

The PEBBLE Project | The Future of U.S. Mining & Metals

Northern Dynasty files updated Preliminary Economic Assessment of Pebble: the project maintains strong economic fundamentals with latest royalty financing

November 14, 2022 Vancouver – Northern Dynasty Minerals Ltd. (TSX: NDM; NYSE American: NAK) ("Northern Dynasty" or the "Company" or "NDM") advises that it has filed on www.sedar.com an updated Preliminary Economic Assessment (the "2022 PEA") for the proposed Pebble Project in Southwest Alaska (the "Proposed Project"). The 2022 PEA updates the Company's September 2021 PEA to evaluate the impact of the recently announced royalty financing (see July 27, 2022 news release). The 2022 PEA updates the 2021 PEA to examine both the impact from the \$12 million tranche of the previously completed royalty investment and the potential impact of a \$60 million royalty investment if all five tranches are fully committed. The 2022 PEA highlights that the Pebble Project remains very robust and, although the Company believes the royalty has the potential to be very valuable, it has minimal impact on the forecasted economics of the project while strengthening the Company's balance sheet position.

The forecast financial results of the Proposed Project with no royalty (as presented in the 2021 PEA) and with the royalty (as presented in the 2022 PEA) are tabulated below. All currency references are in U.S. dollars.

Description	Units	LOM Values No Royalty ⁴	LOM Values L/T Prices, 2% Gold / 6% Silver Royalty	LOM Values L/T Prices, 10% Gold / 30% Silver Royalty
Financial Summary				
Mining Taxes & Government Royalties	US\$ M	\$1,479	\$1,467	\$1,420
Corporate Income Tax	US\$ M	\$2,125	\$2,098	\$1,988
Post-Tax Undiscounted Cash Flow	US\$ M	\$8,224	\$8,131	\$7,759
Post-tax NPV at 7% ³	US\$ M	\$2,281	\$2,245	\$2,097
Post-Tax IRR	%	15.7	15.6	15.1%
Post-Tax Payback Period	years	4.8	4.8	4.9

Comparison of key projected results for Proposed Project Base Case (20 year life, per Proposed Project submitted to the NEPA process)^{1,2}

The Proposed Project is as the project is described in the Pebble Project permit applications and its amendments. NEPA is the National Environmental Policy Act.

1 Case shown includes major infrastructure (access road, port, power) provided by third parties under lease agreement

2 Long-term metal prices: copper \$3.50/lb; gold \$1,600/oz; molybdenum \$10/lb; silver \$22/oz; rhenium \$1,500/kg

3 Net Present Value is calculated using a 7% discount rate, given the polymetallic nature of the Pebble deposit and the large contributions of gold to total project revenues.

4 The Life of Mine Values ("LOM Values"), No Royalty are derived from 2021 PEA, now supplanted by 2022 PEA. The 'LOM Values 2% Gold/6% Silver Royalty' are the results for the initial \$12 million tranche; the 'LOM Values 10% Gold/30% Silver Royalty' are the results if all tranches of the royalty financing are completed. Further details on the PEA results can be found in the October 25, 2021 news release.

"In the updated technical report we have detailed the impact of the royalty financing on the value of the project," said Ron Thiessen, Northern Dynasty President and CEO. "The results were aligned with our estimates at the time of the financing; the robust financial results of the 20-year base case are minimally impacted by the financing, which provides substantial working capital that we can use to advance the Pebble Project in permitting."

Additionally, the 2022 PEA also assesses the royalty's impact on the projected results for the three potential mine expansion scenarios and potential alternative strategies for gold recovery that were also presented in the 2021

PEA and could form the basis for future permit applications and review. The royalty was found to have a minimal impact on the results of these potential scenarios.

The 2022 PEA also includes updates that reflect events disclosed in the Company's public disclosure record that have occurred since the 2021 PEA was filed.

The 2022 PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no assurance that the 2022 PEA will be realized. Investors are encouraged to read the full text of the 2022 PEA which has been filed on SEDAR and will be also filed on EDGAR (www.sec.gov) and made available on the Northern Dynasty website.

The NI 43-101 Technical Report was prepared by Ausenco Engineering Canada Inc ("Ausenco"), with contributions by the Qualified Persons listed below. The Qualified Persons have reviewed the scientific, technical, and economic information contained in this news release.

- Hassan Ghaffari, P.Eng. of Tetra Tech Metallurgy
- Robin Kalanchey, P.Eng. of Ausenco Recovery Methods
- Sabry Abdel Hafez, P.Eng. of Tetra Tech Open Pit Mining
- Les Galbraith, P.Eng., P.E. of Knight Piésold Tailings and water management
- James Lang, P.Geo. of J M Lang Professional Consulting Inc. Geology and exploration*
- Eric Titley, P.Geo. of Hunter Dickinson Resource data base and sampling*
- David Gaunt, P.Geo. of Hunter Dickinson Resource estimation*
- Stephen Hodgson, P.Eng. of Hunter Dickinson Overall project information*

* Non-independent Qualified Person

Stephen Hodgson, P.Eng, a qualified person who is not independent of Northern Dynasty has approved the scientific, technical, and economic information contained in this news release on behalf of the Company.

About Northern Dynasty Minerals Ltd.

Northern Dynasty is a mineral exploration and development company based in Vancouver, Canada. Northern Dynasty's principal asset, owned through its wholly owned Alaska-based U.S. subsidiary, Pebble Limited Partnership, is a 100% interest in a contiguous block of 1,840 mineral claims in Southwest Alaska, including the Pebble deposit, located 200 miles from Anchorage and 125 miles from Bristol Bay. The Pebble Partnership is the proponent of the Pebble Project, an initiative to develop one of the world's most important mineral resources.

For further details on Northern Dynasty and the Pebble Project, please visit the Company's website at www.northerndynastyminerals.com or contact Investor services at (604) 684-6365 or within North America at 1-800-667-2114. Review Canadian public filings at www.sedar.com and U.S. public filings at www.sec.gov.

Ronald W. Thiessen President & CEO

U.S. Media Contact: Dan Gagnier, Gagnier Communications (646) 569-5897

Forward Looking Information and other Cautionary Factors

This release includes certain statements that may be deemed "forward-looking statements" under the United States Private Securities Litigation Reform Act of 1995 and under applicable provisions of Canadian provincial securities laws. All statements in this release, other than statements of historical facts, which address permitting, development and production for the Pebble Project are forwardlooking statements. These include statements regarding (i) the mine plan for the Pebble Project, the financial results of the 2022 PEA, including net present value and internal rates of return, and the ability of the Pebble Partnership to secure the financing to proceed with the development of the Pebble Project, including any stream financing and infrastructure outsourcing, (ii) the social integration



of the Pebble Project into the Bristol Bay region and benefits for Alaska, (iii) the timing of the appeal process and the ability to successfully appeal the negative Record of Decision ("ROD") and secure the issuance of a positive ROD by the USACE, (iv) the political and public support for the permitting process, (v) the ability of the Pebble Project to ultimately secure all required federal and state permits, (vi) future metals prices, including the price of copper, (vii) the right-sizing and de-risking of the Pebble Project, (viii) the design and operating parameters for the Pebble Project mine plan, including projected capital and operating costs, (ix) exploration potential of the Pebble Project, (x) future demand for copper and gold, (xi) the potential addition of partners in the Pebble Project, (xii) if permitting is ultimately secured, the ability to demonstrate that the Pebble Project is commercially viable, (xiii) the EPA's Proposed Determination process under the Clean Water Act and the impact of this process on the ability of the Pebble Partnership to develop the Pebble Project, and (xiv) the ability and timetable of NDM to develop the Pebble Project. Although NDM believes the expectations expressed in these forward-looking statements are based on reasonable assumptions, such statements should not be in any way be construed as guarantees that the Pebble Project will secure all required government and environmental permits, establish the commercial feasibility of the Pebble Project, achieve the required financing or develop the Pebble Project.

Forward-looking statements are necessarily based upon a number of factors and assumptions that, while considered reasonable by NDM as of the date of such statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies and such statements should not be in any way be construed as guarantees that the Pebble Project will secure all required government permits, establish the commercial feasibility of the Pebble Project, achieve the required financing or develop the Pebble Project. Such forward looking statements or information related to the 2022 PEA include but are not limited to statements or information with respect to the mined and processed material estimates; the internal rate of return; the annual production; the net present value; the life of mine; the capital costs, operating costs estimated for each of the Proposed Project (including how, when, where and by whom such infrastructure will be constructed or developed); projected metallurgical recoveries; plans for further development, and securing the required permits and licenses for further studies to consider expansion of the operation; and market price of precious and base metals; or other statements that are not statement of fact. Forward-looking statements are necessarily based upon a number of factors and assumptions that, while considered reasonable by NDM as of the date of such statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies.

Assumptions used by NDM to develop forward-looking statements include the following assumptions, all of which are subject to risks (i) the Pebble Project will ultimately obtain all required environmental and other permits and all land use and other licenses, (ii) any feasibility studies prepared for the development of the Pebble Project will be positive, (iii) NDM's estimates of mineral resources will not change, and NDM will be successful in converting mineral resources to mineral reserves, (iv) NDM will be able to establish the commercial feasibility of the Pebble Project, (v) NDM will be able to secure the financing required to develop the Pebble Project, and (vi) any action taken by the EPA in connection with the Proposed Determination will ultimately not be successfully in restricting or prohibiting development of the Pebble Project.

The likelihood of future mining at the Pebble Project is subject to a large number of risks and will require achievement of a number of technical, economic and legal objectives, including (i) the current mine plan may not reflect the ultimate mine plan for the Pebble Project, (ii) obtaining necessary mining and construction permits, licenses and approvals without undue delay, including without delay due to third party opposition or changes in government policies, (iii) finalization of the mine plan for the Pebble Project, (iv) the completion of feasibility studies demonstrating that any Pebble Project mineral resources that can be economically mined, (v) completion of all necessary engineering for mining and processing facilities, (vi) the ability of NDM to secure a partner for the development of the Pebble Project, and (vii) receipt by NDM of significant additional financing to fund these objectives as well as funding mine construction, which financing may not be available to NDM on acceptable terms or on any terms at all. NDM is also subject to the specific risks inherent in the mining business as well as general economic and business conditions, such as the current uncertainties with regard to COVID-19. Investors should also consider the risk factors identified in the 2022 PEA and the Company's Annual Information Form for the year ended December 31, 2021, as filed on SEDAR and included in the Company's annual report on Form 40-F filed by the Company with the SEC on EDGAR, and the Company's Management Discussion and Analysis for the year ended December 31, 2022, each as filed on SEDAR and EDGAR, for a discussion of the risks that may impact our forward-looking statements.

The National Environment Policy Act Environmental Impact Statement process requires a comprehensive "alternatives assessment" be undertaken to consider a broad range of development alternatives, the final project design and operating parameters for the Pebble Project and associated infrastructure may vary significantly from that currently contemplated. As a result, the Company will continue to consider various development options and no final project design has been selected at this time, and no determination has been made to pursue any of the expansion options identified in the 2022 PEA.

For more information on the Company, Investors should review the Company's filings with the United States Securities and Exchange Commission at www.sec.gov and its home jurisdiction filings that are available at <u>www.sedar.com</u>.