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ASX: MTM | OTCQX: MTMCF
Australia: Perth, Western Australia
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ASX Release

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Metallium Advances Texas Facility Development and Expands REE Initiatives Amid Global Supply Chain Disruptions

Metallium Limited ("Metallium" or the "Company") (ASX: MTM; OTCQX: MTMCF) is pleased to provide an update on development progress at its flagship Gator Point Technology Campus in Chambers County, Texas, where commissioning of the Company's first Flash Joule Heating (FJH) processing line remains on track to commence in December 2025. The update also outlines expanded plant capacity, the addition of a second demonstration line for REE and semiconductor feedstocks, and Metallium's strengthened position following China's expanded export restrictions on rare earth materials and processing technology.

The Company's patented FJH platform, capable of processing diverse feedstocks ranging from electronic waste and magnet scrap to mine tailings and mineral concentrates, positions Metallium as one of the only non-Chinese groups able to deliver a complete, low-emission refining pathway for critical and strategic metals[1].

KEY HIGHLIGHTS

- **Revised Nameplate:** 8,000 tpa PCB feed capacity (≈1,600 tonnes/annum (tpa) metal-rich char post-plastic removal) - a **5X scale-up from original 350-tpa design** (1 t/day). Ramp up to Stage-1 scale targeted for Q3 26.
- **Expansion Ready:** Core infrastructure, including pre-processing circuit has been configured to allow seamless expansion to a Stage-2 capacity of **16,000 tpa PCB feed** through the addition of supplemental equipment modules.
- **2nd REE / Critical Metals Line:** A dedicated **Specialty Materials Demonstration Line** (350 tpa maximum target capacity for Stage-1) will also be installed to process **rare-earth-element (REE) tailings**, refinery residues, and semiconductor feedstocks containing **gallium and germanium**. This capability will support demonstration programs for REE mining and refining partners seeking a domestic, non-Chinese processing pathway.
- **Target Metals:** The first commercial FJH line will focus on recovering **gold, silver, copper, tin, antimony, and palladium** from PCB e-waste, all of which are trading near record price levels, highlighting the strategic importance of Metallium's recycling model.
- **Commissioning on Track:** Commissioning of the first FJH production line remains scheduled to commence in December 2025, with ramp-up through early 2026 to reach the 8,000 tpa Stage-1 operating level.
- **Site Works & Procurement:** All major process systems have been ordered. Civil and electrical upgrades at the Chambers County site are proceeding, and the installation of environmental scrubber systems is underway.
- **Multi-Feedstock Capability: FJH can treat a broad spectrum of REE-bearing materials, including mine concentrates, tailings, magnet scrap, and refinery residues,** providing a single, flexible processing route that shortens traditional flowsheets and eliminates dependence on Chinese refining. This adaptability is a key differentiator in addressing the full lifecycle of critical metals, from extraction to recycling.

Metallium Managing Director & CEO, Michael Walshe, commented: *"The recent escalation of Chinese export controls, including the export of REE technology targeting defence and chip users, reinforces the importance of establishing a secure, allied supply chain for rare-earth and critical metals. Metallium's technology platform is designed precisely for this moment, offering a clean, rapid, and scalable processing alternative developed and deployed entirely in the United States. Together with Ucore Rare Metals Inc., our REE-separation technology partner, Metallium is uniquely positioned to deliver the technology and materials needed to strengthen U.S. and allied supply-chain independence from China.*

"Our first commercial plant in Texas will not only recycle high-value metals including gold and silver from e-waste but also provide U.S. and allied partners with a non-Chinese refining pathway for rare-earths, gallium, and germanium. Commissioning remains on track to begin in December, with ramp-up continuing through Q1 2026. As global trade tensions reshape supply chains, our technology's ability to process a wide range of REE feedstocks, mine concentrates, magnet

[1] Hoskins, P. and Bicker, L., 2025, China tightens export rules for crucial rare earths. *BBC News,* 9 October. Available at: https://www.bbc.com/news/articles/ckgzl0nwvd7o

scrap, tailings, and refinery residues, positions Metallium at the centre of a new, resilient U.S.-based critical-metals ecosystem.

"With core infrastructure already in place to support Stage 1 operations and future expansion, Metallium enters the commissioning phase from a position of strength and readiness. As Washington moves to secure domestic supply chains for critical materials, Metallium's U.S. operations and multi-feedstock processing capability provide a proven, scalable platform to meet these national-security imperatives."

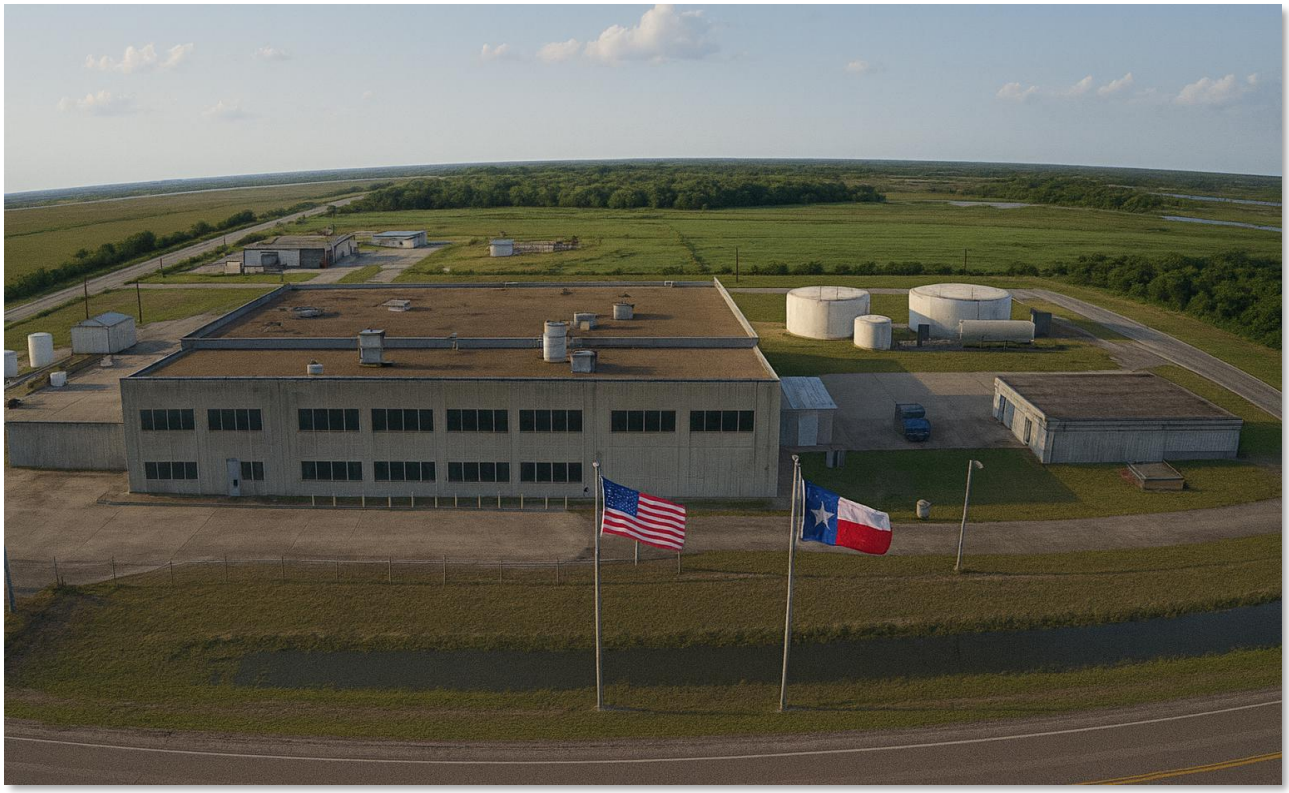

Figure 1: Texas Technology Campus will house the 1st FJH commercial plant & serve as a hub for ongoing R&D and future expansion

STRATEGIC CONTEXT – RARE EARTH INDEPENDENCE

China's recent expansion of export restrictions, now covering additional rare-earth metals, refining equipment, and process technology, has intensified the urgency for **non-Chinese supply chain solutions**. According to recent reporting by the *BBC* (Hoskins and Bicker, 2025), Beijing's tightening of rare-earth export rules now requires government approval for products containing even trace amounts of rare-earth material, extending to refining technology and magnet-manufacturing equipment. This underscores the immediate need for Western processing capacity independent of Chinese control.

Metallium's **binding collaboration with Ucore Rare Metals Inc[2].** (TSXV: UCU; OTCQX: UURAF) delivers the first **fully U.S.-based rare-earth refining pathway** capable of treating both **primary and recycled feedstocks**. By integrating Metallium's **FJH upgrading process**, which converts complex inputs into high-purity REE chlorides, with Ucore's **RapidSX™** separation technology, the partnership creates a **versatile, modular, and China-free refining system** that can process materials from **mine concentrates, mixed rare-earth carbonates, magnet scrap, and industrial residues**, a level of feedstock flexibility unmatched in current Western supply chains.

This technical breadth is strategically significant: most Western REE projects remain reliant on Chinese refining due to the complexity of feedstock variation. Metallium's FJH process bypasses these limitations, producing clean chloride intermediates that plug directly into multiple downstream separation routes, whether for heavy or light REE compositions. This ability to handle **heterogeneous materials from mine to magnet** provides resilience against supply shocks and strengthens Metallium's eligibility for U.S. federal critical-minerals funding programs.

[2] ASX: MTM ASX Announcement 16/09/2025, '*Binding Deal with Ucore for U.S. REE Refining Independence*'

U.S. CRITICAL-MINERALS PRIORITY AND POLICY ALIGNMENT

Recent U.S. government initiatives, including the **Pentagon's accelerated stockpiling of critical minerals such as antimony, cobalt, indium, and rare earths**[3], underscore the urgency of establishing secure, non-Chinese refining capacity within allied jurisdictions. The program, driven by the Defense Logistics Agency under the **One Big Beautiful Bill Act**, highlights Washington's focus on rebuilding domestic supply chains for defence and high-technology applications.

Metallium's **Texas-based FJH facility** is directly aligned with these objectives. Its ability to **upgrade diverse feedstocks, including mine concentrates, tailings, refinery residues, and e-waste, into high-purity intermediates** positions the Company as one of the few U.S.-anchored technology providers capable of supporting defence-industrial-base metals independence.

This alignment with U.S. critical-minerals and national-security priorities not only enhances Metallium's strategic relevance but also provides a foundation for potential participation in future government procurement and grant programs aimed at securing the supply of critical and strategic materials.

TEXAS FACILITY DEVELOPMENT – STAGE 1 AND 2

Metallium's Technology Campus in Chambers County, Texas, remains the Company's operational focus, with development progressing according to schedule.

- **Stage-1** construction and installation are advancing on schedule, aligned with the December 2025 commissioning target. Stage-1 will deliver an **8,000 tpa PCB feed capacity (≈ 1,600 tpa metal-rich char feed to FJH system)**, with ramp-up through early 2026 as systems transition to continuous operation. The pre-processing circuits have been designed with headroom for this throughput, allowing the site to operate at full Stage-1 capacity without requiring additional capital commitments.
- **Stage-2** planning provides for a **16,000 tpa expansion**, achievable through the addition of further process equipment. All foundational infrastructure, electrical systems, and site layout are being implemented to accommodate this growth path, enabling a rapid and capital-efficient expansion once operating performance and feedstock logistics support scaling.

This staged development approach balances near-term commercial readiness with long-term scalability, positioning Metallium to meet rising U.S. demand for low-emission metal recovery and refining capacity.

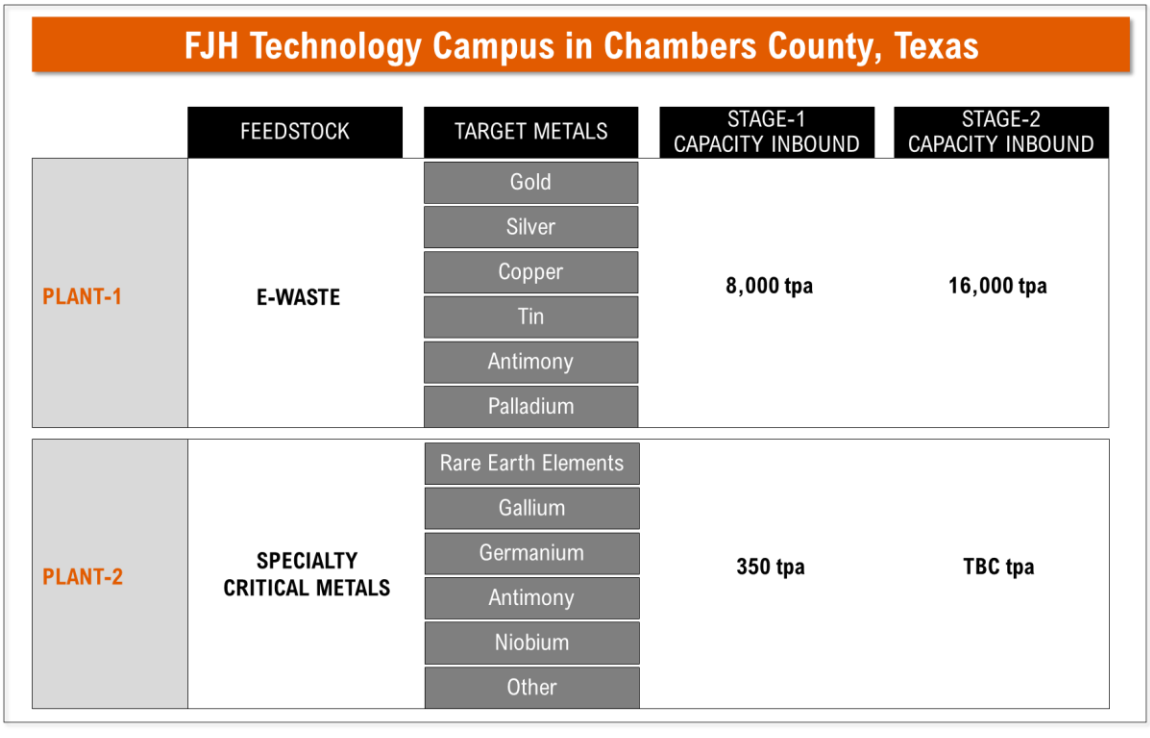

Figure 2: Metallium's FJH Technology Campus - Multi-Feedstock Processing and Expansion Pathway

[3] Hodgson, C., Chávez, S. & Williams, A., 2025, *'Pentagon steps up stockpiling of critical minerals with $1bn buying spree', Financial Times*, 12 October, LINK

An indicative timeline is presented below for the Chamber's County Commercial Facility.

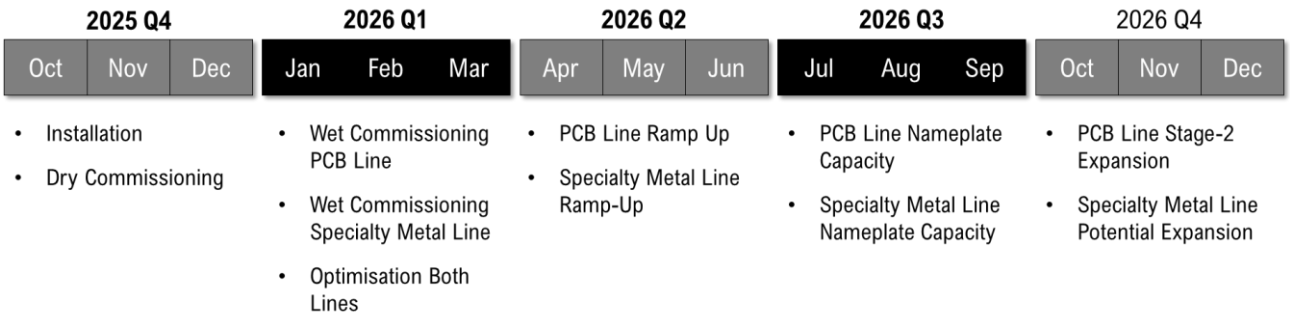

Figure 3: Indicative Timeline for Texas Commercial Facility

MULTI-SITE U.S. EXPANSION STRATEGY

Metallium's broader U.S. growth plan is advancing in parallel with the Texas facility, supported by exclusive options to establish additional FJH processing sites in **Westport, Massachusetts** and **Harrisonburg, Virginia**. Both locations are **fully permitted for e-waste and industrial-waste processing** and co-located with high-throughput metal-recycling operations, enabling rapid deployment of modular FJH units when required[4].

Each site provides **existing industrial infrastructure including high-capacity power, sealed pads, rail access, and warehousing**, ensuring that expansion can be achieved efficiently and at low incremental cost. The Massachusetts site is located within **Mid-City Scrap's long-established metals campus**, while the Virginia site forms part of **Recycle Management LLC's multi-modal recycling facility**, positioned near the Northern Virginia data-centre corridor, one of the highest e-waste generating regions in the United States.

With the U.S. government **accelerating domestic investment in critical-minerals and refining capacity**, and with capital increasingly flowing into U.S.-based strategic-metal projects, Metallium's pre-permitted multi-site footprint provides an immediate platform to scale in response to policy or market demand.

While **Texas remains the Company's near-term operational and financial focus**, the secured options give Metallium a **shovel-ready pipeline for future deployment** across multiple U.S. regions, and a foundation for **longer-term international expansion** into allied jurisdictions.

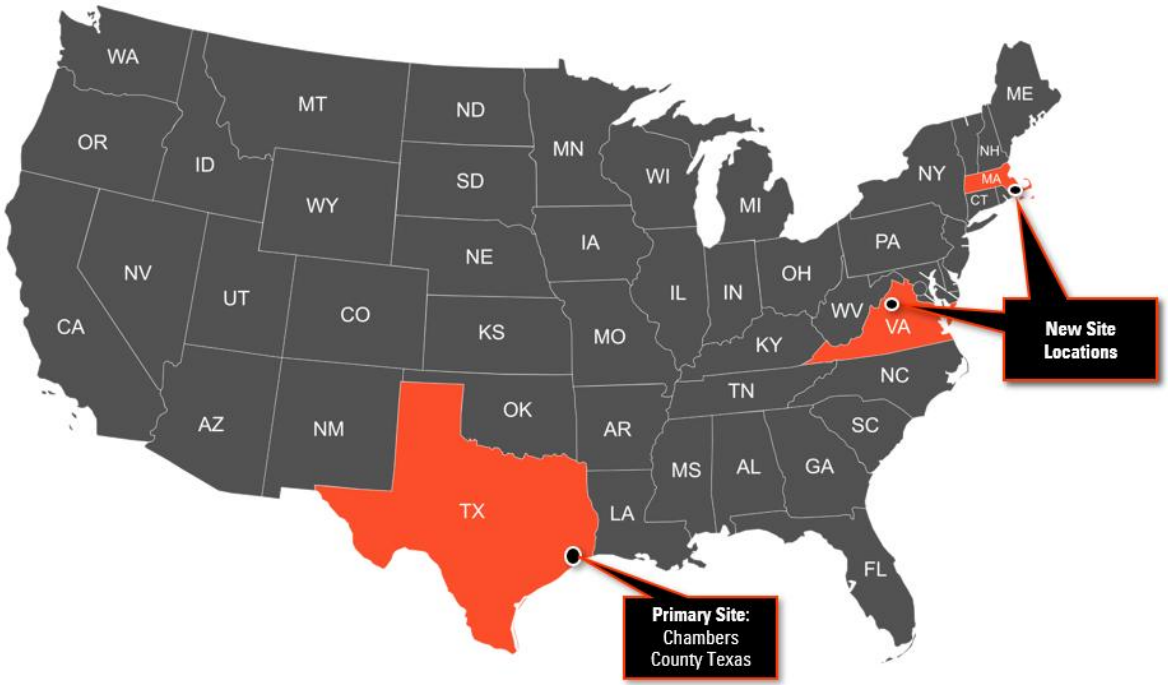

***Figure 4**: Metallium's current site location map within the United States*

[4] ASX: MTM announcement 21 August 2025, "*Multi-Site U.S. Expansion Strategy Initiated*".

NOTE: Printed circuit board (PCB): a high-value electronic component used in computers, phones, and industrial equipment that contains recoverable metals such as copper, gold, silver, tin, palladium, and antimony

This announcement has been authorised for release by the Metallium Board of Directors.

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ABOUT METALLIUM LIMITED

METALLIUM

Metallium Ltd (ABN 27 645 885 463), is pioneering a low-carbon, high-efficiency approach to recovering critical and precious metals from mineral concentrates and high-grade waste streams. The company's patented **Flash Joule Heating (FJH)** technology enables the extraction of high-value materials, including **gallium, germanium, antimony, rare earth elements, and gold**, from feedstocks such as refinery scrap, e-waste, and monazite.

Aligned with U.S. strategic supply chain objectives, Metallium has recently secured its first commercial site in Texas via its wholly owned subsidiary, **Flash Metals USA Inc.**, marking a major step toward near-term production and revenue generation.

To learn more, visit:

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