

New Afton Mine

Kamloops, BC, Canada (2014)

PRODUCT USED:
Hard-Cem®

OWNER:

New Gold Inc.

BACKGROUND

New Gold Inc.'s New Afton Mine near Kamloops in British Columbia, Canada, was built in 2011 and opened in 2012. As part of its mining operation, it employs the block-caving method. Because of that, New Gold Inc. needed to construct a large network of concrete tunnels and passageways beneath their target ore body.

The extraction and hauling activities within that area created an extremely abrasive situation for the concrete infrastructure — especially in the truck turning and dumping areas and rock chutes. By 2014, the original concrete in these areas had already worn out and needed to be replaced.

That indicated that the concrete would need to be replaced every three years, which would increase the mine's maintenance costs significantly.

SOLUTION

The replacement concrete used to remediate the truck turning and dumping areas and the rock chutes contained Kryton's Hard-Cem admixture. Since then, the concrete in the area has resisted abrasion and has not needed to be replaced for more than six years of continuous service. As a result, with the help of Hard-Cem, New Gold Inc. has been able to skip at least two replacement events for their mine's concrete. Without the need for this replacement, New Gold Inc. has also been able to avoid the process of creating additional concrete with cement, which has allowed them to reduce their lifetime carbon footprint by 49.5% so far.

