RNS Number: 3099K Altona Rare Earths PLC 28 May 2025

28 May 2025

#### ALTONA RARE EARTHS PLC

("Altona" or "the Company")

# MONTE MUAMBE FLUORSPAR PROJECT UPDATE: STRONG INITIAL METALLURGICAL RESULTS, DISCOVERY OF NEW HIGH-GRADE OUTCROPS, AND ENHANCED DEVELOPMENT SCOPE

Altona Rare Earths PLC (LSE: REE), a resource exploration and development company focused on critical raw materials in Africa, is pleased to announce very encouraging initial fluorspar metallurgical testing results, and the discovery of further fluorspar occurrences within the mining licence, creating conditions conducive to produce acid-grade fluorspar ("acid-spar") at Monte Muambe.

# **Highlights**

- Initial flotation tests of fluorspar ore samples resulted in a concentrate at 93.62% CaF<sub>2</sub>, with impurities reduced to acceptable or near-acceptable levels for hydrofluoric acid production
- These results indicate that the fluorspar at Monte Muambe is more suitable for the
  development of acid-spar which is used in the production of hydrofluoric acid. This is a
  higher value product than the met-spar (used primarily as a flux in the steel industry)
  previously envisaged
- Altona will now advance its metallurgical testing program aimed at generating a flowsheet for an acid-spar production plant as well as product samples for evaluation by potential offtakers
- Ground proofing of gallium anomalies led to the discovery of new high-grade fluorspar outcrops, which could lead to higher resource estimates subject to further study
- Project development scope revised to reflect acid-spar production operation at a greater production capacity than originally anticipated

### **Encouraging metallurgical testing results**

Following the announcement on 10 February 2025, Altona is pleased to report highly promising initial metallurgical test results from a fluorspar ore sample sent to Peacocke Simpson laboratory in Zimbabwe. The objective was to assess processing routes for producing a fluorspar concentrate, focusing on gravity and flotation methods. While gravity concentration tests yielded limited success, flotation tests delivered a strong quality upgrade from the ore, both by increasing the CaF<sub>2</sub> concentration and by decreasing impurities content.

Flotation tests were completed using a Denver flotation cell, after milling the ore to -45 micron. It should be noted that the aim of this initial test work was to identify the most suitable reagents and therefore only one stage of cleaning was used, and results were not optimized.

Using a Denver flotation cell and milling to -45 micron, the initial testwork conducted with a single cleaning stage aimed at identifying optimal reagents produced a concentrate grading 93.62% CaF<sub>2</sub>. Impurity levels (including Si, Al, CaCO<sub>3</sub>, and S) were within acceptable limits for acid-grade fluorspar, while elements such as Fe and P were significantly depleted, indicating that further

cleaning stages could achieve full acid-spar specifications.

These early results demonstrate the clear potential to produce a high-purity acid-spar concentrate (min. 97% CaF<sub>2</sub>) from Monte Muambe ore. As such, further metallurgical testing is now planned to develop a full processing flowsheet and generate product samples for engagement with potential offtake partners.

# Discovery of Additional Fluorspar Mineralisation

As announced on 17 April 2024, the Company identified three sizeable gallium soil anomalies across Monte Muambe, highlighting potential for gallium mineralisation while also serving as vectors for identifying additional fluorspar zones.

The Company is pleased to report that ground follow-up of these anomalies has resulted in the discovery of previously undocumented fluorspar outcrops. These zones are currently undergoing evaluation to determine their extent.

In-fill soil sampling is underway, with two clear objectives: to pinpoint optimal gallium targets for future trenching and drilling, and to further delineate fluorspar mineralisation.

These developments strongly suggest that fluorspar mineralisation at Monte Muambe extends beyond previously known areas, indicating potential for a significantly larger resource than estimated in the Competent Person Report (18 October 2023, available on the Company's website). The Company is actively evaluating the impact of these findings through ground mapping, trenching, and sampling, with the goal of defining a JORC-compliant Mineral Resource Estimate ("MRE") in the coming months.

## Advancing Towards Higher-Value Fluorspar Production

Based on metallurgical results to date, Monte Muambe fluorspar is more suited to the production of acid-spar, a higher-grade, higher-value product used in hydrofluoric acid manufacture rather than the met-spar initially considered.

Hydrofluoric acid is the only existing source of fluorine for the entire chemical industry, across a wide range of application including for the manufacturing of the lithium compound LiFP<sub>6</sub> which is used in batteries. The demand for fluorspar is expected to increase by about 25-30% in the coming year due to the strong growth in energy-storage batteries<sup>(1)</sup>. Fluorspar is on the critical minerals list of most jurisdictions, including the European Union's Critical Raw Materials Act's list.

The project scope is now being updated accordingly taking into consideration an acid-spar operation. Whereas a 15,000 to 20,000 tonne per annum met-spar operation was initially envisioned, an indicative ore inventory of 3 to 4 million tonnes at 35% CaF<sub>2</sub> could support a 50,000 tonne per annum acid-spar operation over a mine life exceeding 12 years.

The current price of acid-spar in China is about USD 440 per tonne<sup>(2)</sup>.

# **Next Steps**

- An advanced metallurgical testing program aimed at generating a flowsheet for an acid-spar production plant as well as product samples for evaluation by potential off-takers
- Trenching and drilling in order to define an enhanced fluorspar JORC MRE

Given the geometric association of gallium soil anomalies and fluorspar outcrops, synergies between this work and the gallium exploration program are expected.

This work will progress in parallel with the prefeasibility study for rare earths, for which the Company has been making meaningful progress in identifying possible strategic partners.

**Cedric Simonet, CEO of Altona, commented:** "I am very pleased with the latest developments for the Monte Muambe fluorspar project, which result in an updated scope including a higher-value product (acid-spar) and a higher-production capacity objective.

"Work towards the development of a possible fluorspar mining operation at Monte Muambe will continue in parallel with the prefeasibility study for rare earths, and with on-going exploration for gallium, thus multiplying the opportunities to create value from this asset."

This announcement contains information which, prior to its disclosure, was inside information as stipulated under Regulation 11 of the Market Abuse (Amendment) (EU Exit) Regulations 2019/310 (as amended).

- (1) <a href="https://www.fastmarkets.com/insights/fluorspar-supply-tightness-to-ease-in-china-demand-to-rise-from-booming-ess-sector-2025/">https://www.fastmarkets.com/insights/fluorspar-supply-tightness-to-ease-in-china-demand-to-rise-from-booming-ess-sector-2025/</a>
- (2) https://www.metal.com/en/prices/202405200007, ex-VAT

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#### **About Atona Rare Earths Plc**

Altona is a resource exploration and development company focused on critical raw materials in Africa. The Company is listed on the Main Market of the London Stock Exchange with the ticker "REE". The Company currently holds copper, fluorspar and rare earths projects.

The Monte Muambe rare earths, gallium and fluorspar project is located in Northwest Mozambique. The Project was acquired in June 2021, and the Company has so far drilled over 7,800m, and defined a maiden JORC Mineral Resource Estimate of 13.6 million tonnes at 2.42% TREO. A Competent Person Report including the Scoping Study for Monte Muambe was published on 18 October 2023. The Project is now at Prefeasibility Study stage, with a focus on metallurgical testing for rare earths extraction.

The Company is assessing the possibility of rapidly putting in production high-grade fluorspar veins occurring at Monte Muambe along the western margin of the rare earth bearing carbonatite intrusion. The Company is also assessing the potential of recently discovered gallium occurrences.

Altona is presently diversifying its portfolio by acquiring a limited number of critical raw material projects to complement Monte Muambe. The acquisitions of the Kabompo South copper project in Zambia and of the Sesana copper-silver project in Botswana, located just 25 km from MMG's Khoemacau Zone 5 copper-silver mine, represent the first steps towards the implementation of this expanded strategy.

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