

# Advanced piping solutions for handling scaling fluids



Successful outcome in pilot test for SCT Discharge Line with Pexgol.



## Barrick Gold Dominican Rep. | 2023

### • Working Conditions

Temperature: 65°C / 149°F  
Flow: 250 m<sup>3</sup>/h  
Pressure: 7 bar

### • Pexgol Pipe

Pexgol 315 mm, Class 12

### • Application

SCT discharge line in cooling towers

### • Length

35 m / 114 ft

## The Challenge

Barrick Gold Corporation, at its Pueblo Viejo mining unit, faced a significant challenge in its operation. The company was using 12" SCH 40 carbon steel pipes for the transportation of slurry with lime sludge in its SCT discharge line at the cooling towers. This method presented several problems, primarily due to its chemical composition, the fluid was highly scaling. The scale reduced the inner diameter of the pipes by 30% to 40% over an approximate three-month period, severely affecting performance and increasing the energy consumption of the pumping system. Additionally, maintenance required dismantling the lines, cleaning them with high-pressure equipment, and a team of 10 operators for about two weeks, resulting in high operational and maintenance costs.

## The Solution

In search of an innovative solution, Barrick Pueblo Viejo opted to implement 315 mm Class 12 Pexgol pipes, with a length of 35 meters for a pilot test. Pexgol piping, known for its high resistance to abrasion, corrosion, and scaling, was presented as the alternative for this challenging environment. Three-meter sections of the pipe were flown in, and connections were made using electrofusion couplings and flanged couplings for integration into the existing system through flanged joints.

The installation was completed in approximately one day, including the training of staff for field welding. This rapid installation minimized interruptions in the operations of Barrick Pueblo Viejo, allowing for a smooth transition to the new piping system.

Since the implementation of Pexgol, scaling has significantly decreased. The pipes have been operating for 9 months without signs of scaling, resulting in a significant reduction in operational and maintenance costs. The total changeover of the existing line can generate savings of 200,000 USD per year in maintenance.



Steel 12" SCH 40

Pexgol 12" Class 12

# The Advantages of Pexgol Pipe Systems



## High resistance to wear

Pexgol is the preferred solution for abrasive materials transportation. Typically resists three times more than HDPE and twice more than steel.



## Superb internal and external corrosion resistance

Our pipes are proven to withstand decades of exposure to corrosive environments, with nonstop performance in some of the world's harshest environments.



## Excellent chemical and corrosion resistance

Pexgol pipes can resist a wide range of chemical agents, slurries, toxic and radioactive materials.



## Long pipe sections

Pexgol pipes can be supplied in long coil lengths, reducing number of joints, installation time and risks.



## High temperature resistance

Working temperatures can range from  $-50^{\circ}\text{C}$  /  $-58^{\circ}\text{F}$  up to  $110^{\circ}\text{C}$  /  $230^{\circ}\text{F}$ .



## Creep and impact resistance

Pexgol pipes can withstand high amounts of axial and radial stresses and are highly resistant to impact, fracture and fatigue. Furthermore, Pexgol pipes are completely resistant to cracks even when dragged over sharp rocky terrain and coagulated salt crystals.

For more information please visit:  
[pexgol.com](http://pexgol.com)

