

AVEBURY MINE EARTHWORKS AND Tailings Storage Facility

Date: 2007

Principal: Allegiance Metals

Project Value: \$8.0M

TASK

The contract for Allegiance Metals Pty Ltd required development of the mill site including bulk earthworks and drainage, construction of Stage 1 of the Tailings Storage Facility (TSF) including decant structure and seepage collection system, construction of the site access road, and connection of the above works to the Water Storage Dam, wetlands ponds and settlement pond.

CHALLENGES

Mill Site:

- Site excavation including clearing and grubbing, stripping and stockpiling and preparation of foundation surface
- Cart and place approved fill material and trim final site profile to shape and construction of drains

Tailings Storage Facility:

- Site excavation including clearing and grubbing, stockpiling topsoil, stripping embankment foundation, excavating cut-off trench and preparing surface for placement of embankment material and cart, place and compact embankment material
- Excavate decant pipe trench, from bedding for pipe placement, supply and install stilling basin at decant pipe end
- Cart, place and compact embankment material
- Supply and install seepage collection drain and seepage outlet pipe and construct rock lined spillway and
- Trim final embankment profile to shape
- Supply and place base course for road along crest, form safety bund on downstream edge of crest, spread evacuated topsoil over embankment downstream face
- Drilling, loading of explosives & blasting rock in rock borrow pit
- Installation of tailings discharge pipelines
- Construct decant tower
- Supply and install pit, mill return pump and return pipe at settlement pond outlet
- Supply concrete anchor block at decant pipe outlet

OUTCOMES

Works were completed ahead of schedule to allow construction of the process plant.

