

NioCorp Plans to Investigate Feasibility of Rare Earth Permanent Magnet Recycling

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CENTENNIAL, April 18, 2024 - [NioCorp Developments Ltd.](#) ("NioCorp" or the "Company") (NASDAQ:NB)(TSX:NB) plans to investigate the feasibility of recycling permanent rare earth magnets as part of NioCorp's proposed Elk Creek Critical Minerals Project (the "Elk Creek Project") in southeast Nebraska.

NioCorp plans to examine the technical and commercial feasibility of recycling post-consumer neodymium-iron-boron permanent rare earth magnets ("NdFeB magnets") back into separated rare earth oxides that can be used to make new NdFeB magnets. The research is expected to focus first on bench-scale testing and, depending upon results, possibly moving to demonstration-scale testing. This investigation is expected to be conducted separately from the Company's ongoing work to update its Elk Creek Project Feasibility Study.

Once launched, the R&D program will focus on determining efficient processes to de-magnetize, prepare, and grind down used magnets into a feedstock that can then be converted by NioCorp in its planned Elk Creek Project chemical process back into separated rare earth products.

"We are really excited to explore the possibilities of recycling used permanent rare earth magnets and maximize the circular economics of using these magnets across a wide variety of energy efficient platforms, including electric and hybrid vehicles," said Mark A. Smith, CEO and Executive Chairman of NioCorp. "Recycling post-consumer rare earth magnets adds to the strategic value of the particular critical minerals processing approach we intend to deploy in Nebraska."

Scott Honan, NioCorp's Chief Operating Officer, added: "The process flow sheet that we have designed for the Elk Creek Project may be able to recycle rare earth magnets with virtually no changes to its current configuration, other than to expand the facility's rare earth separations capacity at the end of the process. That would make for an efficient and relatively rapid solution to establishing a robust magnet recycling capacity in the U.S."

Mr. Honan added: "Rare earth permanent magnets come in a wide variety of shapes, sizes and formulations, which makes direct recycling very challenging. These magnets are inherently brittle and are typically coated with other metals to prevent corrosion. It is difficult, if not impossible, to separate the magnet from its coating, and the coatings can make reprocessing challenging and costly. However, we believe the Elk Creek process can take the magnet and the coatings at a coarse particle size, separate the magnetic rare earth elements from the coating materials, and deliver high purity, fully separated oxides at a very high recovery rate."

If NdFeB magnet recycling feasibility is successfully demonstrated through this program, and if NioCorp receives sufficient project financing to construct its planned Elk Creek Project facility, NioCorp may be able to increase its planned production of neodymium-praseodymium oxide, dysprosium oxide, and terbium oxide beyond what may be contained in the Elk Creek ore body. As no economic analysis has been completed on the rare earth mineral resource comprising the Elk Creek Project, further studies are required before determining whether extraction of rare earth elements can be reasonably justified and is economically viable after taking account of all relevant factors.

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@NioCorp \$NB \$NB.TO #rareearth #neodymium #praseodymium #dysprosium #terbium #ElkCreek #Niobium #Scandium #permanentmagnets

Qualified Persons:

Scott Honan, M.Sc., SME-RM, COO of [NioCorp Developments Ltd.](#), a Qualified Person as defined by National Instrument 43-101, has reviewed and approved the technical information and verified the data contained in this news release.

For More Information

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About NioCorp

NioCorp is developing a critical minerals project in Southeast Nebraska that is expected to produce niobium, scandium, and titanium. The Company also is evaluating the potential to produce several rare earths from the Elk Creek Project. Niobium is used to produce specialty alloys as well as High Strength, Low Alloy steel, which is a lighter, stronger steel used in automotive, structural, and pipeline applications. Scandium is a specialty metal that can be combined with Aluminum to make alloys with increased strength and improved corrosion resistance. Scandium is also a critical component of advanced solid oxide fuel cells. Titanium is used in various lightweight alloys and is a key component of pigments used in paper, paint and plastics and is also used for aerospace applications, armor, and medical implants. Magnetic rare earths, such as neodymium, praseodymium, terbium, and dysprosium are critical to the making of Neodymium-Iron-Boron magnets, which are used across a wide variety of defense and civilian applications.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 and forward-looking information within the meaning of applicable Canadian securities laws. Forward-looking statements may include, but are not limited to, statements about: NioCorp's plans to investigate the feasibility of recycling post-consumer NdFeB magnets and the expected benefits therefrom and capacity therefor; the potential to produce rare earth products for the Elk Creek Project; the technical and economic feasibility of separating rare earth oxides; NioCorp's expectation and ability to produce niobium, scandium, and titanium at the Elk Creek Project; and NioCorp's ability to secure sufficient project financing to complete construction of the Elk Creek Project and move it to commercial production. Forward-looking statements are typically identified by words such as "plan," "believe," "expect," "anticipate," "intend," "outlook," "estimate," "forecast," "project," "continue," "could," "may," "might," "possible," "potential," "predict," "should," "would" and other similar words and expressions, but the absence of these words does not mean that a statement is not forward-looking.

The forward-looking statements are based on the current expectations of the management of NioCorp and are inherently subject to uncertainties and changes in circumstances and their potential effects and speak only as of the date of such statement. There can be no assurance that future developments will be those that have been anticipated. Forward-looking statements reflect material expectations and assumptions, including, without limitation, expectations, and assumptions relating to: NioCorp's ability to secure sufficient project financing for the construction of the Elk Creek Project on acceptable terms, or at all; the technical and economic translatability of the demonstration-scale process to separate high-purity oxides of several magnetic rare earths from ore to the ore that NioCorp expects to extract from the Elk Creek Project; the future price of metals; and the stability of the financial and capital markets. Such expectations and assumptions are inherently subject to uncertainties and contingencies regarding future events and, as such, are subject to change. Forward-looking statements involve a number of risks, uncertainties or other factors that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those discussed and identified in public filings made by NioCorp with the U.S. Securities and Exchange Commission and with the applicable Canadian securities regulatory authorities and the following: NioCorp's ability to recognize the anticipated benefits of the business combination with GX Acquisition Corp. II (the "Business Combination") and the standby equity purchase agreement (the "Yorkville Equity Facility Financing Agreement" and, together with the Business Combination, the "Transactions") with YA II PN, Ltd., an investment fund managed by Yorkville Advisors Global, LP, including NioCorp's ability to access the full amount of the expected net proceeds under the Yorkville Equity Facility Financing Agreement over the next three years; unexpected costs related to the Transactions; the outcome of any legal proceedings that may be instituted against NioCorp following closing of the Transactions; NioCorp's ability to receive a final commitment of financing from the Export-Import Bank of the United States on the anticipated timeline, on acceptable terms, or at all; NioCorp's ability to continue to meet the listing standards of The Nasdaq Stock Market LLC; NioCorp's ability to operate as a going concern; risks relating to NioCorp's common shares, including price volatility, lack of dividend payments and dilution or the perception of the likelihood any of the foregoing; NioCorp's requirement of significant additional capital; the extent to which NioCorp's level of indebtedness and/or the terms contained in agreements governing NioCorp's indebtedness or the Yorkville Equity Facility Financing Agreement may impair NioCorp's ability to obtain additional financing; covenants contained in agreements with NioCorp's secured creditors that may affect its assets; NioCorp's limited

operating history; NioCorp's history of losses; the material weakness in NioCorp's internal control over financial reporting, NioCorp's efforts to remediate such material weakness and the timing of remediation; the possibility that NioCorp may qualify as a passive foreign investment company under the U.S. Internal Revenue Code of 1986, as amended (the "Code"); the potential that the Transactions could result in NioCorp becoming subject to materially adverse U.S. federal income tax consequences as a result of the application of Section 7874 and related sections of the Code; cost increases for NioCorp's exploration and, if warranted, development projects; a disruption in, or failure of, NioCorp's information technology systems, including those related to cybersecurity; equipment and supply shortages; current and future off take agreements, joint ventures, and partnerships; NioCorp's ability to attract qualified management; the effects of the COVID-19 pandemic or other global health crises on NioCorp's business plans, financial condition and liquidity; estimates of mineral resources and reserves; mineral exploration and production activities; feasibility study results; the results of metallurgical testing; changes in demand for and price of commodities (such as fuel and electricity) and currencies; competition in the mining industry; changes or disruptions in the securities markets; legislative, political or economic developments, including changes in federal and/or state laws that may significantly affect the mining industry; the impacts of climate change, as well as actions taken or required by governments related to strengthening resilience in the face of potential impacts from climate change; the need to obtain permits and comply with laws and regulations and other regulatory requirements; the timing and reliability of sampling and assay data; the possibility that actual results of work may differ from projections/expectations or may not realize the perceived potential of NioCorp's projects; risks of accidents, equipment breakdowns, and labor disputes or other unanticipated difficulties or interruptions; the possibility of cost overruns or unanticipated expenses in development programs; operating or technical difficulties in connection with exploration, mining, or development activities; management of the water balance at the Elk Creek Project site; land reclamation requirements related to the Elk Creek Project; the speculative nature of mineral exploration and development, including the risks of diminishing quantities of grades of reserves and resources; claims on the title to NioCorp's properties; potential future litigation; and NioCorp's lack of insurance covering all of NioCorp's operations.

Should one or more of these risks or uncertainties materialize or should any of the assumptions made by the management of NioCorp prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements.

All subsequent written and oral forward-looking statements concerning the matters addressed herein and attributable to NioCorp or any person acting on its behalf are expressly qualified in their entirety by the cautionary statements contained or referred to herein. Except to the extent required by applicable law or regulation, NioCorp undertakes no obligation to update these forward-looking statements to reflect events or circumstances after the date hereof to reflect the occurrence of unanticipated events.

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