

Nuinsco Updates Prospective Metallurgical Results at Prairie Lake Critical Minerals Project

Highlights:

- Metallurgical program to date has produced very encouraging results.
- A clean phosphate concentrate, grading 26% P2O5 at 76% recovery reliably produced.
- Valuable rare earth elements co-concentrated with phosphate.
- Ample room remains for additional improvements of grade and recovery of phosphate, rare earth elements ("REE") and niobium with further testing.

Toronto, March 13, 2024 – Nuinsco Resources Limited ("**Nuinsco**" or the "**Company**") (CSE: NWI, FRA: NJX) today provided an update on metallurgical results from studies conducted on the Company's Prairie Lake critical minerals and phosphate project located near Terrace Bay, Ontario ("**Prairie Lake**" or the "**Project**") which indicate excellent progress towards developing a process to economically produce multiple mineral concentrates.

Mr. Grant Feasby, metallurgist at P&E Mining Consulting and consultant to the Company commented: "preliminary metallurgical test work to date, at expert test facilities operated by COREM in Quebec and SGS-Lakefield in Ontario, has demonstrated that the mineral apatite can be concentrated to reliably produce a phosphate grade of at least 26% P2O5 at 76% recovery. REEs are co-concentrated with the phosphate, currently up to a concentrate grade of 1% total rare earth oxide ("TREO"), of which approximately 26% are the elements neodymium and praseodymium, which are so valuable to permanent magnet production. Additional test development is expected to improve concentrate grades and recoveries as well as to demonstrate the separation of the REEs from fertilizer- and battery-grade phosphate. A niobium concentration strategy is also being developed. Potentially a large-scale Prairie Lake operation could be a major Canadian producer of three mineral products — phosphate, REEs and niobium — all identified as Critical Minerals by Canada, Ontario and Quebec."

"The accumulating metallurgical results continue to deliver excellent news on the potential economic viability of the Prairie Lake Project," said Paul Jones, Nuinsco's CEO. "An igneous source phosphate concentrate of commercially acceptable grade can reliably be produced from Project feed and great opportunity exists to increase the grade and recovery going forward, as will be confirmed by additional testing. With the consideration of a REE co-concentrate the concentrate potential is further enhanced. Also, when the added valued of a possible niobium concentrate is considered, the Project demonstrates great potential. We are delighted with results to date and anticipate great news to come. Given the current size of the mineral resource estimate ("MRE") at the Project, the implications of a viable concentrate to the secure supply of critical minerals in North America and beyond are enormous."

The Prairie Lake Project contains a large, well-located resource of critical minerals in North America. It contains significant grades of phosphate mineralization (in apatite) REEs and niobium (in pyrochlore). The current size of the Project MRE is very large — in the order of 900 million tonnes (see table below). The Project has amongst the world's highest known light rare earth element content in apatite and contains a host of other REE bearing minerals; it also contains a significant endowment of niobium-bearing pyrochlore, and phosphate mineralization. The Project is a potential source of elements needed for use in transportation, power distribution, green industries and a host of other technologies and applications, including agriculture. The current MRE is already a very large endowment of vitally important critical minerals that are in constantly expanding demand as the world's economies transition towards low-carbon emissions.

Securing a reliable critical minerals supply chain is a strategic concern identified by numerous governments in the recent past and addressed with incentives and programs to encourage development of the critical minerals sector.

The Project is located near the north shore of Lake Superior, putting it in close or easily accessible reach of:

- The towns of Marathon, Terrace Bay and other affected communities all a source of a local, skilled workforce.
- All weather forest access road crossing the project and deposit.
- Paved Highways 17 and 11 to the south and north.
- Canadian Pacific Kansas City Railway and Canadian National Railway networks.
- High capacity (230kV) electrical power transmission line.
- 50km from the Marathon deep water port project. Deep-water ports are also located at Thunder Bay and Sault Ste. Marie, able to handle ocean going ships.
- The Marathon airport.

Laura Giroux, P.Geo, Chief Geologist, acts as Nuinsco's Qualified Person under National Instrument 43-101. Ms. Giroux has reviewed and approved the technical contents of this news release.

About Nuinsco Resources Limited

Nuinsco Resources has over 50 years of exploration success and is a growth-oriented, multi-commodity mineral exploration and development company focused on prospective opportunities in Canada and internationally. Currently the Company has the large multi-commodity (phosphate, rare earth element, niobium, tantalum) Prairie Lake project near Marathon-Terrace Bay, the Zig Zag Lake property (lithium, tantalum) near Armstrong optioned to First Class Metals PLC and retains a NSR royalty on the Sunbeam gold property near Atikokan. In addition, Nuinsco has an agreement for gold exploitation at the El Sid project in the Eastern Desert of Egypt.

Prairie Lake Project Pit Constrained Mineral Resource Estimate⁽¹⁻⁶⁾

			Rare Earth Oxides								Niobium	Phosp hate	
Class	Cut-Off	Tonnes	Nd ₂ O ₃	Pr ₆ O ₁₁	Sc ₂ O ₃	CeO ₂	La ₂ O ₃	Sm ₂ O ₃	Ta₂O₅	Y ₂ O ₃	TREO	Nb ₂ O ₅	P ₂ O ₅
	NSR C\$/t	М	g/t	g/t	g/t	g/t	g/t	g/t	g/t	g/t	kg/t	%	%
Indicated	30	15.6	344	96	15	754	300	58	28	100	1.67	0.16	3.71
Inferred	30	871.8	409	82	18	905	388	79	17	127	2.01	0.10	3.39

^{*}TREO = Total Rare Earth Oxides: neodymium, Nd_2O_3 ; praseodymium, Pr_6O_{11} ; scandium, Sc_2O_3 ; Cerium, CeO_2 ; lanthanum, La_2O_3 ; samarium, Sm_2O_3 ; yttrium, V_2O_3 .

A full description of methodology used to estimate the Prairie Lake project Mineral Resource Estimate is contained in the NI 43-101 compliant Technical Report, effective date 31 May 2022 prepared by P&E Mining Consultants Inc. that is filed on SEDAR.

- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
 The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
- 3. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could potentially be upgraded to an Indicated Mineral Resource with continued exploration.
- 4. The Mineral Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.
- 5. US\$ Metal prices used were \$80/Kg Nd₂O₃, \$80/Kg Pr₆O₁₁, \$1,500/Kg Sc₂O₃, \$50/Kg Nb₂O₅, \$250/t P₂O₅, \$1.35/Kg CeO₂, \$1.35/Kg La₂O₃, \$3.50/Kg Sm₂O₃, Nil\$/t Ta₂O₅ and \$13.00/kg Y₂O₃, 0.78 FX all with combined process recoveries and payables of 50%, except P₂O₅ at 75%.
- The constraining pit optimization parameters were C\$2.50/t mining cost for all material, C\$25/t process cost, C\$5/t G&A cost and 45-degree pit slopes with a C\$30/t NSR cut-off.

Forward-Looking Statements

This news release contains certain "forward-looking statements." All statements, other than statements of historic fact, that address activities, events or developments that Nuinsco believes, expects or anticipates will or may occur in the future are forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek," "anticipate," "believe," "plan," "estimate, "expect," and "intend" and statements that an event or result "may," "will," "can," "should," "could," or "might" occur or be achieved and other similar expressions. These forward-looking statements reflect

the current expectations or beliefs of Nuinsco based on information currently available to Nuinsco. Forward-looking statements are subject to a number of risks and uncertainties that may cause the actual results of Nuinsco to differ materially from those discussed in the forward-looking statements, and even if such actual results are realized or substantially realized, there can be no assurance that they will have the expected consequences to, or effects on Nuinsco. Factors that could cause actual results or events to differ materially from current expectations include, among other things, failure to successfully complete financings, capital and other costs varying significantly from estimates, production rates varying from estimates, changes in world copper and/or gold markets, changes in equity markets, uncertainties relating to the availability and costs of financing needed in the future, equipment failure, unexpected geological conditions, imprecision in resource estimates, success of future development initiatives, competition, operating performance of facilities, environmental and safety risks, delays in obtaining or failure to obtain tenure to properties and/or necessary permits and approvals, and other development and operating risks. Any forward-looking statement speaks only as of the date on which it is made and, except as may be required by applicable securities laws, Nuinsco disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise. Although Nuinsco believes that the assumptions inherent in the forward-looking statements are reasonable, forward-looking statements are not guarantees of future performance and accordingly undue reliance should not be put on such statements due to the inherent uncertainty therein.

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