# Water Transport with Low pH Level Case Study | No.2





### Transport of acid water at high temperatures

## Moa Nickel S.A. Sherritt Cuba | 2010

## Working conditions:

Up to 65°C, 13 bars

## Pipes used:

Pexgol 225 mm, Class 24 (SDR 7.3)

## Application:

Transportation of acid water

## Length:

2500 m

## The Challenge

Moa Nickel required to transport a big amount of overflow acid water from the sedimentation tanks to the slurry thickeners plant.

This overflow water substituted the reposition water that the slurry thickeners used.

The client debated regarding the use of a stainless steel pipe SS316L or thermoplastic flexible materials such as HDPE and polyethylene.

#### The Solution

At the end, Moa Nickel decided to use Pexgol pipes in long sections, instead of short ones of HDPE and polyethylene, as the best solution for the line, because this type of materials didn't allow to work under the security standards in the allowable installation time.

The Pexgol pipe was installed in just 8 days with success. The fact that it didn't require to create a sand bed and the high productivity for its installation in long sections, reduced to the half the installation time for this project. At the end, the client got 25% savings in comparison with the other possible materials.





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#### Advantages

#### 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.

## • Excellent chemical and corrosion resistance:

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

#### • High temperature resistance:

Working temperatures can range from -50°C/-58°F up to 110°C/230°F.

#### • Superb internal and external corrosion resistance:

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

#### Low weight:

Compared to steel or rubber, Pexgol's solution results in reduced transportation, storage and labor costs due to lower weight per meter.

#### • Long pipe sections:

Pexgol's pipes can be supplied in long lengths coils, reducing number of joints, installation time and risk.

#### • Creep and impact resistance:

Pexgol's crosslinking piping solution can withstand high amounts of axial and radial stresses and are highly resistant to impact, fracture and fatigue.

Our pipes are also completely resistant to cracks

– even when dragged over sharp rocky terrain and coagulated salt crystals.





