

THUNDERBIRD UPDATE

Sheffield Resources Limited (“Sheffield” or “the Company”) (ASX: SFX) provides the following update and near term production and shipment outlook for the Kimberley Mineral Sands (KMS) owned Thunderbird Mineral Sands Mine (Thunderbird) in Western Australia.

Thunderbird Production and Shipments

Consistent mine production of between 2.5 to 3 million tonnes of ore per quarter continues at Thunderbird, with the process plant maintaining product recoveries above its original design capacity. For the December 2024 quarter, ilmenite concentrate production is expected to be between 160,000 and 180,000 tonnes and zircon concentrate production is expected to be between 35,000 and 40,000 tonnes.

Total ilmenite concentrate shipments for the December 2024 quarter are expected to be between 160,000 and 180,000 tonnes with regular shipments occurring each month under the life of mine offtake arrangement with joint venture partner Yasteel.

Zircon concentrate shipments to existing and new customers are expected to range between 25,000 and 40,000 tonnes for the December 2024 quarter. New customers are seeking near term and long term supply, with forecast shipments to some new customers in the current quarter contingent upon the timely completion of End User Statements and receipt of Mineral Export Permissions from the Australian Government.

Business Improvement Initiative

A Business Improvement Initiative to identify and implement opportunities to reduce costs and increase productivity was launched in October 2024. This has resulted in several cost saving initiatives being identified, including a reduction in KMS workforce requirements which will regrettably result in approximately 20% of KMS staff and some contractors leaving the business. KMS is providing impacted personnel with appropriate support during this difficult process.

Overburden removal productivity has been lower than expected since the commencement of mine operations at Thunderbird. KMS has recently taken full operational control of waste mining activities at Thunderbird as a first step towards transitioning to drill and blast, excavator and truck waste mining. This transition is expected to result in more efficient removal of overburden when the transition is complete in early 2025.

A review of ore mining and in-pit processing has also commenced and is considering options to reduce mining costs and increase throughput to ensure sufficient feed can be produced to fill the process plant. This review is expected to continue into the March 2025 quarter.

Additional initiatives to maximise throughput at the process plant will be incorporated into an implementation plan during the March 2025 quarter. Sheffield will provide an update on the Business Improvement Initiative and progress on other productivity enhancing measures within the December Quarterly Report or prior in the event of any material developments.

Sheffield Resources Executive Chair, Mr Bruce Griffin said, “*Thunderbird concentrate production and shipments continue to improve and the Business Improvement Initiative is starting to drive costs down and increase productivity. Despite the subdued market conditions, it is particularly pleasing to see zircon concentrate shipments to existing customers resume during the current quarter, as we also field interest from potential new customers for spot and long term supply from Thunderbird.*”

"I would like to thank the KMS team who have worked tirelessly to overcome operational challenges and increase Thunderbird production to the consistent and sustainable levels where it is today."

"We look forward to KMS realising its business initiatives and plans in 2025 and unlocking further value from Thunderbird".

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

ENDS

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ABOUT SHEFFIELD RESOURCES

Sheffield Resources Limited is focused on assembling a portfolio of global mineral sands development and production assets to generate cash returns and growth.

Our core asset is our 50% investment in Kimberley Mineral Sands Pty Ltd (KMS), the owner of the world class Thunderbird Mineral Sands Project under development in north-west Western Australia.

Additionally, Sheffield executed a binding agreement in February 2023, providing the Company with an option to acquire up to an initial 20% interest in the South Atlantic Mineral Sands Project in Brazil, and owns 10% of Capital Metals Plc (AIM: CMET), the owner of the Eastern Mineral Sands Project in Sri Lanka.

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.

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.

Now in production Thunderbird is expected to generate a high-quality suite of mineral sands concentrate products suited to market requirements. These products include a zircon concentrate and an ilmenite 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 over a decades long mine life.

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.

Yansteel's 500ktpa integrated titanium dioxide processing facility, which includes a titanium slag smelter, will consume the magnetic concentrate from Stage 1 of the Thunderbird Mineral Sands Project under a take or pay offtake agreement.

SOUTH ATLANTIC PROJECT

The South Atlantic Project is located in south east Brazil. Four main deposits have been identified within the project area: Retiro, Estreito, Capao do Meio and Bujuru with Exploration Targets developed for the Retiro and Bujuru deposits. The combined Exploration Target for Retiro and Bujuru is estimated between 500 and 720 Mt of material at an average grade of 4.0% to 3.2% HM.

The tenements are held by RGM. Sheffield entered into an option agreement with RGM in February 2023 (and amended in September 2024) with Sheffield providing US\$4.0m to fund project related activities over an 30 month period and earn an option to acquire up to 20% of RGM with the payment of a further US\$11.0m (US\$15.0m in total) to acquire a 20% interest. US\$2.5m of the initial US\$4.0m has been paid with the remaining US\$1.5m payable in equal instalments of US\$0.5m each, with the first scheduled payment to occur in mid-2025.

Should Sheffield elect to exercise the option, subject to various conditions being satisfied, including project financing being obtained and all funds required for project construction being secured, Sheffield may exercise a further option to increase its interest in RGM up to 80%.