Electric Metals Files the Upgraded Emily, Minnesota Manganese Project NI 43-101 Technical Report Confirming the Highest Grade Manganese Resource in North America

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• At a 10% cutoff grade, Indicated Resources increased by 20.9% to 6.2 million metric tons, with a grade of 19.27% manganese, and Inferred Resources increased by 596.5% to 4.9 million metric tons, with a grade of 17.50% manganese

• Large tonnage expansion associated with eastern in-fill and central step-out drill holes, the western zone of the deposit remains open and is recommended for expansion

• 29 new holes drilled, 22 of which reported substantial zones of +25% manganese, and 19 new drill holes reported significant intercepts of 35% to +50% manganese

• Current manganese extractions exceeding 95% recovery, with testing ongoing

TORONTO, May 27, 2024 - Electric Metals (USA) Ltd. ("Electric Metals", "EML" or the "Company") (TSXV:EML)(OTCQB:EMUSF) is pleased to announce the filing of the upgraded Mineral Resource Estimate for the 100% owned Emily Manganese Project in central Minnesota. The Mineral Resource Estimate was prepared in accordance with National Instrument 43?101 ("NI 43?101") by Forte Dynamics, Inc. ("Forte").

The upgraded Mineral Resource Estimate is based on a geological model incorporating data from the 2023 drilling program by North Star Manganese Inc (NSM), a subsidiary of the Company, and historical drilling in 2011 and 2012. The estimate confirms and expands the previous Mineral Resource Estimate from 2022. Results of the upgraded Mineral Resource Estimate (Table 1) are as follows:

Table 1: Emily Classified Mineral Resource Estimate (k metric tons)

Notes associated with Table 1 were reported in the April 9, 2024 Electric Metals (USA) Ltd. press release.

Brian Savage, CEO, Electric Metals, commented "We are pleased to file the upgraded NI 43-101 Mineral Resource Estimate for our Emily Manganese Project in Minnesota, confirming the highest grade manganese resource in North America and solidifying our position as a key player in North America's manganese market. Our plan going forward is to convert these resources into high-grade mineable reserves, and to advance the metallurgical testing to refine and optimize the flow sheet for the production of high-value, high-grade manganese chemicals and products."

NI 43-101 Technical Report and Project Highlights

The upgraded Mineral Resource Estimate is based on a geological model incorporating data from 29 diamond core holes drilled by NSM in 2023 in the eastern and central portion of the Emily Manganese Deposit, and historical drilling data from 7 diamond core holes drilled in 2011 and 2012 in the eastern portion of the deposit, as shown in Figure 1.

Figure 1. Map of Drillholes and Emily Property Boundary

Both the recent drilling and historical drilling are following the known iron and manganese (manganiferous iron ore) Emily formation initially identified in 1913. After discovery of the Emily formation by the Pickands Mather Mining Company in the 1940s, historic drilling was performed by U.S. Steel in the 1950s, and others in the 1990s and 2011-2.

This historic work continued to support the premise that a potentially significant endowment of manganese exists in this area. As reconfirmed by the NSM drilling in 2023, the manganiferous iron ore zones demonstrate consistency, as shown in Figure 2, which represents an east to west cross section of the updated 2023 drilling.

Figure 2. 2023 Drill Program - East to West Cross Section

The East to West Cross Section information was previously reported in the October 31, 2023 Electric Metals (USA) Ltd. press release.

Figure 3 represents a south to north stratigraphic profile of the Emily Deposit. Big Rock Exploration, consulting geologists on the project, were able to confirm the lateral and down dip extensions of manganese mineralization, as shown below.

Figure 3. Emily Deposit - Schematic Stratigraphic Profile

The above profile shows the Paleoproterozoic Emily Iron Formations (Peif), Peif1 through Peif5, and Peif1r, including the overburden and bedrock. The Mineral Resource Estimate was confined by Forte to zones Peif1 (including Peif1r), Peif2, and Peif3. The deposit is open laterally and at depth (downdip); the deepest hole is at 200 meters (656 feet).

A majority of the current drill holes intercepted substantial zones of elevated manganese grades ranging from +25% manganese to +50% manganese. These values were capped within the three primary mineralized domains modeled by Forte, Peif1 (including Peif1r), Peif2, and Peif3. An example of the high grade manganese mineralization is shown in Figure 4.

The zones demonstrated good continuity, and mineralization X-ray diffraction (XRD) results identified the main manganese-bearing minerals as manganite, braunite and cryptomelane, with hematite and subordinate goethite being the main iron-bearing minerals.

Figure 4. High Grade Manganese Oxide (44.5% Mn) in drill hole 23003.

Above is a portion of a 5.39-meter-wide drill intersection (17.7 feet) between 62.88 and 68.28 meters which averaged 44.5% Mn, previously reported in the July 13, 2023 Electric Metals (USA) Ltd. press release.

"Seeing the high grade come out as polished 'near-metal' is truly exciting. We have a number of core samples that exceeded 50 percent manganese - a grade not found in North America and most of the rest of the world", said Brian Savage.

Next Steps

We are developing a drill program to upgrade resources to reserves, facilitate mine permitting, mine planning, additional metallurgical test work and flow sheet optimization. We will also be undertaking studies to determine potential sites for the HPMSM plant and to perform a scoping or pre-feasibility level study for the HPMSM plant.

Further details supporting the geological model and the resource model estimation procedure, including the block model, cutoff grades, and metallurgical recoveries used in the NI 43?101 Technical Report are under the Company's profile at www.sedar.com.

Qualified Person

The scientific and technical data contained in this news release was reviewed and approved by Mr. Donald E. Hulse, who is a Qualified Person under National Instrument 43-101 Standards of Disclosure for Mineral Projects.

About Electric Metals (USA) Limited

Electric Metals (USA) Ltd. (TSXV:EML)(OTCQB:EMUSF) is a U.S.-based mineral development company with manganese and silver projects geared to supporting the transition to clean energy. The Company's principal asset is the Emily Manganese Project in Minnesota, which has been the subject of considerable technical studies, including National Instrument 43-101 Technical Reports - Resource Estimates. The Company's mission in Minnesota is to become a domestic U.S. producer of high purity, high value manganese metal and chemical products to supply the North American electric vehicle battery, technology and industrial markets. With manganese playing a critical and prominent role in lithium-ion battery formulations, and with no domestic supply or active manganese mines in North America, the development of the Emily Manganese Project represents a significant opportunity for America, the State of Minnesota and for the Company's shareholders.

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Forward-Looking Information

This news release contains "forward-looking information" and "forward-looking statements" (collectively, "forward-looking information") within the meaning of applicable securities laws. Forward-looking information is generally identifiable by use of the words "believes," "may," "plans," "will," "anticipates," "intends," "could", "estimates", "expects", "forecasts", "projects" and similar expressions, and the negative of such expressions.

Forward-looking statements in this news release include, but are not limited to, statements with respect to the announcement of an upgraded mineral resource estimate and the ability of Electrical Metals to produce battery grade high purity manganese sulphate monohydrate (HPMSM) and other high-grade manganese products from the Emily Manganese Project ore.

These statements address future events and conditions and so involve inherent risks, uncertainties and other factors that could cause actual events or results to differ materially from estimated or anticipated events or results implied or expressed in such forward-looking statements. Such risks include, but are not limited to, the failure to obtain all necessary stock exchange and regulatory approvals. Forward-looking information is based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and perception of trends, updated conditions and expected developments, and other factors that management believes are relevant and reasonable in the circumstances at the date such statements are made. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information.

All forward-looking information herein is qualified in its entirety by this cautionary statement, and the Company disclaims any obligation to revise or update any such forward-looking information or to publicly

announce the result of any revisions to any of the forward-looking information contained herein to reflect future results, events, or developments, except as required by law.

SOURCE: Electric Metals (USA) Ltd.

View the original press release on accesswire.com