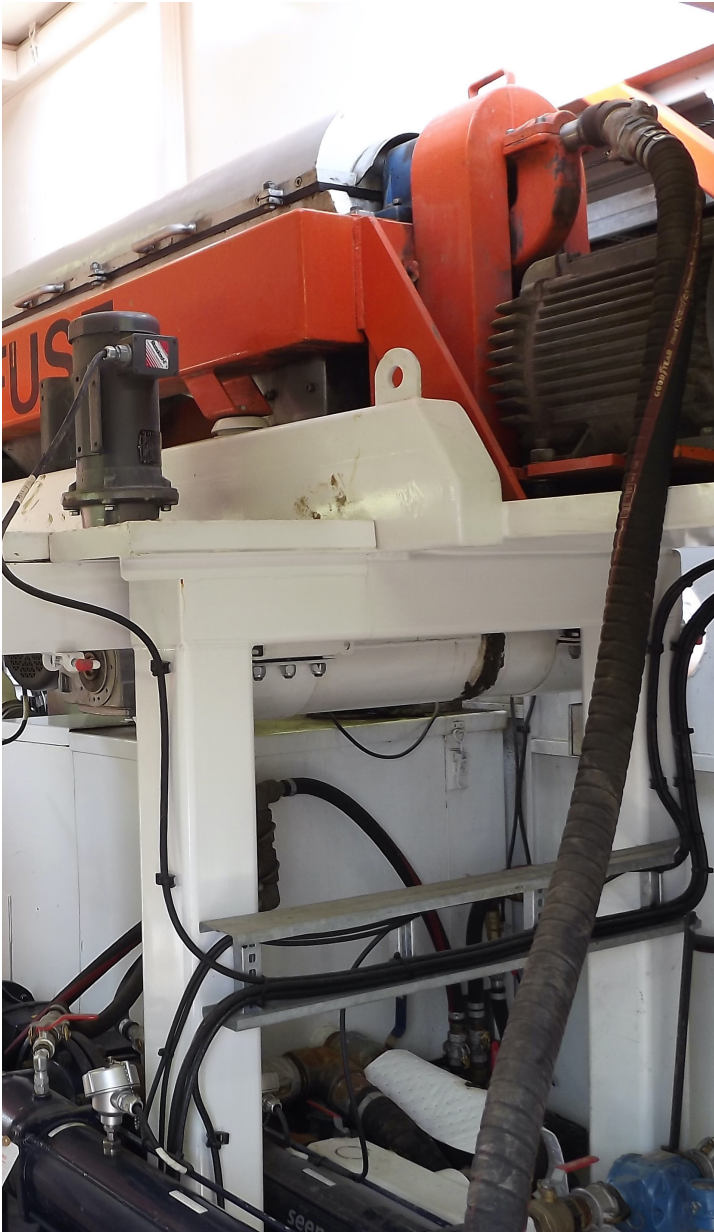
The sand and fines removal are done with shaker processing. The material discharged from this process is primarily sand with trace amounts of fines. This product carries a workable moisture content and is stackable.



The Process

Step 4 – Centrifuge & Water recovery

During the centrifuging and final solids removal process, the clays and fines are collected for reuse or disposal. The centrifuged material contains the highest moisture content with a typical range of 30-40%. This product can be homogenized with that from the dryer to provide a stable fill product.



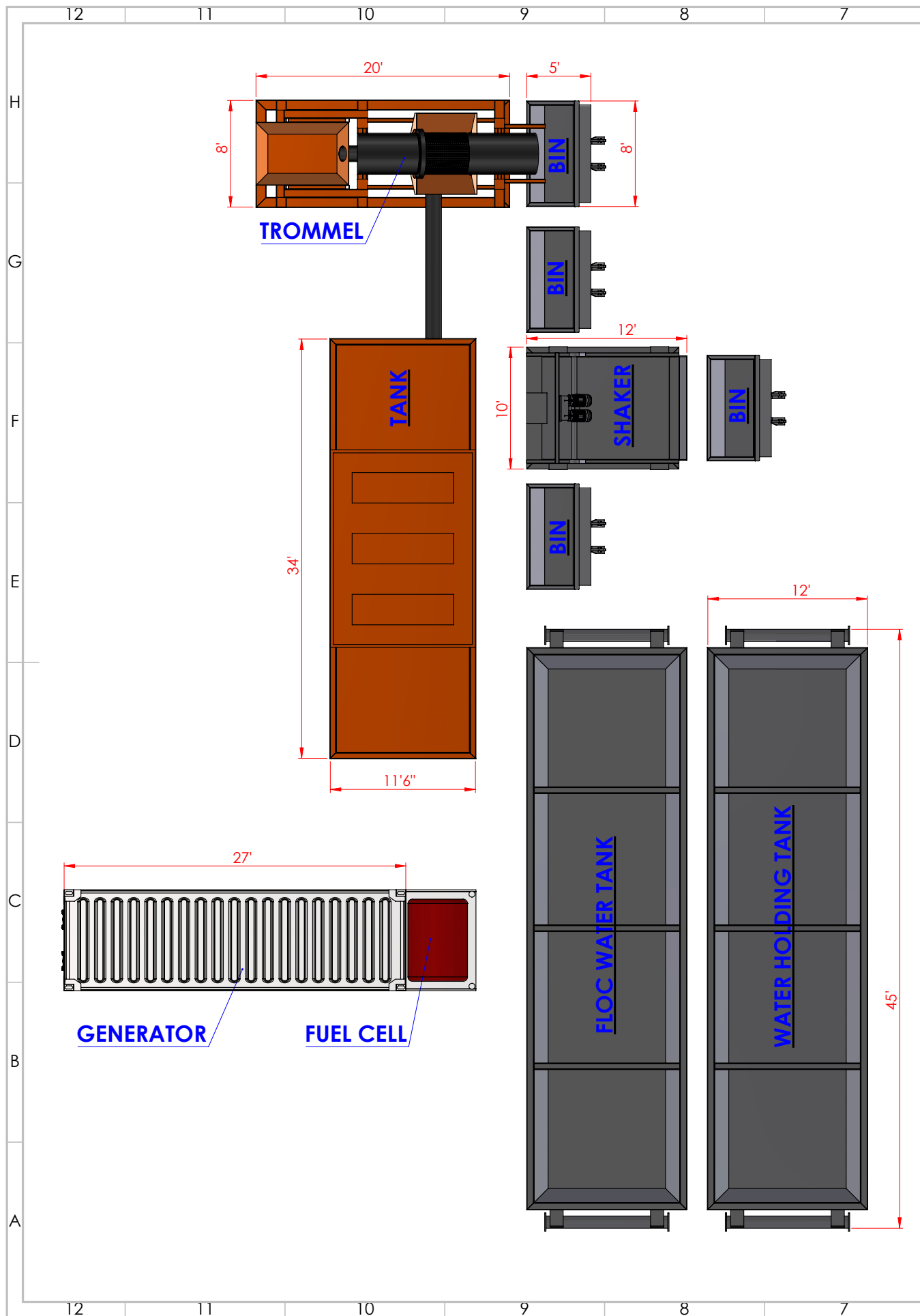
The Process

Step 5 – Water refined



The water recovered from the Hydro-Vac material is flocculated in real time. The distinct advantage to this immediate processing means the water is quickly ready for reuse within the processing plant and back to the Hydro-Vac trucks. After processing, the recycled water will average +150ppm of total dissolved solids than source water.







Contact Us

Mailing address:

PO Box 515 Station M, Calgary AB T2P 2J2
inquires@fuseenviro.com

Head Office

Suite 800, 505 – 3rd St S.W.
Calgary, AB Canada T2P 3E6
Main 1 403 451-0133
Fax 1 403 451-1334

Operations Shop
4819 43 Street
Rocky Mountain House, AB Canada T4T 1A1

www.fuseenviro.com

