

FACT SHEET – Port of Broome December 2016

Thunderbird Mineral Sands Project

The Thunderbird Mineral Sands Project, located on the Dampier Peninsula between Broome and Derby, is being developed by Western Australian company Sheffield Resources Limited.

Thunderbird is a large-scale, mineral sands mining and processing project with low environmental impacts and long term economic and community benefits. Sheffield proposes to undertake mining of mineral sands for more than 40 years from the Thunderbird deposit.

Sheffield is undertaking a Bankable Feasibility Study (BFS) and Public Environmental Review (PER) of Thunderbird, scheduled for completion in 2017. Start of construction is planned to follow with first exports through the ports of Derby/Broome targeted for 2019.

Sheffield believes that Thunderbird can help transform the community through the creation of approximately 140 permanent and many indirect local jobs. Income would stay in the region supporting families, business, cultural values and lifestyle.

The mineral sands products (ilmenite) will be transported in bulk to the Derby Port. Packaged products (zircon concentrates and HiTi88 Leucoxene) will be transported to Port of Broome.

Site Access and Product Transport to Broome

Access to the Mine Site is via Mt Jowlaenga Road; an unsealed road maintained by the Pastoral Lessee. Parts of the existing road will be upgraded and new sections will be constructed to provide safe, all weather access to the Thunderbird. The upgraded Site Access Road will be approximately 30 km long and will meet the minimum requirements of the Main Roads WA. The Great Northern Highway intersection with the Site Access Road will allow entry from Broome and Derby, with overtaking lanes for road trains.

Trucks will be used to deliver construction materials, supplies and remove selected waste streams. Buses and cars will be used for workforce transportation as required.

Bulk mineral product from the Mine Site will be loaded on to road trains and transported to Derby Port for export.

Packaged mineral sands products (zircon concentrates and HiTi88 Leucoxene) will be transported by road train to Broome for export. Existing port facilities including storage sheds will be used for storage and export of packaged products. Bulk products will be loaded (bulka bags or containers) at the Mine Site before transport.

The transport route from the Mine Site to the Port of Broome is approximately 150 km long with approximately 12.5 km of the transport route using the dedicated heavy vehicle bypass route (Gubinge Road and Port Drive) to access the port.



“Australia is a major producer of mineral sands.

Non-reactive and non-toxic, mineral sands products are used in paints and artificial joints, in toothpaste, crockery and porcelain, medicines, food colouring and sunscreen.”

Product Export from the Port of Broome

Packaged products will be exported from the Port of Broome at an estimated average cargo size of about 5,000 t per vessel with about 20-30 annual sailings anticipated depending on customer demands for packaged products.

Ocean-going vessels can berth at the Port of Broome. Packaged products will be transferred via existing wharf or vessel cranes directly to ocean-going vessels.

LIKE TO KNOW MORE

Contact

Kim Pervan

Senior Advisor External Affairs

KPervan@sheffieldresources.com.au

sheffieldresources.com.au



Materials Handling Schedule

Proposed product transport and transhipment schedule

Table 13: Materials Handling Schedule Activity	Daily Hours of Operation	Schedule
Derby Port (Bulk Products)		
Transport of product from Mine Site to Derby Port	24	Estimate 10 truck return journeys per day. 7 days per week
Product Storage Facility	24	7 days per week
Transhipment Vessel Loading	2 x 6 hour periods per day	Approximately 6-10 days per month, subject to tides
Ocean-going Vessel Loading	3 days on average (7 days maximum) to load, operating 24 hours per day	2 - 4 shiploads per month
Port of Broome (Packaged Products)		
Transport of product from Mine Site to Port of Broome	24	Estimate 7 truck return journeys per day. 6 days per week
Packaged Product Storage Facility	24	7 days per week
Ocean-going Vessel Loading	24	2 - 4 shiploads per month