

## COAL MINE SETTLING PONDS, SOUTH KALIMANTAN

# Cleanout of coal mine settling ponds using GEOTUBE® dewatering technology



**Industry:** Mining  
**Application:** Ponds/Storage  
**Location:** Indonesia  
**Product:** **GEOTUBE®**

## Solution

To address the issue, the company implemented a **GEOTUBE®** dewatering facility as part of its cleanout efforts. Over 300 **GEOTUBE®** units were utilized to dewater

## Challenge

A large Indonesian mining corporation faced a challenge in dewatering silt sediments from their settling ponds in South Kalimantan, Indonesia. The ponds had reached their capacity, and the company had limited available land space. The cleaning process involved a continuous cycle of silt dredging and truck relocation to prevent runoff with high levels of suspended solids from polluting nearby river channels. However, this approach became too costly.

**Over 300 GEOTUBE® units were utilized to dewater more than 1,000,000 m<sup>3</sup> (1,307,950 yd<sup>3</sup>) of sediments annually, containing 170,000 m<sup>3</sup> (222,411 yd<sup>3</sup>) of dry solids.**

## CASE STUDY

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more than 1,000,000 m<sup>3</sup> (1,307,950 yd<sup>3</sup>) of sediments annually, containing 170,000 m<sup>3</sup> (222,411 yd<sup>3</sup>) of dry solids. The **GEOTUBE**® dewatering tubes were stacked up to seven layers high, using standardized units with a circumference of 36.6 meters (120 feet) and lengths up to 61.4 meters (201 feet), to create large solid landfill structures and optimize land space.

This project stands as one of the largest **GEOTUBE**® dewatering projects ever undertaken worldwide, providing valuable insights into the economics of large-scale **GEOTUBE**® dewatering. It has recently received the 2021 International Achievement Award (IAA) - Award of Excellence.



The **GEOTUBE**® SFM serves as revetment for the entire waterway network at the new Clark Airport Terminal.

The rolls are easy to transport, and installation is quick and straightforward, requiring simple equipment. Skilled labor is not necessary. This erosion protection solution offers long-term effectiveness due to its high robustness, durability, abrasion resistance, and UV resistance. A site revisit showed significant growth of natural vegetation covering the sand-filled mattresses.



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