

Northern Dynasty: new Pebble mineral resource estimate increases US strategic Rhenium sources by 84%

August 20, 2020 Vancouver – Northern Dynasty Minerals Ltd. (TSX: NDM; NYSE American: NAK) ("Northern Dynasty" or the "Company") announces the results of an updated mineral resource estimate for southwest Alaska's Pebble Project. Already considered among the most significant accumulations of copper, gold, molybdenum and silver ever discovered in the United States, the current study confirms the Pebble deposit also contains substantial quantities of Rhenium – a metal used in jet engines and other military applications, and to produce high-octane fuels.

The US Geological Survey ("USGS") considers Rhenium a strategic metal and confirms the United States currently relies on foreign producers for 82% of its Rhenium needs.

"Certainly the US military has identified Rhenium as a critical mineral, and one the United States must develop additional domestic production of in order to enhance its military security," said Ron Thiessen, Northern Dynasty President & CEO. "The development of Alaska's Pebble Project would clearly go a long way toward filling that gap, while also addressing substantial US domestic supply deficits for other critical minerals – notably copper and silver."

The inclusion of Rhenium into the Pebble resource estimate is based on more than 58,000 analyses from 699 core holes, totaling more than 840,000 feet of drilling.

For the estimate, the Pebble deposit was domained based on geology, alteration and grade distribution. Estimation parameters including top cuts, search strategy, and variography were developed for each modelled domain. Rhenium values were interpolated into the Pebble block model using Ordinary Kriging and classified according to existing criteria.

At a 0.30% copper equivalent cut-off, the Pebble Deposit contains:

- **2.6 million kg of rhenium**, 57 billion pounds of copper, 71 million ounces of gold, 3.4 billion pounds of molybdenum and 345 million ounces of silver within the 6.5 billion tonnes in the combined Measured and Indicated categories at a grade of 0.40% copper, 0.34 g/t gold, 240 ppm molybdenum, 1.7 g/t silver and 0.41 ppm rhenium; and
- **1.6 million kg of rhenium**, 25 billion pounds of copper, 36 million ounces of gold, 2.2 billion pounds of molybdenum and 170 million ounces of silver within the 4.5 billion tonnes in the Inferred category at a grade of 0.25% copper, 0.25 g/t gold, 226 ppm molybdenum, 1.2 g/t silver and 0.36 ppm rhenium.

Current total Rhenium resources in the United States are approximately 5 million kg. Pebble's total Rhenium endowment represents an 84% increase to the nation's known Rhenium resource base.

According to the USGS, some 8,400 kg of Rhenium was produced at six US operations in 2019. However, the United States also imported 39,000 kg – more than 82% of its current needs. Rhenium is used mainly in superalloys for turbine engines and for petroleum reforming catalysts, and demand is expected to grow¹.

Globally, the primary source of Rhenium is mines developed on porphyry copper deposits like Pebble, recovered as a by-product through treatment of molybdenum concentrates.

As a significant deposit of Rhenium on US soil, development of the Pebble resource will materially advance America's goal of achieving self-sufficiency in the critical minerals needed to support and sustain its economic growth, military security, manufacturing industries and transition to a lower carbon future.

¹ Mineral Commodities Summaries 2020 – Rhenium, United States Dept of the Interior, US Geological Survey

Pebble Mineral Resources August 2020

Cutoff CuEq %	CuEq%	Metric Tonnes	Cu (%)	Au (g/t)	Mo (ppm)	Ag (g/t)	Re (ppm)	Cu Blb	Au Moz	Mo Blb	Ag Moz	Re Kkg
Measured												
0.3	0.65	527,000,000	0.33	0.35	178	1.7	0.32	3.83	5.93	0.21	28.1	167
0.4	0.66	508,000,000	0.34	0.36	180	1.7	0.32	3.81	5.88	0.20	27.4	163
0.6	0.77	279,000,000	0.40	0.42	203	1.8	0.36	2.46	3.77	0.12	16.5	100
1.0	1.16	28,000,000	0.62	0.62	302	2.3	0.52	0.38	0.56	0.02	2.0	14
Indicated												
0.3	0.77	5,929,000,000	0.41	0.34	246	1.7	0.41	53.58	64.81	3.21	316.4	2,443
0.4	0.82	5,185,000,000	0.45	0.35	261	1.8	0.44	51.42	58.35	2.98	291.7	2,271
0.6	0.99	3,455,000,000	0.55	0.41	299	2.0	0.51	41.88	45.54	2.27	221.1	1,748
1.0	1.29	1,412,000,000	0.77	0.51	343	2.4	0.60	23.96	23.15	1.07	109.9	853
Measured + Indicated												
0.3	0.76	6,456,000,000	0.40	0.34	240	1.7	0.41	56.92	70.57	3.42	344.6	2,615
0.4	0.81	5,693,000,000	0.44	0.35	253	1.8	0.43	55.21	64.06	3.18	320.3	2,431
0.6	0.97	3,734,000,000	0.54	0.41	291	2.0	0.50	44.44	49.22	2.40	237.7	1,848
1.0	1.29	1,440,000,000	0.76	0.51	342	2.4	0.60	24.12	23.61	1.08	112.0	867
Inferred												
0.3	0.55	4,454,000,000	0.25	0.25	226	1.2	0.36	24.54	35.80	2.22	170.4	1,603
0.4	0.68	2,646,000,000	0.33	0.30	269	1.4	0.44	19.24	25.52	1.57	119.1	1,154
0.6	0.89	1,314,000,000	0.48	0.37	292	1.8	0.51	13.90	15.63	0.85	75.6	673
1.0	1.20	361,000,000	0.68	0.45	377	2.3	0.69	5.41	5.22	0.30	26.3	251

Notes:

Copper equivalent (CuEQ) calculations use metal prices of \$1.85/lb for copper, \$902/oz for gold and \$12.50/lb for molybdenum, and recoveries of 85% for copper 69.6% for gold, and 77.8% for molybdenum in the Pebble West zone and 89.3% for copper, 76.8% for gold, 83.7% for molybdenum in the Pebble East zone.

Contained metal calculations are based on 100% recoveries.

A 0.30% CuEQ cut-off is considered to be appropriate for porphyry deposit open pit mining operations in the Americas.

The current study focuses on rhenium. The classification, tonnes, and grade estimates for copper, gold, molybdenum and silver have not changed from the previous estimate in December 2017.

The mineral resource estimate is constrained by a conceptual pit shell that was developed using a Lerchs-Grossman algorithm and is based in the following parameters: 42 degree pit slope; metal prices and recoveries of \$1,540.00/oz and 61% for gold, US\$3.63/lb and 91% for copper, US\$20.00/oz and 67% for silver and \$12.36/lb and 81% for molybdenum, respectively; a mining cost of \$1.01/ton with a \$0.03/ton/bench increment and other costs (including processing, G&A and transport) of \$6.74/ton. All mineral resource estimates, cut-offs and metallurgical recoveries are subject to change as a consequence of more detailed analyses that would be required in pre-feasibility and feasibility studies.

ALS Global Geochemistry in North Vancouver, Canada (an ISO/IEC 17025 certified facility) is the main laboratory for the analysis of drill core samples from the Pebble Project. Samples are prepared at ALS laboratory Fairbanks, Alaska. Drill core samples were analyzed for Cu, Mo and 31 additional elements by 4 acid digestion of a 0.4 g sample followed by ICP-AES. Au, Pt and Pd were determined by fire assay fusion of a 30 g sample followed by ICP-AES finish. Cu, Mo, Ag, Re and 47 additional elements were also determined by 4 acid digestion of a 0.25 g sample followed by ICP-AES/MS finish. Hg was determined by aqua regia digestion of a 0.5 g sample followed by cold vapour AAS.

As part of a comprehensive Quality Assurance Quality Control ("QAQC") program, control samples were inserted in each analytical batch at the following rates: standards one in 20 regular samples, in-line replicates one in 20 regular samples and blanks one in 50 regular samples. The control sample results were then checked to ensure proper QAQC.

The estimate was prepared for the Pebble Partnership. David Gaunt, P.Geo., a qualified person as defined under 43-101 who is not independent of Northern Dynasty, is responsible for the estimate. He has reviewed and approved the technical information in this release. A technical report providing details of the estimate will be filed on www.sedar.com within 45 days.

Project Status

The Final Environmental Impact Statement (“EIS”) for the Pebble Project was published by the US Army Corps of Engineers (“USACE”) in late July 2020 after 2½ years of scientific study. The Pebble EIS describes a modern copper mine built under the highest standards in the world. The USACE and the Pebble EIS have determined that Pebble will fully co-exist with the existing fishing economy, and create new opportunities and benefits for the local people in the region. The project has the potential to deliver thousands of American jobs, and substantial government revenue and economic activity, while producing minerals like copper, gold, molybdenum, silver and important by-products such as rhenium that are critical to America’s economic and military security.

The USACE is expected to issue a Record of Decision (“ROD”) with respect to several of Pebble’s key federal permits shortly. The process to secure a number of permits issued by the State of Alaska, is expected to take 2 – 3 years.

On the strength of the Final EIS and anticipated ROD, Northern Dynasty’s goal is to secure a major mining company (or consortium of companies) to become a partner(s) in the Pebble enterprise, and participate in the final stages of project evaluation, design and permitting. In the meantime, the Pebble Partnership will continue to advance programs and partnerships to enhance public and political support for the Pebble Project in Alaska, and prepare for state permitting.

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 (“PLP”), is a 100% interest in a contiguous block of 2,402 mineral claims in southwest Alaska, including the Pebble deposit. PLP 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 US 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". All statements in this release, other than statements of historical facts, especially those that address estimated resource quantities, grades and contained metals, and metal price assumptions are forward-looking statements because they are generally made on the basis of estimation and interpolation from a limited number of drill holes and metallurgical studies. Although diamond drill hole core provides valuable information about the size, shape and geology of an exploration project, there will always remain a significant degree of uncertainty in connection with these valuation factors until a deposit has been extensively drilled on closely spaced centers, which has occurred only in specific areas on the Pebble Project. These statements include statements regarding (i) the mine plan for the Pebble Project, (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 issuance of a positive Record of Decision by the US Army Corps of Engineers and the ability of the Pebble Project to secure state permits, (v) the right-sizing and de-risking of the Pebble Project, (vi) the design and operating parameters for the Pebble Project mine plan, (vii) exploration potential of the Pebble Project, (viii) future demand for copper and gold, (ix) the potential partnering of 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 or develop the Pebble Project. 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, (ii) studies for the development of the Pebble Project will be positive, (iii) NDM's estimates of mineral resources will not change, (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.

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 contemplated in this presentation. As a result, the Company will continue to consider various development options and no final project design has been selected at this time.

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