

Preliminary Economic Assessment for Northern Dynasty's Pebble Project Completed: Robust projected financial results, excellent optionality and important benefits for Alaska

Evaluates a Proposed Project and three potential Expansion Scenarios for the Pebble copper-gold-molybdenum-silver-rhenium project

Project is expected to add substantially to the Alaskan economy and provide the U.S. with an important supply of copper and other metals to help meet its low-carbon economy goals

Pebble Performance Dividend and Right of Way payments offer additional benefits to local residents and create economic diversification in the region

October 25, 2021 Vancouver – Northern Dynasty Minerals Ltd. (TSX: NDM; NYSE American: NAK) ("Northern Dynasty" or the "Company") announces, further to the Company's September 9, 2021 news release, that it has filed the "Preliminary Economic Assessment NI 43-101 Technical Report, Pebble Project, Alaska, USA" ("2021 PEA") at www.sedar.com. The technical report and an executive summary will also be posted on the Company's website at www.northerndynastyminerals.com. The PEA Technical Report will also be filed on EDGAR later this week. U.S. dollars and U.S. standard units are used unless otherwise indicated. All results are post-tax. Unless otherwise noted, all figures are based on forecast long-term metal prices.

The 2021 PEA provides production, financial and cost estimates for its proposed Pebble Project (the "Proposed Project") in Southwest Alaska as described in the Pebble Project permit application and its amendments.

Key Projected Results for Proposed Project¹

- 20 years of open pit mining with a processing rate of 180,000 tons per day ("Tpd")
- At forecast long-term² metal prices, Internal Rate of Return ("IRR") of 15.7% and Net Present Value at 7% discount rate ("NPV₇")³ of \$2.3 billion
- At prevailing⁴ metal prices, IRR of 23.7% and NPV₇ of \$4.7 billion
- Life-of-mine ("LOM") metal production for this scenario: 6.4 billion lb copper; 7.4 million oz gold; 300 million lb molybdenum; 37 million oz silver; and 230,000 kg rhenium
- Average annual metal production: 320 million lb copper; 368,000 oz gold; 15 million lb molybdenum; 1.8 million oz silver and 12,000 kg rhenium
- Average co-product C1 Copper Cost of \$1.65/lb CuEq and Gold Cash Cost of \$753/oz AuEq; average by-product C1 Copper Cost of \$0.69/lb and Gold Cash Cost of (\$1,148)/oz
- Average annual Net Smelter Return ("NSR") of \$1.6 billion and LOM NSR of \$32 billion

The 2021 PEA also examines three potential mine expansion scenarios, each with a mine life that could reach more than 100 years, and potential scenarios for gold recovery that could form the basis for future permit applications and review. The Project could potentially provide more than \$8 billion to the Southwest Alaska region through the Pebble Performance Dividend and the Lake and Peninsula Borough severance tax over the life of the potential expansion scenarios. This is in addition to the benefits that could flow from the existing and possible future agreements with Alaska Native Village Corporations.

"The 2021 PEA forecasts strong economics for the Proposed Project and also demonstrates significant optionality for future potential developments," said Northern Dynasty President and CEO Ron Thiessen. "We have made a significant investment in the design of this project to ensure it can be built and operated with industry-leading environmental safeguards while generating significant financial returns over multiple decades. It has never been

¹ Results include infrastructure outsourcing and gold streaming

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 Prevailing metal prices: copper \$4.25/lb; gold \$1,800/oz; molybdenum \$18/lb; silver \$24/oz; rhenium \$1,600/kg

about the Pebble Mine Project or the Bristol Bay Fishery; it has always been about the Bristol Bay Fishery and the Pebble Mine Project. We look forward to more engagement, in the near future, on the expansive and financially rewarding opportunities for the communities and the residents of Western Alaska resulting from a potential Pebble Mine development.”

The Proposed Project detailed in the 2021 PEA is consistent with the Project Description in the Pebble EIS, as published by the U.S. Army Corps of Engineers (“USACE”) in July 2020. It does not include an onsite gold plant. The Proposed Project recently underwent a comprehensive review by the USACE. This review culminated in their publishing of a Final Environmental Impact Statement (“FEIS”) on July 24, 2020, which positively concluded – among other things – that the Proposed Project would “not have measureable effects” on fisheries in Southwest Alaska. The USACE subsequently issued a negative Record of Decision for the Project based, in part, on potential impacts to the fishery. Pebble Limited Partnership has filed an administrative appeal of the Record of Decision, arguing in part that the findings of potential impacts to the fishery were not adequately substantiated.

As mentioned above, the 2021 PEA also examines three potential mine expansion scenarios, each with a mine life that could reach more than 100 years, and potential scenarios for gold recovery that could form the basis for future permit applications and review. These potential expansion scenarios were modelled on a mine development concept submitted by Northern Dynasty’s 100%-owned U.S.-based subsidiary Pebble Limited Partnership (“Pebble Partnership”) to the USACE during federal permitting in response to the federal agency’s Request for Information (“RFI”) about future potential mine development scenarios. For the Proposed Project and the potential expansion scenarios, the 2021 PEA also considers the impact of each on financial results of third parties owning and financing the construction of key transportation and power infrastructure, as is commonly the case in Alaska. It is assumed these third parties would either construct the facilities through their own resources or they would be included in overall project construction management. The Pebble Partnership would lease, operate and maintain the facilities as part of overall mine operations, with lease payments set to provide a market rate of return to lessors. Details of the results for the potential expansion and gold recovery scenarios are provided in the technical report and summarized in the Company’s September 9, 2021 news release.

With the exception of the Proposed Project, all development scenarios evaluated in the 2021 PEA are presented to demonstrate the optionality inherent in the polymetallic Pebble deposit by presenting a broad range of potential pathways for future mine development. Neither Northern Dynasty nor the Pebble Partnership has proposed or intends to propose any of these potential expansion scenarios in the near-term for regulatory approval. Any future development options beyond the Proposed Project would require extensive federal, state and local permitting processes and approvals before proceeding, which would be in addition to the initial permits and approvals required for the Proposed Project and, very importantly, in consultation with the people and communities of Western Alaska, as well as the State agencies.

“While the forecasted economics of this project are impressive, what I’m most excited about is how this is a game-changer for the local population who suffer from a lack of employment and diverse economic activity, and the opportunity to live in the region and apply advanced education, through high-paying jobs. The Project could potentially provide more than \$8 billion to the Southwest Alaska region through the Pebble Performance Dividend and the Lake and Peninsula Borough severance tax over the life of the potential expansion scenarios. This is in addition to the other significant benefits that could flow from the existing and possible future agreements with Alaska Native Village Corporations. It also has the potential to add substantially to the Alaska economy, and might provide the U.S. with substantial amounts of domestically-produced copper, silver and gold, which it will need to help achieve its low carbon energy future,” Mr. Thiessen added.

The 2021 PEA has been prepared within the guidelines established by National Instrument 43-101 (“NI 43-101”) to disclose the current costs estimates and potential financial results for the Pebble Project. The Company is a “foreign issuer” under the U.S. Exchange Act and entitled to file continuous disclosure reports with the U.S.

Securities and Exchange Commission under the Multi-Jurisdictional Disclosure System (“MJDS”) between Canada and the United States, and to provide disclosure on our mineral properties, including the Pebble Project, in accordance with NI 43-101 disclosure standards and CIM Definition Standards. For this reason, information contained in this news release in respect of the Pebble project may not be comparable to similar information made public by United States companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.

The 2021 PEA is based on an August 2020 mineral resource estimate (see Northern Dynasty news release dated August 20, 2020). The 2021 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. There is no assurance that the 2021 PEA will be realized, or that the project economics will be achieved. Mineral Resources that are not mineral reserves do not have demonstrated economic viability, and there is no assurance that the Pebble Project mineral resources will ever be upgraded to reserves. The 2021 PEA assumes that the Proposed Project will ultimately be able to obtain the required permits from the USACE and state of Alaska authorities to enable development of the Proposed Project. Neither the 2021 PEA, nor the mineral resource estimates on which the 2021 PEA is based, have been adjusted for any risks that (i) the Pebble Partnership may not be able to successfully appeal the record of decision issued by the USACE on November 25, 2020 denying the granting of the required permit under the Clean Water Act (“CWA”), or (ii) any action that may be taken by the EPA in order to reinstate the process of a CWA Section 404(c) determination for the waters of the Bristol Bay, each of which could adversely impact the ability of the Proposed Project to proceed. In addition, the 2021 PEA does not account for any additional capital or operating costs that may be necessary to obtain the required federal or state permits, should adjustments to the operating or environmental mitigation plans be required to be made in order to secure the required permits.

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

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 2,402 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.

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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 forward-looking statements. These include statements regarding (i) the mine plan for the Pebble Project, the financial results of the 2021 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 political and public support for the permitting process, (iv) the ability to successfully appeal the negative Record of Decision and secure the issuance of a positive Record of Decision by the U.S. Army Corps of Engineers and the ability of the Pebble Project to secure all required federal and state permits, (v) the right-sizing and de-risking of the Pebble Project, including any determination to pursue any of the expansion scenarios for the Pebble Project or to incorporate a gold plant, (vi) the design and operating parameters for the Pebble Project mine plan, including projected capital and operating costs, (vii) exploration potential of the Pebble Project, (viii) future demand for copper and gold and the metals prices assumed for the financial projections including the 2021 PEA, (ix) the potential addition of partners in the Pebble Project, and (x) the ability and timetable of NDM to develop the Pebble Project and become a leading copper, gold and molybdenum producer. 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 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 this Preliminary Economic Assessment 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 and three Expansion Scenarios for the Pebble Project; and other costs and payments for the proposed infrastructure for the Pebble 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 assumptions that (i) the Pebble Project will obtain all required environmental and other permits and all land use and other licenses without undue delay, and that the EPA will not ultimately make a CWA Section 404(c) determination that is adverse to the Pebble Project, (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, and (v) NDM will be able to secure the financing required to develop 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) 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, (ii) finalization of the mine plan for the Pebble Project, (iii) the completion of feasibility studies demonstrating that any Pebble Project mineral resources that can be economically mined, (iv) completion of all necessary engineering for mining and processing facilities, (v) the inability of NDM to secure a partner for the development of the Pebble Project, and (vi) 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 its Annual Information Form for the year ended December 31, 2020, 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.

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 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 www.sedar.com.