ASX Announcement

8 September 2025

ANTIMONY SMELTER CONCEPTUAL STUDY AND PLANT DESIGN DELIVERED WITH METSO AUSMELT TECHNOLOGY

"Establishing one of the only mine-to-metal antimony supply chains in the Western world"

Highlights

- **Concept study completed by Metso using proven Ausmelt Top Submerged Lance (TSL) technology.**
- **Significantly lower electricity usage than conventional smelting methods, achieved through independent fuel/oxygen injection and advanced energy recovery. At full production, the plant's consumption will be 4,000 MWh per year.**
- **The proposed facility is designed to produce 5,000 tonnes per annum of high-purity (>99.65%) antimony ingot and antimony trisulfide, establishing one of the of the only mine-to-metal antimony supply chains in the Western world.**
- **Modular smelter design allowing for rapid expansion capabilities to meet increasing U.S. demand for antimony.**
- **Antimony trisulfide is an essential and non-substitutable component to over 300 types of munitions, making it important to source in America. "Establishing a fully domestic supply chain of this critical mineral is foundational to keeping America's war fighters safe," said Colonel Steven Power, Project Manager, Maneuver Ammunition Systems (PM MAS) at the Picatinny Arsenal**
- **Environmentally responsible process design utilizing Best Available Technology (BAT)—including off-gas cleaning, sulphur scrubbing, and water treatment—aimed at achieving net-zero harmful emissions.**
- **The Metso configuration has a compact footprint of only ~20–25 acres, making it well-suited for development on Trigg's recently secured patented land position at ACP.**
- **Rapid timeline: The study confirmed that an accelerated design and construction pathway could result in the smelter being ready for production within a targeted 2-year period.**

Trigg Minerals Limited (ASX: TMG, OTCQB: TMGLF) is pleased to announce the completion of the first deliverables of a conceptual study with Metso, a global leader in smelting technology, confirming the viability of a state-of-the-art antimony smelter. The proposed facility is designed to produce 5,000 tonnes per annum of high-purity (>99.65%) antimony ingot and antimony trisulfide, establishing one of the of the only mine-to-metal antimony supply chains in the Western world.

Environmental & Energy Advantage

The proposed smelter will use Metso's Ausmelt TSL technology, which has been successfully deployed in more than 50 smelters worldwide. Unlike older technologies, Ausmelt enables precise oxygen and fuel control, reducing overall power demand and improving metal recoveries. The design incorporates:

- Advanced off-gas systems (cooling, baghouse, scrubber) to ensure only clean gas is released to atmosphere.
- Water treatment units producing clean water suitable for sewer discharge.
- Slag management options under study to enable safe re-use options

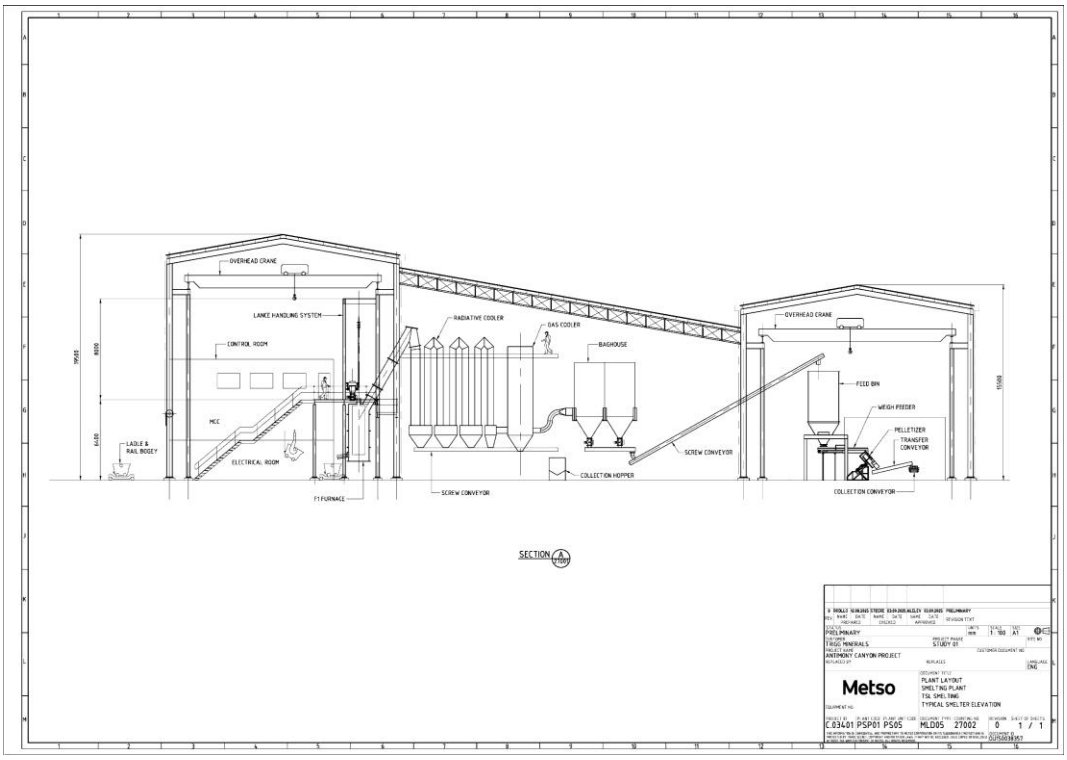

Figure 1: Antimony Ausmelt Top Submerged Lance (TSL) Technology Concept Design

Trigg Minerals Managing Director Andre Booyzen commented: "*This is a breakthrough moment for Trigg Minerals and for the future of antimony supply in the United States. The Metso Ausmelt concept study confirms that we can build a modern, energy-efficient smelter that meets the highest environmental standards while consuming significantly less electricity than conventional designs. We are proud to be advancing a project that not only secures a critical mineral supply chain but also sets a new benchmark for clean and responsible metals production.*

Together, these innovations underpin Trigg's zero harm philosophy — protecting people, the environment and local communities while delivering strategic metals security."

Next Steps

With the concept study in hand, Trigg will now move to engage with all required stakeholders and authorities, including the newly named Department of War, to commence detailed design at ACP to position the project for accelerated development.

ENDS

The announcement was authorised for release by the Board of Trigg Minerals Limited.

For more information, please contact:

Andre Booyzen
Trigg Minerals Limited
Managing Director
info@trigg.com.au
+61 (08) 6256 4403

Kristin Rowe
NWR Communications
kristin@nwrcommunications.com.au
+61 (0) 404 889 896

ABOUT TRIGG MINERALS

Trigg Minerals Limited (ASX: TMG, OTCQB: TMGLF) is advancing antimony development across two Tier-1 jurisdictions, with a strategic vision to become a vertically integrated, conflict-free supplier to Western economies. Its flagship Antimony Canyon Project in Utah, USA, is one of the country's largest and highest-grade undeveloped antimony systems - historically mined but never subjected to modern exploration. In Australia, the Company's Wild Cattle Creek deposit (Achilles Antimony Project, NSW) hosts a JORC 2012 Mineral Resource of 1.52 Mt at 1.97% Sb**,** for 29,900 tonnes of contained antimony comprising 0.96 Mt at 2.02% Sb (Indicated) and 0.56 Mt at 1.88% Sb (Inferred), based on a 1% Sb cut-off (refer ASX announcement dated 19 December 2024). With a proven leadership team, active government engagement, and smelter development underway, Trigg is strategically positioned to lead the resurgence of antimony supply from reliable Western sources.

For further information regarding Trigg Minerals Limited, please visit the ASX platform (ASX: TMG) or the Company's website at www.trigg.com.au.

DISCLAIMERS

Competent Persons Statement

The information in this announcement that relates to Exploration Results is based on, and fairly represents, information compiled by Mr Jonathan King, a Member of the Australian Institute of Geoscientists (AIG) and a Director of Geoimpact Pty Ltd, with whom Trigg Minerals Limited engages. Mr King has sufficient experience relevant to the style of mineralisation, type of deposit, and activity being undertaken to qualify as a Competent Person under the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr King consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

This report contains forward-looking statements that involve several risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more risks or uncertainties materialise, or underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward-looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

Previously Reported Information

The information in this report that references previously reported Mineral Resource at Wild Cattle Creek and exploration results is extracted from the Company's ASX market announcements released on the date noted in the body of the text where that reference appears. The previous market announcements are available to view on the Company's website or the ASX website (www.asx.com.au).

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.