
THUNDERBIRD CONSTRUCTION OVER 75% COMPLETE

HIGHLIGHTS

- Thunderbird Mineral Sands Project construction on track and over 75% complete
- Management review of forecast cost to complete confirms project delivery expected within the \$484m of available funding
- Concentrate Upgrade Plant construction has commenced with steel structure installation in progress
- Wet Concentrate Plant construction continuing, with installation of pipework and hoppers underway
- Site electrical works and overall materials delivery on track
- First delivery of mineral sands products to customers remains on target for Q1 2024

Sheffield Resources Limited (“Sheffield” or “the Company”) (ASX: SFX) is pleased to provide an update on activities at its 50% owned Thunderbird Mineral Sands Project (**Thunderbird**) in northern Western Australia.

Construction Update

Thunderbird is now more than 75% complete as at 31 January 2023.

Progressive installation of pipework and hoppers at the Wet Concentrate Plant is underway, and installation of steel structures at the Concentrate Upgrade Plant has commenced. Steel frameworks supporting ancillary service areas are continuing to be installed, with site electrical services also progressing well. Completion of construction activities and initiation of commissioning activities remains on target for late 2023.

With more than 80% of EPC construction expenditures now fully committed, Kimberley Mineral Sands (**KMS**) management expect that EPC construction activities, which represented \$336m of the total budget of \$379m, including contingency, will be completed in accordance with the original budget.

Pre-Production Capitalised Operating Expenditures

In addition to the construction activities, the KMS team has increased its focus on the pre-production activities and planned expenditures to maximise operational readiness once construction is complete. The expected on-budget completion of construction activities means that the overall funding envelope allows increased commitment of funds toward these activities.

KMS intends to bring forward recruitment of operations personnel and other activities to minimise start up risk. The additional cost of these activities, together with inflationary pressure experienced throughout the resources sector, and amendments to mine pre-strip and pre-production timing and cost estimates, will add \$27m to the previous estimate of pre-production costs.

KMS now estimates the total direct expenditures through to commencement of operations to be \$407m. After allowance for project financing costs, \$54m of remaining contingency and working capital provisions are available, with a total funding requirement of \$484m (refer ASX announcement “Final Investment Decision” of 10 October 2022). Remaining contingency and working capital represents approximately 40% of current uncommitted expenditure.

Executive Chair Comment

Sheffield Resources Executive Chair, Mr Bruce Griffin said, *“Thunderbird construction is advancing at a rapid pace, and we are extremely pleased by the progress made by the KMS team. We remain on schedule for commissioning later this year. Our forecast pre-production activities now include anticipated changes to operational mobilisation and scheduling to reduce start up risk, resulting in an anticipated cost increase.*

It is pleasing to note that KMS has continued to manage the capital expenditures in line with FID estimates despite the inflationary environment. KMS remains extremely well positioned to complete the project comfortably within the current available funding of \$484m.”

This ASX announcement has been authorised for release by the Company’s Board of Directors.

ENDS

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Image 1: Thunderbird Plant Site – aerial view (February 2023)



Image 2: Wet Concentrate Plant & Concentrate Upgrade Plant progress



Image 3: Concentrate Upgrade Plant - steel installation



Image 4: Wet Concentrate Plant steel piping installation



Image 5: Process Water Area framework & cable tray installation



Image 6: Unpacking of steel piping and cradles at site laydown area



Image 7: Process Water Area sub-station – electrical works

ABOUT SHEFFIELD RESOURCES

Sheffield Resources Limited is focused on developing the world class Thunderbird Mineral Sands Project, located in north-west Western Australia, through its 50% investment in Kimberley Mineral Sands Pty Ltd (KMS).

ABOUT YANSTEEL

Yansteel is a wholly-owned subsidiary of Tangshan Yanshan Iron & Steel Co., Ltd, a privately owned steel manufacturer headquartered in Hebei, China producing approximately 10mt per annum of steel products and has annual revenues of ~A\$6bn.

Construction of a 500ktpa integrated titanium dioxide processing facility including a titanium slag smelter has commenced by the company. This complex will consume the magnetic concentrate from Stage 1 of the Thunderbird Mineral Sands Project under a take or pay offtake agreement.

THUNDERBIRD MINERAL SANDS

The Thunderbird Mineral Sands Project (“Thunderbird”) is one of the largest and highest grade mineral sands discoveries in the last 30 years. The 2022 KMS Bankable Feasibility Study shows Thunderbird is a technically low risk Project, that generates strong cash margins from globally significant levels of production over a decades long mine-life.

Thunderbird will generate a high-quality suite of mineral sands concentrate products suited to market requirements. These products include a zircon concentrate and a magnetic concentrate that contains a high quality ilmenite suitable smelting into chloride slag or for manufacturing titanium dioxide pigment.

Thunderbird is located in one of the world’s most attractive mining investment jurisdictions and is well placed to deliver long term, secure supply of high quality products to a range of potential customers.

KIMBERLEY MINERAL SANDS

Kimberley Mineral Sands Pty Ltd, (KMS) is a 50:50 Joint Venture between Sheffield and Yansteel. The joint venture owns and is developing the Thunderbird Mineral Sands Project and adjacent tenements on the Dampier Peninsula.

KMS is governed by a four person Board of Directors with Sheffield and Yansteel each nominating two directors. Key Joint Venture decisions require unanimous approval of both shareholders. KMS operates as a standalone entity with its own management and employees.