ASX ANNOUNCEMENT
10 September 2024

KEY ENVIRONMENTAL PERMIT RECEIVED FOR BATTERY GRADE MANGANESE SULPHATE PROJECT

HIGHLIGHTS

- **Environmental Permit received for the Company's battery grade manganese sulphate plant, which will be located in Jinshi, Hunan Province, China**
- **Environmental Permit is the second of three critical permits required for the construction and operation of the plant, with the outstanding Energy Permit expected to be received in coming weeks**
- **Timely receipt of the critical permits highlights the strong in-country support Firebird continues to receive from the Jinshi Government**
- **Award of Environmental Permit demonstrates the zero waste program and significant environmental benefits derived from operating within circular industries in China**
- **As part of the Environmental Impact Assessment and permitting requirements, Firebird was required to enter into Memorandums of Understanding (MOUs) to supply its leach residue with cement companies for consumption within cement production**
- **Firebird has entered into MOUs with three Chinese cement manufacturing plants and one brick manufacturing plant:**
    - **An MOU signed with Badao Cement Plant (Badao), which is located in the Jinshi Industrial Park**
    - **The Company's Chinese subsidiary, Hunan Firebird Battery Technologies (HFBT), can supply up to 100% of leach residue from the high-purity manganese sulphate process to Badao, which will then be incorporated into the production of cement**
    - **Remaining MOUs are with China Materials Changde Cement Co., Ltd., Hunan Changde Southern Cement Co. Ltd., and Xinyuan Environmental Protection Brick Factory, Xinzhou Town. Potential consumption demand from these plants far exceeds production levels**
- **Once the Energy Permit is received and following a Final Investment Decision (FID), anticipated to be in late Q4 2024, Firebird will be ready to immediately commence construction of the plant, with completion projected to take ~12-15 months and operations expected to commence in late 2025**

Firebird Metals Limited (ASX: FRB, Firebird or **the Company)** is pleased to announce its subsidiary, Hunan Firebird Battery Technologies (**HFBT**), has received the key Environmental Permit for Stage 1 of the Battery Grade Manganese Sulphate Project in China.

As part of the process to be awarded the Environmental Permit, Firebird was required to enter into MOUs to dispose of their leach residue, which is a waste stream in the production of high-purity manganese sulphate. The Company has signed non-binding MOUs with four Chinese industrial plants for potential offtake for the leach residue, with total potential demand far exceeding the amount of leach residue to be produced per annum from the plant.

Demand for leach residue, which is used in the production of cement, highlights the significant environmental benefits derived from operating within a circular industry and demonstrates the Company's unique zero-waste process, where all key inputs, reagents, customers and consumers of by-products from our production process which don't form part of our supply chain are located in close proximity to our plant.

Firebird Managing Director, Peter Allen, commented: *"We continue to execute steadfastly on our vision and set the platform for Firebird to become a near-term low-cost high-purity manganese sulphate producer. We have now been awarded two of the three critical permits required for the Company to complete construction of the plant and commence stage-one operations.*

"The speed at which the Company is progressing in China is testament to the significant levels of support we have had and continue to receive from the Jinshi Government and we look forward to receiving the Energy Permit in the coming weeks. Firebird is in the most exciting position the Company has ever been in since listing in 2021, as we look to progress and finalise offtake discussions, make a final investment decision in late Q4 and work toward starting production in late 2025.

"We are also pleased to sign multiple MOUs for the use of our leach residue supporting the Environmental Permit application, which highlights the exciting commercial opportunities and synergies that are on offer for the Company, due to the strategic location of our plant. Being part of a circular industry forms a key part of Firebird's zero waste process, where all key inputs, reagents, customers and consumers of residue are located in close proximity to our plant."

PERMIT APPROVALS

The granting of the Environmental Permit, which is the second of three critical permits, marks another significant milestone for the Company, paving the way for the building and operation of the plant. The first critical permit, the Safety Permit, was received in May 2024, alongside two additional minor permits: the Water and Soil Monitoring Permit and the Workplace Health and Safety Permit.

The outstanding Energy Permit application has been lodged with the Government and is expected to be issued in coming weeks.

In China, there are a total of 8 permits required for construction and operation, which are outlined below, along with status updates for each permit.

Once all permits are obtained and following the anticipated Final Investment Decision (**FID**) in the Q4 2024, Firebird will be ready to immediately begin construction of the facility.

Construction is projected to take 12-15 months, with operations expected to commence in late 2025.

	PERMIT	STATUS
1	**Project Initiation Permit** by the NDRC (National Development and Reform Committee)	**Granted**
2	**Project Environmental Permit** via the Environmental Impact Assessment (EIA) Document	**Granted**
3	**Project Safety Permit**	**Granted**
4	**Project Energy Permit** via Energy Technology Evaluation Document	Energy consumption complete, application lodged with Government and expected to be issued end Q3 2024
5	**Water and Soil Monitoring Permit**	**Granted**
6	**Workplace Health and Safety Permit**	**Granted**
7	**Social Stability Permit**	Work commenced
8	**Building and Construction Permit**	Following completion of preliminary design

LEACH RESIDUE MOUS

Firebird's battery grade manganese sulphate plant is strategically located, allowing access to tier-one infrastructure and manufacturers such as a steam plant, dual power lines, water treatment plant and cement plant depot. This strategic location offers significant CAPEX savings, commercial benefits and synergistic opportunities.

HFBT has signed MOUs with three cement manufacturing plants, China Materials Changde Cement Co. Ltd., Hunan Changde Southern Cement Co. Ltd and Badao Cement Plant (**Badao**) and one brick manufacturing plant, Xinyuan Environmental Protection Brick Factory, Xinzhou Town, for delivery of the leach residue, which is a waste stream from the high-purity manganese sulphate production process.

The MOUs will see Firebird sell its residue, which holds no value within the Firebird supply chain, allowing the Company to dispose of its residue in an economical and environmentally friendly manner.

The MOU with Badao, a local Jinshi cement manufacturer, demonstrates the strategic synergies and commercial opportunities that are available to Firebird due to the location of its plant, adding significant value as part of a circular industry. Badao will incorporate the leach reside into their cement production process.

This announcement has been approved for release by the Board.

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About Firebird Metals Limited

Firebird Metals is an advanced manganese developer focused on combining mining and downstream processing with a dedication to the advancement of the EV battery sector.

The Company is currently progressing its unique China-focused lithium manganese iron phosphate (LMFP) battery strategy, which will develop Firebird into a near-term producer of high-purity, battery-grade manganese sulphate, a key cathode material in LMFP batteries for electric vehicles.

Execution of this strategy will place Firebird at the forefront of manganese sulphate production, at a time when the use and demand for manganese in batteries continues to rapidly grow. Due to the low number of ASX-manganese developers and increasing use of LMFP by car manufacturers, Firebird is in a strong position to benefit from this growing market and deliver significant value to its shareholder base.

The Company also owns 100% of its project portfolio, located in the renowned East Pilbara manganese province of Western Australia, which boasts a total Resource of 234Mt[1,2], with exciting exploration and development growth upside. The portfolio is led by the flagship Oakover Project, which holds a Mineral Resource Estimate[1] of 176.7 Mt at 9.9% Mn, with 105.8 Mt at 10.1% Mn in an Indicated category.

The Company's other key Projects are Hill 616 and Wandanya which provide Firebird with compelling growth opportunities. Hill 616 contains an Inferred Mineral Resource[2] of 57.5Mt at 12.2% Mn and shares similar geological traits to Oakover. Wandanya is a high-grade exploration opportunity, with Direct Shipping Ore potential.

The Company is committed to generating sustainable long-term value and growth for stakeholders, through the implementation of best practice exploration methods while prioritising the well-being, health and environmental protection of its employees and communities it operates in.

JORC Compliance Statement

This announcement contains references to Mineral Resource Estimates, which have been reported in compliance with Listing Rule 5.8 and extracted from previous ASX announcements as referenced. The Company confirms that it is not aware of any new information or data that materially affects the information previously reported and that all material assumptions and technical parameters underpinning the Mineral Resource Estimates continue to apply and have not materially changed.

[1] See ASX announcement dated 23 March 2023: Indicated Resource of 105.8Mt at 10.1%; Inferred Resource of 70.9Mt at 9.6% for global Resource of 176.7 Mt at 9.9% Mn.
[2] See ASX announcement dated 1 December 2021: Inferred Resource of 57.5 Mt at 12.2% Mn.