



RASP ZINC PROJECT

SCOPE OF WORK

The 750,000 tpa concentrator was constructed to treat underground ore mined from the Rasp Mine located in the centre of the Broken Hill, NSW. The concentrator was designed to produce 124,000 tonnes of lead and zinc concentrates each year.

The concentrator plant included single stage crushing, with conveyors that deliver the ore to a coarse ore bin. Coarse ore is ground in a two stage grinding circuit that comprises a SAG mill and a ball mill. The ore/slurry from the grinding circuit is classified via the mill cyclones and the cyclone overflow undergoes flotation to produce separate lead and zinc concentrates. Lead and zinc concentrates produced in flotation are thickened in high rate thickeners.

The thickened concentrates are pumped to dedicated concentrate storage tanks prior to filtration via separate filter presses. Filtered concentrate is loaded into containers for shipment off site via rail. Final tailings can be disposed either into a tailings storage facility or be pumped underground via a borehole and underground distribution system. The load out of the concentrate used an innovated conveyor loading process whereby lead and zinc concentrate is loaded directly into containers on discharge from the filters.

The \$71.5 million Guaranteed Maximum Price (GMP) contract was awarded to GR Engineering in November 2010 with the Practical Completion successfully achieved in April 2012. The scope included the turnkey delivery of a lead and zinc concentrator plant including project management, design, procurement, construction and commissioning of the process plant facilities and associated services (within nominated battery limits). There was a refurbishment component of the work (\$3.6 million) which was undertaken on a provisional sum.

Commodity: Zinc-Lead

Region: Australia

Location: Broken Hill, New South Wales

Project Type: Greenfields, lump sum contract

Client: CBH Resources Limited subsidiary of Toho Zinc Corporation Ltd

Award Date: November 2010

Completion Date: April 2011

Project Manager: Geoff Tanner

Process Manager: Bill Gosling