PORGERA PASTE BACKFILL PROJECT

SCOPE OF WORK

Following the completion of a basic engineering study by GR Engineering, Barrick (Niugini) Limited appointed GR Engineering to complete detailed engineering to enable Porgera to purchase major equipment and receive bids from qualified contractors for the construction and commissioning of the paste system facilities on a fixed price basis.

The life of mine production profile for the Porgera underground mine will increase the current production rate from 0.68 to 1.2 Mtpa. This increase in production subsequently generates an increase in the quantity of backfill required. The primary influence on being able to achieve the life of mine production profile from the underground mine relates to the mine's capacity to backfill previously mined stope voids in order to gain access to subsequent stopes, also ensuring that the mine production fleet can adequately meet the productivity levels required.

The paste plant is designed to cyclone a proportion of the gold plant tailings to provide a suitable sized paste plant feed and then filter and repulp the tailings in a controlled fashion with cement. Paste is then pumped through an extensive underground reticulation system via positive displacement pumps. The plant has a design throughput rate of 134 dry tph of tailings at a feed density of 73.5% solids to produce 100 m³/h of paste. Construction and commissioning works were successfully completed in 2010.

Commodity: Paste Backfill
Region: South East Asia
Location: In the Enga Province, 600 km northwest of Port Moresby in the highlands of Papua New Guinea at an altitude of 2,200 to 2,700 m
Project Type: Brownfields, EPCM

Client: Barrick (Niugini) Limited a wholly owned subsidiary of Barrick Gold Corporation (TSX: ABX; NYSE: ABX)
Award Date: January 2008
Completion Date: December 2010
Project Manager: Steve Kendrick
Process Manager: Bill Gosling