



PROJECT NAME

Carrapateena TSF and Decant Pond

> **CLIENT** OZ Minerals

DESIGNER Golder Associates

> **LOCATION** South Australia



PRODUCT COLETANCHE[®] ES3

> **SURFACE** 88,000 m² 945,000 ft²

INSTALLATION DATE 2019



BACKGROUND

The OzMinerals Carrapateena mine is a copper-gold project located approximately 160 km north of Port Augusta in South Australia. The ore is processed onsite to produce a gold-copper concentrate. A lined tailings storage facility was required to receive the tailings by-product and protect the surrounding environment. A lined decant pond was also constructed as part of the processing facility.

SOLUTION

For both the TSF and the decant pond, the designer required a Bituminous Geomembrane (BGM) with specified mechanical, durability and hydraulic properties. Coletanche ES3 met or exceeded all the specification requirements and was selected as the appropriate BGM. Quality assurance measures for the installation called for air-lance testing, ultrasonic testing and vacuum testing.















REASONS OF CHOICE

Coletanche ES3 was well suited to the rugged conditions of the site. ES3 is designed to interface directly with various stone and large soil particle sizes. This allows it to be installed efficiently without additional protection measures. Coletanche BGMs have been tested for chemical compatibility with various tailings types and have a hydraulic conductivity which easily met project requirements. An additional benefit of the Coletanche BGM is the dimensional stability it provides in exposed conditions. Unlike many polymeric liners, ES3 does not wrinkle and deform in the high heat conditions of the site.



About COLETANCHE®:

COLETANCHE® bituminous geomembranes have been developed 40 years ago. This durable composite is an effective waterproof and gas-impermeable separation layer with significant properties: UV resistance, workability at temperatures -40 to 40° C (-40 to 104° F), mechanical / puncture resistance, harsh chemical resistance, dimensional stability and mechanical workability, easily installed, welded and repaired by local crews or maintenance people of any client.

COLETANCHE® offers value to all civil engineering projects: effective for solid and liquid waste storage, heap leach pads, tailings ponds, dams, reservoirs, containment basins, canals, & ditches. The COLETANCHE® geomembrane, an efficient alternative, takes the place of two or more layers in geo-profiles reducing material and labor costs.



Axter

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