

RECENT ADVANCES WITH THE GLYCAT™ PROCESS FOR EXTRACTION OF GOLD AND SILVER IN THE PRESENCE OF COPPER

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ABSTRACT

Mining and Process Solutions (MPS) are continuing to work towards commercializing their *GlyCat™* Process. It is a glycine-based with minor cyanide addition leaching process that can be used to leach gold and silver from concentrates, ores, or tailings. Base metals like copper, zinc and nickel could also be recovered if desired. It is the only comparable process that is easily adapted to existing cyanidation plants in the market today.

The process can reduce the amount of cyanide used by greater than 50% and achieve the same or better recovery to cyanidation. The precious metals can be easily recovered onto activated carbon, resins or polymers and the tailings produces typically contain no to very low Free Cyanide (<1 ppm), and WAD Cyanide (<10 ppm).

MPS has now piloted the process for over 3,500 hours demonstrating the highlighted benefits above and are working with several major companies to plant trial. The process is in use in 2 small tailings treatment operations in Zimbabwe. They successfully treat copper gold tailings of 1-5 g/t Au with 1-6% Cu using *GlyCat™* process in brick lined vats producing 2-3 kg of Au and 0.8-1 tonne of copper per week where cyanidation has failed

Keywords: GlyCat™ Process, Glycine, Cyanide, Gold, Silver, Base Metals, Tailings Treatment, Vat Leaching