

Application Story

PROJECT | FISH PROCESSING PLANT
Product | Geotube® Dewatering Technology
Application | Aquaculture

Location

Chile

The Challenge:

A Chilean fish processing plant wanted to develop a cost-efficient method of managing its waste products.

The Solution:

Geotube® dewatering technology was used by the owner to take the blood water (mixture including blood, fish parts, and lipids) from the processing plant and dewater it with Geotube® containers [photo 2].

The fish processing waste material flowed from the plant to an elevated drum filter where the initial separation took place. The solids dropped out over a gravity flow separator. Liquid waste flowed into a homogenization tank [photo 3]. Next the pH was tested and adjusted with caustic soda as needed. Then conditioner was added to the homogenization tank [photo 4]. A control system was used to measure and apply the correct dosages. Polymer was injected into the feedline as it passed through a mixing chamber en route to the Geotube® containers [photo 5].

The Results:

The Geotube® dewatering process yielded clear effluent. [Photo 6 shows the transition from raw waste (on left), to conditioner step (in middle), to polymer step (on right.) Photo 7 presents the dewatered effluent after one hour.]

After the Geotube® dewatering on the blood water, the test results revealed the following:

- Solids Removal: 97%
- BOD Reduction: 80%
- Nitrogen Capture: 92%
- Oils and Fats Removal: 97%



Contact Information:

Toll Free: 888-795-0808 / www.geotube.com

Geotube® is a registered trademark of TenCate™ Geosynthetics North America © 2010 All Rights Reserved.