Company / implementer: Mineros S.A

Sector: ISIC 0722 Mining of gold and other precious metals.

Location: El Bagre, Antioquia, Colombia E 918.047,1 - N 1.328.598

Update: 01 Feb. 2018

Results

- Reduction in surface water use of 253,497 m³/year corresponding to 50%.

Other benefits

- Supply of good water quality to internal processes and reduction in electricity used for pumping.
- Reduction in treatment costs.
- Reduction in the load of contaminants dumped into water sources.
- Recovery and use of solids generated by sedimentation in treatment processes, with a recovery of 28.1 g gold/year

Supplier References

Supplier: Internal Development

Contact information: www.mineros.com.co

Implementing Company

Company in charge of implementing the solution: Mineros S.A/Underground Mining.

Contact information: Luis Felipe Castañeda.

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Description

Six sedimentation ponds were built to treat water from the processes of “La Y” mine. GelFlocoBulk coagulant is applied to the treatment process. A pumping system to use mine water in gold processing is also needed. This allows recirculation of this water in its entirety and contributes to a reduction in the surface water used during the processing stage that was previously obtained from the concession in the Tigüí River. The project also implies a reduction in dumping volumes.

The Tigüí River (Municipality of Zaragoza) is an area of low pressure levels on water resources; however it has a high impact due to pollution caused by deforestation and the execution of unregulated mining activities.

Investment and Operating Costs

Investment Costs: USD 27,000 was invested between 2015 and 2017. An additional investment of USD 4,000 is expected between 2018 and 2019.

Non-Monetary Costs: Human resources at the processing plant of the La Y Mine.

Limitations and Recommendations

- Water in the mine has high solid contents and therefore requires the use of coagulant.

Cases of Application

N/A

References