## Flowsheet Options For Processing Copper Gold & Gold Copper Ores

## Damian Connelly1

1.Damian Connelly FAusIMM(CP)
Consultant Principal Engineer, METS Engineering Group, Perth WA 6005. Email: damian.connelly@metsengineering.com

## PROCESSING COPPER GOLD & GOLD COPPER ORES

Copper and gold have similar cyanide metallurgy depending on the nature of the minerals present. The processing of gold copper and copper gold ores can be highly problematic, site specific and the process selection is dependent on ore grade, mineralogy, acid leach behaviour, cyanide chemistry, product saleability and environmental considerations. The production of a copper gold concentrate is also an option where the copper is of a marketable grade.

In some situations the flotation tailings may be subject to cyanide leaching if technically and commercially viable. The general effects of copper on cyanide leaching chemistry are increased cyanide and lime consumption and decreased dissolution rates for gold and silver. The severe fouling of carbon, high solution losses and even re-precipitation of gold can occur.

Recent advances in cyanide recovery and producing saleable copper products have changed the flowsheets available for such problematic ores. There are a number of technologies and new methods now available.