



META**FLO**
technologies™

RemTech Treats Heavy Metals Simultaneously for Gold Leaching Effluent

MetaFLO's biopolymer provides advanced bio-friendly remediation of contaminated water such as effluents, helping companies save costs, increase productivity and protect the environment.

CASE STUDY



PROJECT

REMTECH – INDUSTRIAL GOLD LEACHING EFFLUENT TREATMENT

Belo Horizonte, MG - Brazil



Challenge

Effluents from mining operations, specifically gold leaching processes, often contain high concentrations of heavy metals, which pose significant compliance and environmental challenges. Traditional treatments don't simultaneously eliminate all the heavy metals available in the effluent, as they are often costly and may struggle to meet stringent regulatory standards required for safe discharge or reuse. An advanced treatment was necessary to ensure compliance with COPAM-08/22 regulatory limits and to achieve sustainable water management.

Solution

In this case, the focus was on treating Arsenic, Copper, Iron and Nickel present in the effluent using 0.025% RemTech—MetaFLO's advanced solution for remediation. The biopolymer is environmentally friendly, allows water reuse, doesn't generate toxic byproducts and can remove several heavy metals simultaneously.

Outcome

✓ REGULATORY COMPLIANCE

The treated effluent met environmental standards, supporting the mining company's goals for sustainable water reuse and safe discharge into the environment. Capable of treating Arsenic (10.70 ppm to 0.06 ppm), Cooper (7.90 ppm to 0.00 ppm), Iron (144.90 ppm to 0.85 ppm) and Nickel (4.70 ppm to 0.73 ppm).

✓ COST-EFFECTIVE SOLUTION

By reducing the need for additional alkalizing agents, RemTech streamlined the treatment process, offering a more economical and environmentally friendly approach to heavy metal remediation.

✓ ENHANCED PROJECT TIMELINES

With low dosages of our RemTech biopolymer, the treatment presented the fastest results with the least volume of precipitated sludge compared to traditional methods.



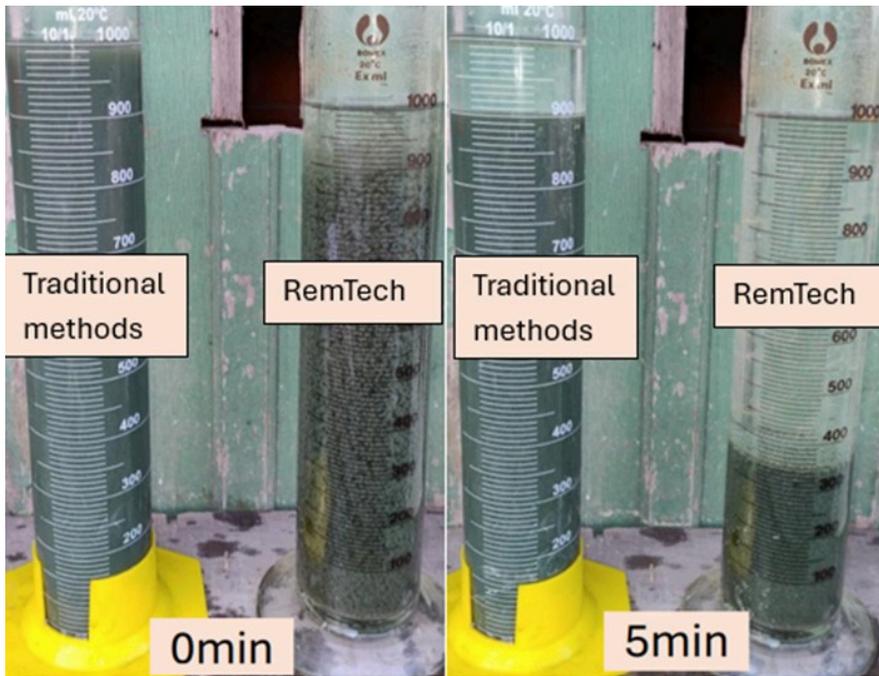


Figure 1: Treated Effluent with RemTech

