

Electric Metals (USA) Limited

Developing Battery Grade Manganese for Domestic USA Supply

Company Overview

Electric Metals (USA) Limited has the highest-grade manganese deposit in North America and is poised to emerge as a low-cost producer of 100% domestically sourced, high-purity, battery grade, manganese products (HPMSM) for the electric vehicle battery and energy storage sectors.

The company's flagship asset is the Emily Manganese Project in Minnesota, USA, which contains North America's highest-grade manganese deposit. Manganese is a key metal in the EV battery/ energy storage revolution due to its prominent role in lithium-ion battery chemistries.

Investment Highlights

Highest-Grade Manganese Deposit in North America:

- NI 43-101 resource with 10% cutoff grade averages 19.3% manganese at indicated levels and 17.5% at inferred levels
- Several historical drill holes have intersected grades above 50% manganese large deposit

Large Deposit:

- Roughly 2.1Mt of contained manganese in indicated and inferred classifications assuming 10% cutoff grade; roughly 4.2Mt assuming 5% cutoff grade (based on NI 43-101)
- Independent modelling of over 70 historical drill holes suggests a much larger deposit
- Resource could allow for well over 50-year mine life

Location, Location, Location:

- Strategically located near the industrial heartland of America
- Infrastructure and local ecosystem in place due to long history of mining in the region
- Avoids costly, unreliable, and complex overseas supply chains

Significant Capital Already Invested:

- Millions invested in technical studies, drilling, local infrastructure, process development, and pilot processes
- Provides valuable knowledge about the resource as well as mill buildings that can be leveraged

Project Overview

Power & Gas

- Adjacent 69 AC power line and three larger lines nearby
- Major trunk gas pipeline 20 miles south

Major Highways

- Site located off State Highway 6 and ~100 miles to I-35 and 150 miles to I-94 PORTS
- Major transportation centres for the shipment of bulk commodities

Rail

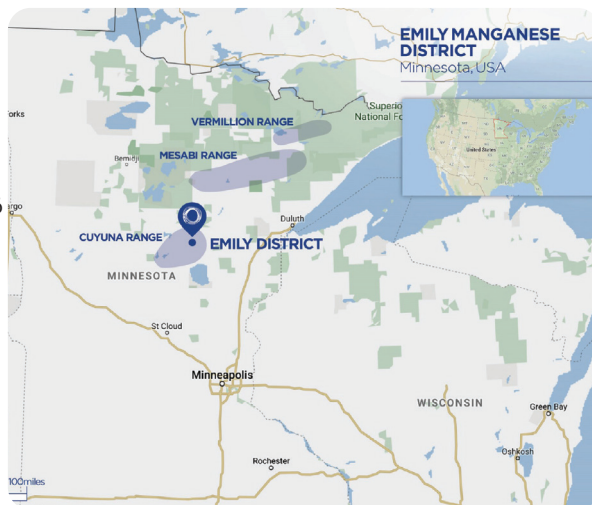
- Tier One BNSF railroad nearby

Airports

- Proximity to regional and international airports

Skilled Mining Force

- Minnesota supplies > 90% of domestic US iron ore production; Emily can leverage off the existing skilled workforce



Management & Directors

Brian C Savage	CEO & Director
Natasha Tsai	CFO
Dr. Quinton Hennigh	Director
Henry J Sandri	Director
Steve Durbin	Director
Tyson Hall	Director
Michèle McCarthy	Director
Sylvia Chen	Director

Key Announcements

31/10/24	Electric Metals Announces Private Placement Offering
24/09/24	Metallurgical Tests Yield High-Purity Manganese Sulphate Monohydrate from the Emily Manganese Deposit, Minnesota
20/09/24	Electric Metals Announces Changes to its Board of Directors
27/06/24	Electric Metals (USA) Announces Results of Annual Shareholder Meeting

Key Metrics (December 2024) (CAD)

Share Price	\$0.08
Shares Outstanding	144.7M
Market Capitalization	\$11.6M
Share Price: Year high-low	\$0.220 - \$0.045

Share Price Performance



Flagship Project



Emily Project Phased Development

Phase I

- Design drill programme to upgrade to measured resources and obtain other technical data
- Initiate mineralogy, ore characterization, crushing, and grinding studies for mine design and environmental studies
- Advance metallurgical test work, flow sheet assessment, and initial production of commercial chemical products for product development
- Initiate scoping study for processing plant design, including site identification
- Initiate baseline environmental studies for Emily site
- Continue to engage stakeholders, foster transparency, and build support for the project

Phase II

- Undertake geological, geotechnical and environmental drilling programme
- Initiate scoping study on preliminary mine design
- Metallurgical test work and flow sheet design
- Develop mine permitting plan and initiate ore and waste characterization studies
- Complete scoping study for processing plant design and site location
- Optimize processing plant design and initiate pre-feasibility study for processing plant
- Continue to engage stakeholders, foster transparency, and build support for the project

Phase III

- Prepare NI 43-101 resource update
- Finalize pre-feasibility study for processing plant development
- Continue baseline environmental studies at Emily site and ore and waste characterization studies
- Advance pre-feasibility study for mine development
- Advance mine and plant permitting
- Continue to engage stakeholders, foster transparency, and build support for the project

Emily Metallurgical Test Work Results

Achieved >95% HPMSM leach extractions

- Confirmed the potential for producing high-purity manganese sulphate monohydrate (HPMSM), electrolytic manganese metal (EMM), electrolytic manganese dioxide (EMD / MnO₂) from the Emily manganese deposit
- Manganese extraction rates exceeded 95% in leach tests
- Effective removal of impurities, including iron, potassium, and other trace elements, was achieved
- Crystallization tests yielded HPMSM aimed for the battery-materials market
- The test work provides a strong foundation for the future development of a full-scale processing plant, including flowsheet refinement and further process optimization

Near Term Catalysts for Revaluation

- Positive scoping study for high-grade Emily manganese deposit
- Potential non-dilutive funding: Department of Defense and/or Department of Energy grants, royalty financing
- Strategic partnerships: offtake agreements with battery and auto manufacturers
- Design and construction decision of HPMSM plant



Confirmed High-Grade NI 43-101 Resource

Class	Cutoff (Mn%)	Metric Tons (kt)	Density (g/cm ³)	Mn (%)	Fe (%)	SiO ₂ (%)
Indicated	15	4,264	3.08	22.3	21.7	25.8
	10	6,234	3.10	19.3	22.4	29.4
	5	14,475	2.98	12.1	22.2	38.0
Inferred	15	3,185	3.12	20.3	20.4	29.7
	10	4,915	3.15	17.5	20.4	32.3
	5	9,603	3.01	12.1	20.3	33.8

Manganese Demand by Battery Chemistry

The electrification of the global transportation fleet coupled with other energy storage applications will drive incremental demand for high-purity manganese products.

