



The Chandler Proposal

Overview

Tellus propose to construct and operate a dual revenue business known as the Chandler Facility. The first aspect of the business would involve the construction and operation of an underground rock salt mine. The second aspect would involve the storage of equipment and archives and also the storage, recovery and permanent isolation of difficult to manage waste materials, such as chemical hazardous wastes that are not generally accepted at landfills.

The Chandler Facility would be supported by a rail siding and surface storage and transfer facility known as the Apirnta Facility. Haul and access roads would link each facility. Collectively, the two proposed facilities, the haul road and access road are referred to as 'the Proposal'.

The Chandler Facility

The proposed Chandler Facility would be located approximately 120 kilometres south of Alice Springs and about 25 kilometres from the community of Titjikala.

An average of 500,000 tonnes of salt would be mined every year (with a maximum of 750,000 tonnes). Salt would be mined at a depth of about 850 metres below ground. The salt bed is about 250 to 300 metres thick. Depending on the overseas salt market, most of the salt would be exported to Asia. Up to 400,000 tonnes of difficult to manage waste would be stored or permanently isolated inside the mined salt rooms per year (although average volumes are expected to be significantly less than this amount - 340,000 tonnes per annum). Isolating waste at this depth is known as a 'deep geological repository'.

Salt mining

Salt mining activities would involve:

- Deep mining of rock salt using a 'room and pillar' system of mining.
- Transport of salt via shaft hoisting to the surface.
- Stockpiling of rock salt for processing and packaging.
- Transport of rock salt to domestic and overseas market

Storage, recovery and permanent isolation of materials

Storage and permanent isolation would involve:

- Transport of materials (equipment, archives, etc.) and waste, predominantly by rail, for receipt and temporary storage at the Apirnta Facility.
- Transfer of materials by truck from the Apirnta Facility to the Chandler Facility via the proposed private Chandler Haul Road.
- Transport of packaged materials via mine access decline or via hydraulic backfill into the voids left from the salt mining operation:
 - Materials such as equipment and archives would be stored separately for future retrieval.
 - Waste would be permanently isolated in line with operational management plans and a strict Waste Acceptance Criteria (WAC).
- Once full, sealing the underground voids permanently with an engineered barrier.

The facility would be designed and managed to allow for future waste recovery opportunities – that is, wastes would be stored like-with-like and the final



disposal locations of the waste would be tracked and logged for future reference. At some point in the future, a technology recovery park would be established to support research and development into ways to release waste materials back into the circular economy.

Key underground infrastructure

The key underground infrastructure would include:

- Underground mine.
- Mine access decline.
- Two ventilation shafts.

Key aboveground infrastructure

The key aboveground infrastructure would include:

- Salt processing facilities.
- Waste unloading area.
- Waste storage warehouse.
- Surface hydraulic backfill plant and underground reticulation.
- Salt and overburden stockpiles.
- Maintenance buildings.
- Administration buildings.
- Accommodation village.
- Solar (2-3 MW)/diesel (4 MW) hybrid power plant.
- Clean and raw water dams.
- Water and sewage treatment.
- Fuel storage facility.
- Utility reticulation.
- A future technology recovery park.



Graphical representation of the proposed Chandler Facility

The Apirnta Facility

The purpose of the Apirnta Facility would be to provide a licensed facility that safely allows for the temporary storage of waste products prior to being transported by road for storage to the Chandler Facility.

The Apirnta Facility would provide for the temporary storage of up to 400,000 tonnes of waste during the construction phase although average volumes when the Chandler Facility is operating are expected to be less than this amount (340,000 tonnes per annum). The waste would be stored either in a warehouse, within an open storage yard or within a liquid storage tank.

The majority of wastes arriving at the Apirnta Facility would be transported via the Central Australian Railway. Some waste may be delivered by road. All transport would be undertaken by reputable companies licenced to transport dangerous goods. Waste arriving would be inspected, sampled, unloaded and appropriately stored in accordance with appropriate standards, codes and regulations and in line with a strict WAC.

Chandler Haul Road and Henbury Access Road

The proposed Chandler Haul Road would be a private road approximately 30 kilometres long and would connect the Chandler Facility to the Apirnta Facility. It would provide for the movement of salt from the Chandler Facility to the Apirnta Facility. It would also provide for the movement of equipment, archives and waste temporarily stored at the Apirnta Facility to the Chandler Facility.

The proposed Henbury Access Road would be a private road approximately 60 kilometres long and would connect the Apirnta Facility to the Stuart Highway. It would provide for the movement of workers and delivery vehicles to and from the Stuart Highway to the Apirnta Facility and through to the Chandler Facility.



Graphical representation of the proposed Apirnta Facility

