

DISSOLVED COPPER RECOVERY FROM MINE SEEPAGE WATER AT BATU HIJAU SITE, NEWMONT – INDONESIA¹

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Abstract: Batu Hijau recently implemented recovery of copper as copper-sulfide from mine seepage waters. Treatment objective is to clean mine water to reduce dissolved copper level reporting to the mill while reducing risk potential for above compliance water discharge. At the same time, a saleable product is produced to offset treatment cost. Treatment involves dosing liquid sodium hydrosulfide into an existing lime water treatment plant. Dissolved copper is recovered into a concentrate grading 30 to 35% copper at over 99% recovery. The product is filtered and combined with flotation plant concentrate production for sale. Several water treatment technologies have been evaluated by Batu Hijau personnel over the past few years. This route is identified as the most cost effective way of cleaning mine seepage water at Batu Hijau.

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