



## PROJECT FOCUS

# OK TEDI MINING PROCESSING ASSET REPLACEMENT (PAR) PROJECT

Ok Tedi Mining Limited (OTML) operates a large scale copper and gold mining and processing facility in the Western Province of Papua New Guinea. Ore from the open pit is mined at an annual rate of 24 million tonnes and processed through a facility consisting of a primary gyratory crusher, two parallel grinding and flotation modules, gravity separation and a tailings sulphur and fluorine removal circuit.

The operation commenced in 1985 and current life of mine plans see production potentially continuing beyond 2030.

The originally installed concentrate regrind and flotation equipment is nearing the end of its economic life and a decision was taken to replace the aging equipment with more modern machinery operating on an updated flowsheet. This upgrade formed the scope of work for the Processing Asset Replacement Project (PAR).

The scale of this project is significant, especially when considering the remote and mountainous location of the site and the associated degree of effort required to access the site with heavy loads. The construction work is being self-executed by the OTML operations team.

Over 2,500 m<sup>3</sup> of concrete and over 1,000 tonnes of fabricated steel will be required to construct the new facility. The selected site is very constrained and required substantial relocation of existing infrastructure and realignment of the major road access to the mine.

GR Engineering completed feasibility study work in 2020 and was awarded an EPCM contract in 2021 for the provision of engineering services to complete the detailed design for the PAR. The key objective of this scope of work was to provide OTML with the necessary engineering services, procurement support and detailed design deliverables to enable the Owner's team to execute the procurement, construction and commissioning of the PAR. The scope of this contract required GR Engineering to undertake the following tasks:

- Establish a design basis and a process design criteria for the processing facilities to be constructed;
- Conduct design reviews, HAZID, HAZOP and risk assessments in conjunction with the OTML project team;
- Select suitable process equipment and design the process plant facilities required to support the selected equipment;
- Create technical specifications to enable the procurement of the process equipment, construction materials, fabricated items and site construction services;
- Provision of the engineering design and management services required to create the detailed design deliverables;
- Provide OTML with engineering assistance for the design of interfaces and extensions to the existing site services required to support the new plant;
- Provide an off-site support resource to assist the OTML team with implementing the engineering designs and resolving construction queries.

Construction of the new PAR facilities commenced in 2022 and the Regrind section of the new plant is due for completion and commissioning in 2024. Once this first phase of the PAR is fully commissioned and operating reliably at nameplate capacity, construction of additional planned upgrades of the rougher, cleaner and re-cleaner flotation circuits will commence.



### SUMMARY:

**Commodity:** Copper-Gold

**Region:** South East Asia

**Location:** Western Province PNG

**Project Type:** Brownfields, EPCM schedule of rates and procurement support

**Client:** Ok Tedi Mining Limited

**Award Date:** March 2021

**Completion Date:** Early 2024 (scheduled)

**Project Manager:** Rod Schier

**Total Project Value:** USD 180M

## About GR Engineering

A leading process engineering, design and construction organisation that strives to provide workable, cost effective solutions and quality services to the global resource and mineral processing industry. GR Engineering has a proven track record of delivering turn-key projects in over 20 countries.

The company guarantees integrated, efficient and practical designs whilst maintaining a high level of safety and operational performance.

Personnel at GR Engineering have the capability and track record to undertake projects from the initial evaluation and study phase through to design, construction, commissioning, operational support and asset management.

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