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ASX RELEASE

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MTM FORMALLY EXERCISES ITS OPTION FOR GLOBAL LICENCE AGREEMENT OVER FLASH JOULE HEATING.

Highlights:

- Flash Metals Pty Ltd has formally exercised its Option ("FJH Option") to license the patented Flash Joule Heating technology.
- The worldwide exclusive license will include:
  - the recovery of rare earth elements (REE's), metals and metallic compounds from Coal Fly Ash, Bauxite Residue (Red Mud), Ores, Bitumen and Coal;
  - the use of processed coal fly ash waste for the lower carbon building materials including cement and concrete;
  - the recovery of REE, metals (including gold, silver, platinum and palladium) and metallic compounds from E-Waste (electronic equipment, consumer electronics, power tools, print circuit board, CPU's and smartphones); and
  - the recycling of degraded or end of life Lithium-Ion Batteries to recover metals including lithium, manganese, copper, cobalt and nickel.
- Directors John Hannaford and Lachlan Reynolds visited William Marsh Rice University and KnightHawk Engineering in Houston, Texas this week to inspect the technology hub and progress on the Flash Joule Heating prototype.

MTM Critical Metals Limited (ASX:MTM) (MTM or the Company) advises that Flash Metals Pty Ltd has elected to exercise its FJH Option and enter into a joint research and development agreement. The Parties will use their best endeavours to complete and execute a worldwide exclusive license by 20 May 2024. This date can be extended by mutual written agreement between the parties.

By securing the licence, the Company will hold the rights to develop the patented Flash Joule Heating (FJH) technology in relation to specific applications (see below for more detail). FJH is a novel processing and recycling technology being developed to extract critical metals including REE, titanium, nickel, cobalt and lithium from waste material including lithium-ion batteries, eWaste, Coal Fly Ash (CFA) produced by coal-fired power stations or bauxite residue (red mud) derived from aluminium production.

MTM Managing Director, Mr Lachlan Reynolds said *"We are very excited to be able to formally exercise the FJH Option and proceed to licence the Flash Joule Heating technology. The development work conducted by Rice and KnightHawk Engineering to date, which we have seen in person, has given us confidence to scale up the technology and to commercialise it. The technology applications are extremely exciting and have huge potential as the world looks to decarbonise and secure critical mineral supply chains."*

The FJH process technology has been proven at a laboratory-scale. KnightHawk Engineering in Houston has independently verified the technology development work that has been carried out to date and is in the process of building a test plant to demonstrate the scaling up the technology for the Company. MTM directors recently visited William Marsh Rice University and KnightHawk Engineering to meet the key technology experts behind the invention and to inspect the progress that has been made on the FJH prototype model that is being built to demonstrate the extraction process at a larger scale.

The FJH technology involves the rapid and intense heating of material to volatilise metals directly and make them more amenable to extraction in the form of volatile gases or through the use of conventional acid leaching. Laboratory testing shows that these processes may be done with less heat and reagents than would traditionally be required in current proven processes for the same metals.

Test work is being carried out to demonstrate that FJH technology is scalable and has potential to both directly recover critical metals and also to make materials more amenable to metal recovery through conventional acid leaching methods.

FJH technology has already been shown to be an effective method for producing high-value graphene materials from carbon-based materials, including waste streams. This technology is currently being successfully scaled up and commercialised by Universal Matter, Inc.

The university and technical team that have invented the FJH technology are the founders of numerous other technologies that have been commercialised including Weebit Nano's (ASX: WBT) highly successful ReRam memory chip technology. They will continue to support MTM as it develops and expands on the FJH technology.

The Company has provided the following information to the licensing university under the terms of the FJH Option:

- A detailed business plan for the commercialisation of the technology which includes timeline to productisation, plan for investment and fundraising, R&D facilities required for commercialisation of the technology;
- Evidence that the Company has identified high quality candidates to be hired as employees and/or consultants with extensive engineering and scientific experience to develop and commercialise the technology;
- A written report summarising the technology development completed by the Company to date and the development plan moving forward; and
- Evidence of the adequacy of financial resources and capital access necessary for the Company to meet the monetary commitments to develop the technology under the licence agreement.

The worldwide, royalty-bearing, exclusive license potential products, and markets include the following:

i. recovery of rare earth elements ("REE") and other metals and metallic compounds from industrial waste, whereby for the purpose of this Agreement industrial waste is defined as by-product of a manufacturing process, and which includes coal fly ash and bauxite residue from aluminium mining;

ii. recovery of REE and other metals and metallic compounds from ores, or bitumen, or coal;

iii. use of purified industrial waste ie. the removal of toxic heavy metals, in reinforcement of building materials including cementitious materials;

iv. recovery of REE and other metals, metallic compounds from electronic waste ("E-Waste"), which includes all types of old, end-of-life or discarded electrical and electronic equipment, such as office equipment, entertainment and consumer electronic equipment, electric and electronic tools, printed circuit boards, computer processors, electronic waste plastics, computers, smartphones, electronic devices and displays; and

v. recovery of metals, metal compounds, and other commercially valuable materials from all types of old, end-of-life or discarded batteries ("Battery Waste").

The worldwide, royalty-bearing, exclusive and non-exclusive license potential products and markets include the following:

i. a worldwide, royalty-bearing, exclusive license under Rice's rights in Rice Patent Rights
   a. Ultrafast Flash Joule Heating Synthesis methods and systems for performing same;
   b. Removal of Heavy Metals from waste and uses thereof;
   c. Flash recycling of batteries; and

ii. a worldwide, royalty-bearing, non-exclusive license under Rice's rights in Rice Patent Rights
   a. Methods and Systems for the recovery and reuse of conductive additive for Flash Joule Heating.

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

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About MTM Critical Metals Limited

MTM Critical Metals Limited is an exploration company which is focused on searching for niobium (Nb) and rare earth elements (REE) in Western Australia and Québec. Additionally, the Company has acquired an option to exclusively negotiate the licencing rights to an early-stage processing technology for REE and precious metals known as Flash Joule Heating, which has been developed by researchers at Rice University, USA. MTM's West Arunta Nb-REE licences lie within one of Australia's critical metal exploration hotspots where over $60m in exploration expenditure has been collectively invested in the district by a number of ASX companies including WA1 Resources Limited (ASX:WA1), Encounter Resources Limited (ASX:ENR), Rio Tinto Limited (JV with Tali Resources Pty Ltd) (ASX:RIO), CGN Resources Limited (ASX:CGR), and IGO Limited (ASX:IGO). The Company also holds tenements in other prolific and highly prospective mineral regions in Western Australia. The Mukinbudin Nb-REE Project comprises two exploration licences located 250km northeast of Perth in the South West Mineral Field of Western Australia. The East Laverton Projects is made up of a regionally extensive package of underexplored tenements prospective for REE, gold and base metals. The Mt Monger Gold Project comprises an area containing known gold deposits and occurrences in the Mt Monger area, located ~70km SE of Kalgoorlie and immediately adjacent to the Randalls gold mill operated by Silver Lake Resources Limited. In Québec, the Pomme Project is a known carbonatite intrusion that is enriched in REE and niobium and is considered to be an extremely prospective exploration target adjacent to a world class REE resource (Montviel deposit). The Company has an experienced Board and management team which is focused on discovery to increase value for shareholders.

Previous Disclosure

The information in this announcement is based on the following MTM Critical Metals Limited ASX announcements, which are all available from the MTM Critical Metals Limited website www.mtmcriticalmetals.com.au and the ASX website www.asx.com.au.

Date	Description
19 December 2023	MTM to acquire West Arunta Niobium-REE Project
12 January 2024	Flash Metals Presentation Deck – MTM acquires Flash Metals
13 February 2024	RIU Explorers Conference Presentation Deck
11 March 2024	Clarification and retraction statement

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original ASX announcements and that all material assumptions and technical parameters underpinning the relevant ASX announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original ASX announcements.

Cautionary Statement Regarding Values & Forward-Looking Information

The figures, valuations, forecasts, estimates, opinions and projections contained herein involve elements of subjective judgment and analysis and assumption. MTM Critical Metals does not accept any liability in relation to any such matters, or to inform the Recipient of any matter arising or coming to the company's notice after the date of this document which may affect any matter referred to herein. Any opinions expressed in this material are subject to change without notice, including as a result of using different assumptions and criteria. This document may contain forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "believe", "plan", "expect", and "intend" and statements than an event or result "may", "will", "should", "could", or "might" occur or be achieved and other similar expressions. Forward-looking information is subject to business, legal and economic risks and uncertainties and other factors that could cause actual results to differ materially from those contained in forward-looking statements. Such factors include, among other things, risks relating to property interests, the global economic climate, commodity prices, sovereign and legal risks, and environmental risks. Forward-looking statements are based upon estimates and opinions at the date the statements are made. MTM Critical Metals undertakes no obligation to update these forward-looking statements for events or circumstances that occur subsequent to such dates or to update or keep current any of the information contained herein. The Recipient should not place undue reliance upon forward-looking statements. Any estimates or projections as to events that may occur in the future (including projections of revenue, expense, net income and performance) are based upon the best judgment of MTM Critical Metals from information available as of the date of this document. There is no guarantee that any of these estimates or projections will be achieved. Actual results will vary from the projections and such variations may be material. Nothing contained herein is, or shall be relied upon as, a promise or representation as to the past or future. MTM Critical Metals, its affiliates, directors, employees and/or agents expressly disclaim any and all liability relating or resulting from the use of all or any part of this document or any of the information contained herein.