



## Tellus provides a solution to the waste challenges faced by Australia's precious metal mining industry by offering safe and cost-effective disposal and permanent isolation of arsenic contaminated waste

### CLIENT'S SECTOR

Mining – Precious Metal

### CLIENT'S WASTE TYPE

Arsenic Waste

### THE CLIENT CHALLENGE

**Disposal of hazardous arsenic waste generated during the mining process**

Precious metal producers in Australia have faced the challenge of safely disposing of arsenic contaminated waste, a hazardous waste product generated at operating precious metal processing facilities. Arsenic contaminated wastes are toxic substances which if not disposed of appropriately can become a soil contaminant and over time leach into groundwater systems creating a public health and safety risk as well as potentially causing damage to local ecosystems and the greater environment.

Limitations to traditional waste infrastructure aligned with declining available capacity has resulted in a lack of domestic infrastructure options to effectively, safely and affordably deal with existing and projected mining waste volumes. This poses a serious challenge to the precious metal industry and has resulted in significant legacy waste stockpiles and an increased risk of environmental contamination and a liability to community health.

### TELLUS SOLUTION

**Safe and cost-effective storage and permanent isolation at the Sandy Ridge near surface geological repository**

Tellus has provided the precious metal industry with a safe and cost-effective solution, offering permanent isolation at the Sandy Ridge near surface geological repository. Arsenic contaminated waste can be placed and encapsulated within the Sandy Ridge near surface geological repository. Encapsulation at Sandy Ridge provides a long-term safe and environmentally sound way of isolating hazardous waste, preventing discharge of hazardous chemicals into the environment.

This innovative solution follows world best practices for the safe management of these difficult to manage waste types, one that can meet today's safety requirements as well as protecting future generations. The superior site selection at the Sandy Ridge Facility, located in the Big Belle Suite, a 70-million-year-old kaolin clay bed, forms part of the facility's multi-barrier safety case and provides a solution in which this hazardous arsenic contaminated waste is permanently isolated from the biosphere over geological time (millions of years).

“ Tellus has provided us a long-term solution to an ongoing waste problem in the precious metals industry. The Sandy Ridge Facility offers safe, cost-effective and permanent isolation of our waste, ensuring that both community and environment remain protected into the future. ”

**Waste Manager, WA Gold Producer**