



# Copper Mountain Mine Embankment Dewatering



***DrainTube™ lowers environmental impact while providing stability.***

**LOCATION:**

*Princeton, British Columbia*

**PRODUCT:**

*DrainTube™*

**PROJECT PARTNERS:**

*Owner*

*Copper Mountain Mining Corporation*

*Consultant*

*AMEC*

*Completion Date*

*Spring 2014*

Copper Mountain Mine is located 20 km south of Princeton, BC. It consists of three existing open pit mines that have been combined into one large pit. The mine utilizes conventional crushing, grinding and flotation to produce copper concentrates with gold and silver credits.

## Challenge

A tailings pond on the mine site needed to be raised periodically as the mine tailings increased. To ensure stability of the embankment, the weight of the soil needed to be reduced as it became saturated. The client required a solution with sufficient compressive strength and flow capacity to withstand the weight of the soil while efficiently dewatering the embankment structure.

## Solution

Nilex recommended DrainTube to accelerate desaturation of the soil and increase the overall stability of the embankment. This geocomposite solution consists of tubes placed between two pieces of geotextile operating as a separation layer allowing hydraulic flow. The diameter and horizontal spacing of the tubes are designed to provide sufficient drainage capacity while maintaining compressive strength.

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## Installation

Approximately 12,200 m<sup>2</sup> of DrainTube was easily installed by a crew of five. It was simply rolled out, filled over and compacted. The DrainTube solution, as opposed to drainage layers which consist of aggregate and perforated pipe, eliminated the need for aggregate which reduced hauling costs and the need for special equipment.



## Results

Using DrainTube lowered the projects overall environmental impact by reducing the need to produce or transport materials. Nilex provided the client with a solution that would remove water from the embankment structure while providing stability. Compared to the alternative, DrainTube saved the client time, money and resources.

## The Nilex Advantage

Nilex is committed to unearthing better results. Whether it's for a civil, resource or environmental project, we offer the latest engineered and technically superior materials and techniques to save our customers time and money, and minimize the need to move or remove earth, and reduce the need for granular materials.

With over 35 years experience, a long-standing commitment to the environment and highly qualified staff, Nilex delivers the products and technologies that give clients an economic advantage with environmental benefit.

