Element One Advances U.S.-Based Critical Minerals Production and Natural Hydrogen Research

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Company Signs a Memorandum of Understanding to Secure Proposed Site and Long-Term Feedstock Supply to Support what would be the First, Class 1 Nickel U.S. Hard Rock Demonstration Project Targeting Dual Energy and Critical Minerals Output

Vancouver, May 5, 2026 - Element One Hydrogen and Critical Minerals Corp. (CSE: EONE) ("Element One" or the "Company") today announced a significant step toward advancing a domestic U.S. supply platform for critical minerals and natural hydrogen research, following the execution of a Memorandum of Understanding ("MOU") with Twin Sisters Olivine, Ltd. ("Twin Sisters").

The MOU outlines a proposed framework under which Twin Sisters would provide a long-term supply of high-grade olivine material and sublease property in Washington State for the development of a planned demonstration facility. The Company is evaluating an initial plant capacity of approximately 50,000 tonnes of olivine per year.

Photograph of the Twin Sisters Olivine Operations in Washington State

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/8900/295929_d02645bca4b9dae5_002full.jpg

The proposed project is designed to evaluate the technical and commercial viability of producing magnesium, nickel and cobalt along with other critical materials from silicate minerals (olivine) present in ultramafic rocks. In addition to demonstration scale production of critical minerals the project will also evaluate the production of hydrogen from the same materials either as an in-situ precursor to the olivine mining or as part of an integrated flowsheet with the co-recovery of critical minerals an approach the Company believes could represent an emerging model at the intersection of energy and mining.

"This announcement reflects a transition from technology development toward a potential demonstration pathway," said Tim Johnson, Chief Operating Officer of Element One. "We are working to position Element One within two strategically important sectors, natural hydrogen and critical minerals, while advancing a project that may support domestic supply chain objectives."

Strategic Framework

Under the terms of the MOU, Twin Sisters has agreed to:

- Supply a minimum of 50,000 tonnes of olivine annually over an initial five-year period, with potential expansion to 100,000 tonnes per year;
- Provide access to a proposed plant site in Washington State through a sublease arrangement.

Element One intends to utilize proprietary and innovative mineral extraction processes developed in collaboration with Revora Materials, alongside innovative hydrogen evolution technology under development , to assess the co-production potential of:

- Natural hydrogen
- Class 1 nickel concentrate

- Magnesium hydroxide
- Iron oxide
- Silica

The Company believes that a multi-commodity processing model may offer potential advantages compared to traditional single-commodity extraction approaches, particularly in an environment of increasing demand for secure, domestic supply of both energy and critical materials.

Development Pathway
The proposed demonstration facility is expected to target an initial throughput of approximately 150 tonnes per day. Subject to technical validation and economic assessment, the Company will evaluate a potential scale-up pathway toward larger commercial operations.

The project remains in the planning stage and will require additional engineering studies, permitting, financing, and execution of definitive agreements.

Positioning Within Key Market Themes

The Company believes the proposed platform provides exposure to two significant and evolving global market trends:

- Natural Hydrogen - an emerging energy theme focused on low-carbon hydrogen generation from naturally occurring geological systems
- Critical Minerals - including both magnesium, where there is no current US domestic supply and battery-grade nickel, which is widely viewed as essential to electrification, energy storage, and advanced manufacturing

Governments in North America and globally have increasingly emphasized the importance of domestic supply chains for both energy and critical minerals, particularly in light of geopolitical risk and trade policy developments.

Key Highlights

- Proposed U.S.-based demonstration platform targeting integrated hydrogen and critical minerals production
- Long-term feedstock supply framework under evaluation
- Identified potential plant location in Washington State
- Multi-commodity processing model designed to evaluate co-production economics
- Exposure to natural hydrogen and battery-grade nickel market dynamics
- Scalable development concept from demonstration to potential commercial operations

Commercial Considerations
The Company intends to conduct further technical and economic analysis to evaluate the potential commercial viability of the proposed project. Any future development decisions will be subject to the results of such studies, as well as market conditions, permitting, financing, and other factors.

No assurances can be made that the demonstration project will be constructed or that commercial production will be achieved.

About Element One Hydrogen & Critical Minerals Corp.
Element One Hydrogen & Critical Minerals Corp. (CSE: EONE) is a Canadian company focused on the exploration, development, and commercialization of natural hydrogen and critical mineral resources, as well as new hydrogen-generation technologies. The Company's projects include the Foggy Mountain critical minerals project as well as projects in Alaska and British Columbia that are prospective for hydrogen production through stimulation in the subsurface as well as critical and battery metals.

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For further information visit our website at www.e1-h2.com or to connect directly, please reach out to Tim Johnson at tjohnson@e1-h2.com or 250.668.3161.

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