

## FORM 51-102F3 - MATERIAL CHANGE REPORT

1. **Name and Address of Company**

Nuinsco Resources Limited (the “Company”)  
115-2420 Bank St.,  
Ottawa, Ont. K1V 8S1

2. **Date of Material Change**

May 31, 2022.

3. **News Release**

The news release attached hereto as Schedule “A” announcing the material change described herein was released through thenewswire.ca at Toronto, Ontario on May 31, 2022.

4. **Summary of Material Change**

The Company announced an initial Mineral Resource Estimate (“MRE”) on its Prairie Lake Critical Minerals and Phosphate Project located near Terrace Bay, Ontario (the “Project”).

The pit constrained MRE consists of a 15.6 million tonne Indicated Mineral Resource and a very large 871.8 million tonne Inferred Mineral Resource in accordance with National Instrument 43-101. The MRE also includes niobium and phosphate in oxides which, along with the Total Rare Earth Oxides, as defined therein, are expected to be key drivers of a Preliminary Economic Assessment on the Project that will commence shortly.

The material change is further described in the Company's news release attached hereto as Schedule “A”, which news release is incorporated herein.

5. **Full Description of Material Change**

5.1 Full Description of Material Change

No information other than that provided in Item 4 above is presently available.

5.2 Disclosure for Restructuring Transactions

Not Applicable.

6. **Reliance on subsection 7.1(2) of National Instrument 51-102**

Not Applicable.

7. **Omitted Information**

Not Applicable.

8. **Executive Officer**

The following is the name and business telephone number of an executive officer of the Company who is knowledgeable about the material change and this report.

Sean Stokes  
Executive Vice-President  
(416) 712-7481

9. **Date of Report**

June 15, 2022.

## Schedule "A"

## Nuinsco Announces Initial Mineral Resource Estimate on the Prairie Lake Critical Minerals & Phosphate Project

### HIGHLIGHTS:

- 871.8 million tonne Inferred Mineral Resource including 2.01 kg/t TREO, plus niobium and phosphate.
- 15.6 million tonne Indicated Mineral Resource including 1.67 kg/t total rare earth oxides (“TREO”), plus niobium and phosphate.
- Substantial potential remains to expand and upgrade the initial Mineral Resource Estimate.
- Situated in Ontario, Canada, a stable, mining friendly, jurisdiction – a potential key North American source of Critical Minerals to meet an anticipated enormous expansion in demand for such products.
- Project is exceptionally close to the TransCanada Highway, rail, power and shipping infrastructure.
- Preliminary Economic Assessment to commence shortly.
- Further drilling to increase quantity and quality of the initial Mineral Resource is planned.

**Toronto, May 31, 2022** – Nuinsco Resources Limited (“Nuinsco” or the “Company”) (CSE: NWI) today announced an initial Mineral Resource Estimate (“MRE”) on its Prairie Lake Critical Minerals and Phosphate Project located near Terrace Bay, Ontario (“Prairie Lake” or the “Project”).

As tabulated below, the pit constrained MRE consists of a 15.6 million tonne Indicated Mineral Resource and a very large 871.8 million tonne Inferred Mineral Resource in accordance with National Instrument 43-101. The MRE also includes niobium and phosphate in oxides which, along with the TREO, are expected to be key drivers of a Preliminary Economic Assessment on the Project that will commence shortly.

“We are of course delighted with this initial MRE,” said Paul Jones, Nuinsco’s CEO. “It has been clear to us for a long time that the Prairie Lake Project contains an exceptional endowment of sought after commodities, many of which have been identified as Critical Elements defined under the Canadian Minerals and Metals Plan. Combined with outstanding technical and logistical attributes, Prairie Lake has the potential to be an enormously significant asset to the Company. The suite of economically significant mineralization identified in the MRE includes neodymium, praseodymium, niobium, scandium, and phosphate; demand for all is projected to steeply increase over the coming years through expanding electrification and implementation of “green” technologies to combat climate change, and to sustain and improve agricultural productivity globally. Although this initial MRE demonstrates the scope of the mineralization present on the project, we regard it as a starting point. The surface expression of the MRE encompasses approximately 46% of the total surface area of the Prairie Lake Complex; other work conducted by the Company external to the MRE has identified extensive domains with grades similar to those of the MRE. Given that more than 50% of the surface area of the Project lies outside of the Resource Estimate and that mineralization is known to occur at surface throughout the extent of the property expansion of the initial Mineral Resource is a distinct and realistic possibility.”

### Prairie Lake Project Pit Constrained Mineral Resource Estimate<sup>(1-6)</sup>

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

\*TREO = Total Rare Earth Oxides: neodymium, Nd<sub>2</sub>O<sub>3</sub>; praseodymium, Pr<sub>6</sub>O<sub>11</sub>; scandium, Sc<sub>2</sub>O<sub>3</sub>; Cerium, CeO<sub>2</sub>; lanthanum, La<sub>2</sub>O<sub>3</sub>; samarium, Sm<sub>2</sub>O<sub>3</sub>; tantalum, Ta<sub>2</sub>O<sub>5</sub>; yttrium, Y<sub>2</sub>O<sub>3</sub>.

1. 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, socio-political, 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 Nd<sub>2</sub>O<sub>3</sub>, \$80/Kg Pr<sub>6</sub>O<sub>11</sub>, \$1,500/Kg Sc<sub>2</sub>O<sub>3</sub>, \$50/Kg Nb<sub>2</sub>O<sub>5</sub>, \$250/t P<sub>2</sub>O<sub>5</sub>, \$1.35/Kg CeO<sub>2</sub>, \$1.35/Kg La<sub>2</sub>O<sub>3</sub>, \$3.50/Kg Sm<sub>2</sub>O<sub>3</sub>, Nil\$/t Ta<sub>2</sub>O<sub>5</sub> and \$13.00/kg Y<sub>2</sub>O<sub>3</sub>, 0.78 FX all with combined process recoveries and payables of 50%, except P<sub>2</sub>O<sub>5</sub> at 75%.*
6. *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.*

The Prairie Lake MRE was conducted in accordance with National Instrument 43-101 ("**NI 43-101**") standards of disclosure and the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014). The Project benefits from a location in a politically stable jurisdiction; is exceptionally well located near available rail, road, shipping, and power infrastructure; and is ideally placed in North America with respect to current supply chain concerns for critical minerals.

The most significant drivers to economic viability at the Prairie Lake project and their main uses are listed below:

**Neodymium (Nd)** – currently trading at circa US\$140-145/kg (Nd-oxide 99.5% pure). This element is central to the development and production of permanent magnets used in traditional, electric and hybrid vehicles and wind turbines. Demand for these applications is projected to expand substantially with the electrification of the global vehicle fleet and expansion of the capacity for renewable electric-power generation worldwide.

**Praseodymium (Pr)** – currently trading at circa US\$140-145/kg (Pr-oxide 99.5% pure). This element can be used as a substitute for neodymium in fabrication of permanent magnets and consequently, as with neodymium, demand is projected to expand substantially. It also has uses in alloys with magnesium in aircraft engines. It has additional use in colouring glass and ceramics.

**Scandium (Sc)** – currently trading at circa US\$1,500/kg (Sc-oxide 99.9% pure). Scandium has applications in fuel-cell technology, lighting components, and is alloyed with aluminum to impart heat-resistance and strength where it is used in aerospace components. Greatly expanded use in aerospace and automobile sectors is projected with the expansion of supply.

**Niobium (Nb)** – currently trading at circa US\$50/kg (Nb<sub>2</sub>O<sub>5</sub> in concentrate). By far the greatest use of this element is in applications in structural steel and in the transportation sector. Nb added to steel produces lightweight and strong alloys that reduce vehicle and aircraft weight and material requirements in buildings and structures, thus improving energy efficiency and reducing adverse environmental emissions. Ceramics containing niobium oxide can be used to make capacitors and have wide application in electronics product (e.g. cell phones).

**Tantalum (Ta)** – currently trading at circa \$250/kg (Ta<sub>2</sub>O<sub>5</sub> in concentrate). The most significant use for tantalum is in the production of electronic components used in mobile phones, computers, and automobiles. It is also used to produce alloys with applications in aerospace, processing equipment, and medicine.

**Phosphate (P<sub>2</sub>O<sub>5</sub>)** – currently trading at circa US\$250/t (phosphate concentrate >30%). This compound has enormous agricultural applications as a fundamental component of fertilizers (it is the P in the N-P-K rating of fertilizer). As such it is central to global food production. Global phosphate shipments (all applications) are approximately 72Mt per annum and are expected to expand as the global population increases and greater food production is required.

The mineralization of economic interest contained within the Prairie Lake complex occurs at surface and extends to unknown depths below the deepest drilling yet conducted (circa 525 metres vertically). There is no indication

that mineralization diminishes with depth and is known to occur at surface throughout the extents of the complex.

### Prairie Lake Project Mineral Resource Estimate Sensitivity to NSR Cut-Off

Class	Cut-Off	Tonnes	Nd <sub>2</sub> O <sub>3</sub>	Pr <sub>6</sub> O <sub>11</sub>	Sc <sub>2</sub> O <sub>3</sub>	CeO <sub>2</sub>	La <sub>2</sub> O <sub>3</sub>	Sm <sub>2</sub> O <sub>3</sub>	Ta <sub>2</sub> O <sub>5</sub>	Y <sub>2</sub> O <sub>3</sub>	TREO*	Nb <sub>2</sub> O <sub>5</sub>	P <sub>2</sub> O <sub>5</sub>
	NSR C\$/t	M	g/t	g/t	g/t	g/t	g/t	g/t	g/t	g/t	kg/t	%	%
Indicated	50	14.5	358	100	16	787	306	60	28	101	1.73	0.17	3.75
	40	15.2	349	98	15	766	302	59	28	101	1.69	0.17	3.73
	30	15.6	344	96	15	754	300	58	28	100	1.67	0.16	3.71
	20	15.7	343	96	15	751	300	58	27	100	1.66	0.16	3.70
	10	15.7	343	96	15	751	300	58	27	100	1.66	0.16	3.70
Inferred	50	815.1	419	83	19	930	394	81	17	127	2.06	0.10	3.43
	40	860.1	412	82	19	911	389	80	17	128	2.02	0.10	3.40
	30	871.8	409	82	18	905	388	79	17	127	2.01	0.10	3.39
	20	873.4	409	82	18	904	387	79	17	127	2.01	0.10	3.38
	10	873.5	409	82	18	904	387	79	17	127	2.01	0.10	3.38

The Prairie Lake project consists of 46 mineral claims covering an area of ~630 ha and is superbly located, easily accessed by an all-weather road from the TransCanada Highway located 28 kilometres to the south. The MRE for the Prairie Lake project is based on 73 inclined diamond drill holes performed between 1969 and 2010 totalling 12,180 metres. Additionally 2,068 metres of surface trenching is included in the Mineral Resource Estimate. A total of 5,409 drill core samples and 1,042 channel samples are incorporated into the MRE, excluding QA/QC samples. A length of 1.5 metres was used for composites and they were capped as follows: 1,850 g/t Nd<sub>2</sub>O<sub>3</sub>, 250 g/t Pr<sub>6</sub>O<sub>11</sub>, no cap Sc<sub>2</sub>O<sub>3</sub>, 1% Nb<sub>2</sub>O<sub>5</sub>, 14% P<sub>2</sub>O<sub>5</sub>, 3,700 g/t CeO<sub>2</sub>, 1,700 g/t La<sub>2</sub>O<sub>3</sub>, 520 g/t Sm<sub>2</sub>O<sub>3</sub>, no cap Ta<sub>2</sub>O<sub>5</sub> and 570 g/t Y<sub>2</sub>O<sub>3</sub>. Grade interpolation was undertaken with the ID2 method on 10m x 10m x 10m blocks. Indicated Mineral Resources were classified within a 55m x 55m x 40m search ellipse and three drill holes while Inferred Mineral Resources were classified in two passes with a 110m x 110m x 80m search ellipse with two drill holes and subsequently a 220m x 220 m x 160m search ellipse with one drill hole.

Historical analyses were performed by Xray Assay Laboratories (Don Mills, Ontario) and Bondar Clegg and Company Ltd (Ottawa, Ontario). All analyses since 2007 have been performed at Activation Laboratories in Ancaster, Ontario (ISO/IEC 17025:2005); samples were delivered to the Activation Laboratories facility in Thunder Bay (ISO/IEC 17025:2005), Ontario for preparation and onward delivery to Ancaster.

**Eugene Puritch, P.Eng., FEC, CET** acts as Nuinsco's Qualified Person under National Instrument 43-101. Mr. Puritch 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 company focused on prospective opportunities in Canada and internationally. Currently the Company has four properties in Ontario – the high-grade Sunbeam gold property near Atikokan, the Dash Lake gold property near Terrace Bay, the large multi-commodity (rare-earths, niobium, tantalum, phosphate) Prairie Lake project near Terrace Bay, and the Zig Zag Lake property (lithium, tantalum) near Armstrong. In addition, Nuinsco has an agreement for gold exploitation at the El Sid project in the Eastern Desert of Egypt.

#### Cautionary Note Regarding Forward-Looking Information

*This press release contains forward-looking statements or information (collectively, "FLI") within the meaning of applicable Canadian securities legislation. FLI is based on expectations, estimates, projections and interpretations as at the date of this press release.*

*All statements, other than statements of historical fact, included herein are FLI that involve various risks, assumptions, estimates and uncertainties. Generally, FLI can be identified by the use of statements that include words such as "seeks", "believes", "anticipates", "plans", "continues", "budget", "scheduled", "estimates",*

*“expects”, “forecasts”, “intends”, “projects”, “predicts”, “proposes”, “potential”, “targets” and variations of such words and phrases, or by statements that certain actions, events or results “may”, “will”, “could”, “would”, “should” or “might”, “be taken”, “occur” or “be achieved.”*

*FLI herein includes, but is not limited to: future drill results; the Company’s ability to convert Inferred Mineral Resources into Measured and Indicated Mineral Resources; environmental matters; stakeholder engagement and relationships; parameters and methods used to estimate the Mineral Resource Estimates (each an “MRE”) at the Fenelon and Martiniere properties (collectively the “Deposits”); the prospects, if any, of the Deposits; future drilling at the Deposits; and the significance of historical exploration activities and results.*

*FLI is designed to help you understand management’s current views of its near- and longer-term prospects, and it may not be appropriate for other purposes. FLI by their nature are based on assumptions and involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such FLI. Although the FLI contained in this press release is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure shareholders and prospective purchasers of securities of the Company that actual results will be consistent with such FLI, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Company nor any other person assumes responsibility for the accuracy and completeness of any such FLI. Except as required by law, the Company does not undertake, and assumes no obligation, to update or revise any such FLI contained herein to reflect new events or circumstances, except as may be required by law. Unless otherwise noted, this press release has been prepared based on information available as of the date of this press release. Accordingly, you should not place undue reliance on the FLI or information contained herein.*

*Furthermore, should one or more of the risks, uncertainties or other factors materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in FLI.*

*Assumptions upon which FLI is based, without limitation, include: the ability of exploration activities to accurately predict mineralization; the accuracy of geological modelling; the ability of the Company to complete further exploration activities; the legitimacy of title and property interests in the Deposits; the accuracy of key assumptions, parameters or methods used to estimate the MREs; the ability of the Company to obtain required approvals; the results of exploration activities; the evolution of the global economic climate; metal prices; environmental expectations; community and non-governmental actions; and any impacts of COVID-19 on the Deposits, the Company’s financial position, the Company’s ability to secure required funding, or operations. Risks and uncertainties about the Company’s business are more fully discussed in the disclosure materials filed with the securities regulatory authorities in Canada, which are available at [www.sedar.com](http://www.sedar.com).*

#### *Information Concerning Estimates of Mineral Resources*

*The disclosure in this press release and referred to herein was prepared in accordance with NI 43-101 which differs significantly from the requirements of the U.S. Securities and Exchange Commission (the “SEC”). The terms “Measured Mineral Resource”, “Indicated Mineral Resource” and “Inferred mineral Resource” used in this press release are in reference to the mining terms defined in the Canadian Institute of Mining, Metallurgy and Petroleum Standards (the “CIM Definition Standards”), which definitions have been adopted by NI 43-101. Accordingly, information contained in this press release providing descriptions of our mineral deposits in accordance with NI 43-101 may not be comparable to similar information made public by other U.S. companies subject to the United States federal securities laws and the rules and regulations thereunder.*

*Investors are cautioned not to assume that any part or all of Mineral Resources will ever be converted into reserves. Pursuant to CIM Definition Standards, “Inferred Mineral Resources” are that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Such geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred*

*Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. However, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of Feasibility or Pre-Feasibility studies, except in rare cases. Investors are cautioned not to assume that all or any part of an Inferred Mineral Resource is economically or legally mineable. Disclosure of "contained ounces" in a Mineral Resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC standards as in place tonnage and grade without reference to unit measures.*

*Canadian standards, including the CIM Definition Standards and NI 43-101, differ significantly from standards in the SEC Industry Guide 7. Effective February 25, 2019, the SEC adopted new mining disclosure rules under subpart 1300 of Regulation S-K of the United States Securities Act of 1933, as amended (the "SEC Modernization Rules"), with compliance required for the first fiscal year beginning on or after January 1, 2021. The SEC Modernization Rules replace the historical property disclosure requirements included in SEC Industry Guide 7. As a result of the adoption of the SEC Modernization Rules, the SEC now recognizes estimates of "Measured Mineral Resources", "Indicated Mineral Resources" and "Inferred Mineral Resources". Information regarding Mineral Resources contained or referenced in this press release may not be comparable to similar information made public by companies that report according to U.S. standards. While the SEC Modernization Rules are purported to be "substantially similar" to the CIM Definition Standards, readers are cautioned that there are differences between the SEC Modernization Rules and the CIM Definitions Standards. Accordingly, there is no assurance any Mineral Resources that the Company may report as "Measured Mineral Resources", "Indicated Mineral Resources" and "Inferred Mineral Resources" under NI 43-101 would be the same had the Company prepared the Mineral Resource Estimates under the standards adopted under the SEC Modernization Rules.*

**To learn more, please visit [www.nuinsco.ca](http://www.nuinsco.ca) or contact:**

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