



ANNUAL INFORMATION FORM

FOR THE YEAR ENDED DECEMBER 31, 2021

This annual information form ("AIF") is as of March 31, 2022

Item 1. Table of Contents

	Page
Item 1. Table Of Contents.....	2
Item 2. Preliminary Notes.....	3
Item 3. Corporate Structure.....	13
Item 4. General Development Of The Business.....	14
Item 5. Description Of Business	19
Item 6. Dividends.....	57
Item 7. Description Of Capital Structure.....	57
Item 8. Market For Securities	57
Item 9. Escrowed Securities.....	58
Item 10. Directors And Officers	59
Item 11. Promoters.....	67
Item 12. Legal Proceedings.....	67
Item 13. Interest Of Management And Others In Material Transactions.....	69
Item 14. Transfer Agent And Registrar	69
Item 15. Material Contracts.....	69
Item 16. Interests Of Experts	70
Item 17. Additional Information	70
Item 18. Disclosure For Companies Not Sending Information Circulars.....	71
Item 19. Audit And Risk Committee, Auditor Fees, Exemptions, Code Of Ethics	71
Appendix A - Audit And Risk Committee Charter	74

Item 2. Preliminary Notes

This AIF contains "forward-looking information" within the meaning of applicable Canadian securities legislation. Wherever possible, words such as "plans", "expects", or "does not expect", "budget", "scheduled", "estimates", "forecasts", "anticipate" or "does not anticipate", "believe", "intend" and similar expressions or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved, have been used to identify forward-looking information.

Forward-looking information in this AIF include, without limitation, statements regarding:

- our expectations regarding the potential for securing the necessary permits for a mine at the Pebble Project and our ability to establish that such a permitted mine can be economically developed;
- the success of our appeal of the record of decision ("**ROD**") of the United States Army Corps of Engineers (the "**USACE**") denying the issuance of certain permits required for the Pebble Project, and the timing of a decision on this appeal;
- our ability to successfully obtain federal and state permits required for the Pebble Project under the Clean Water Act ("**CWA**"), the National Environmental Policy Act ("**NEPA**"), and relevant legislation;
- the outcome of the US government investigations involving the Company;
- our ability to successfully defend against purported class action lawsuits that have been commenced against us;
- our plan of operations, including our plans to carry out and finance exploration and development activities;
- our ability to raise capital for exploration and development activities and meet our working capital requirements;
- our expected financial performance in future periods;
- our expectations regarding the exploration and development potential of the Pebble Project;
- the outcome of the legal proceedings in which we are engaged;
- the contribution of the Pebble Project to the Alaskan and United States economies;
- the uncertainties with respect to the effects of COVID-19;
- the uncertainties related to the conflict in the Ukraine; and
- factors relating to our investment decisions.

Such forward-looking statements or information related to the Preliminary Economic Assessment 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 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.

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. 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 risk that 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.

Forward-looking information is based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made, but which may prove to be incorrect. We believe that the assumptions and expectations reflected in such forward-looking information are reasonable.

Key assumptions upon which the Company's forward-looking information are based include:

- our appeal of the ROD with the USACE will be successful;
- that we will ultimately be able to demonstrate that a mine at the Pebble Project can be economically developed and operated in an environmentally sound and socially responsible manner, meeting all relevant federal, state and local regulatory requirements so that we will be ultimately able to obtain permits authorizing construction of a mine at the Pebble Project;
- that we will be able to secure sufficient capital necessary for continued environmental assessment and permitting activities and engineering work which must be completed prior to any potential development of the Pebble Project which would then require engineering and financing in order to advance to ultimate construction;

- that we will ultimately be able to demonstrate that a mine at the Pebble Project will be economically feasible based on a mine plan for which permitting can be secured;
- the U.S. Environmental Protection Agency's Proposed Determination process under the Clean Water Act will not have a negative impact on the ability of the Pebble Partnership to develop the Pebble Project;
- that the COVID-19 outbreak will not materially impact or delay our ability to obtain permitting for a mine at the Pebble Project;
- that the market prices of copper, gold, molybdenum, rhenium and silver will not decline significantly or stay depressed for a lengthy period of time;
- the projected contributions of the Pebble Project to the Alaskan and United States economies are subject to the assumptions underlying the 2021 PEA and other assumptions as to economic impact;
- that key personnel will continue their employment with us; and
- that we will continue to be able to secure adequate financing on acceptable terms.

Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. Forward looking statements are also subject to risks and uncertainties facing our business, any of which could have a material impact on our outlook.

Some of the risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements include:

- we may be unsuccessful in our appeal of the ROD with respect to the decision to deny the issuance of permits which we require to operate a mine at the Pebble Project, and the timing of a decision on the appeal may be longer than anticipated;
- the issuance by the U.S. Environmental Protection Agency of a revised Proposed Determination under the Clean Water Act;
- our inability to ultimately obtain permitting for a mine at the Pebble Project;
- an inability to establish that the Pebble Project may be economically developed and mined or contain commercially viable deposits of ore based on a mine plan for which government authorities are prepared to grant permits;
- we may not be successful in defending shareholder securities litigation claims that have been filed against us in the US and in Canada, and we may be obligated to indemnify our underwriters in addition to being subject to liabilities to the plaintiffs;
- the uncertainty of the outcome of current or future government investigations and inquiries, including but not limited to, matters before the U.S. Department of Justice, a federal grand jury in Alaska and the U.S. Securities and Exchange Commission;
- government efforts to curtail the COVID-19 pandemic may delay the Company in completion of its work relating to this permitting process;
- our ability to obtain funding for working capital and other corporate purposes associated with advancement of the Pebble Project
- an inability to continue to fund exploration and development activities and other operating costs;
- our actual operating expenses may be higher than projected;
- the highly cyclical and speculative nature of the mineral resource exploration business;
- the pre-development stage economic viability and technical uncertainties of the Pebble Project and the lack of known reserves on the Pebble Project;
- an inability to recover even the financial statement carrying values of the Pebble Project if we cease to continue on a going concern basis;

- the potential for loss of the services of key executive officers;
- a history of, and expectation of further, financial losses from operations impacting our ability to continue on a going concern basis;
- the volatility of gold, copper, molybdenum, silver and rhenium prices and the share prices of mining companies;
- the inherent risk involved in the exploration, development and production of minerals, and the presence of unknown geological and other physical and environmental hazards at the Pebble Project;
- the potential for changes in, or the introduction of new, government regulations relating to mining, including laws and regulations relating to the protection of the environment and project legal titles;
- potential claims by third parties to titles or rights involving the Pebble Project;
- the uncertainty of the outcome of current or future litigation including, but not limited to, the appeal of the ROD denying the issuance of permits required to operate a mine at the Pebble Project;
- the possible inability to insure our operations against all risks;
- the highly competitive nature of the mining business;
- the projected contributions of the Pebble Project to the Alaskan and United States economies may not be realized;
- the potential equity dilution to current shareholders due to any future equity financings or from the exercise of share purchase options and warrants to purchase the Company's shares;
- that we have never paid dividends and will not do so in the foreseeable future.

This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements or information. Forward-looking statements or information are statements about the future and are inherently uncertain, and actual achievements of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements or information due to a variety of risks, uncertainties and other factors, including, without limitation, the risks and uncertainties described above. See "**Risk Factors**" on page 49 and the risk factors and related discussions in our Management Discussion and Analysis for the year ended December 31, 2021 (our "2021 Annual MD&A").

Our forward-looking statements are based on the reasonable beliefs, expectations and opinions of management on the date of this AIF. Although we have attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There is no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should appreciate the inherent uncertainty of, and not place undue reliance on, forward-looking information. We do not undertake to update any forward-looking information, except as, and to the extent required by, applicable securities laws.

Incorporation of Continuous Disclosure Documents by Reference

In this AIF, the "Company" or "Northern Dynasty" refers to Northern Dynasty Minerals Ltd. and all its subsidiaries and affiliated partnerships together unless the context states otherwise.

Currency and Metric Equivalents

All dollar amounts are expressed in Canadian dollars unless otherwise indicated. The Company's accounts are maintained in Canadian dollars. The daily rate of exchange on December 31, 2021, as reported by the Bank of Canada for the conversion of one Canadian dollar into one United States dollar ("U.S. dollar"), was \$1.2678.

On March 30, 2022, the rate of exchange of the Canadian Dollar, based on the daily rate in Canada as published by the Bank of Canada, was US\$1.00 = \$1.2470. Exchange rates published by the Bank of Canada, available on

its website www.bankofcanada.ca, are nominal quotations - not buying or selling rates - and intended for statistical or analytical purposes.

The following tables set out the exchange rates, based on the daily rates in Canada as published by the Bank of Canada for the conversion of Canadian Dollars into U.S. dollars.

Year Ended December 31 (Canadian Dollars per U.S. Dollar)				
	2021	2020	2019	2018
Rate at end of year	\$1.2678	\$1.2732	\$1.2988	\$1.3642
Average rate for year	\$1.2535	\$1.3415	\$1.3269	\$1.2957
High for year	\$1.2942	\$1.4496	\$1.3600	\$1.3642
Low for year	\$1.2040	\$1.2718	\$1.2988	\$1.2288

Monthly High and Low Daily Exchange Rate (Canadian Dollar per U.S. Dollar)		
Month or Period	High	Low
March 2022 (to March 30, 2022)	\$1.2867	\$1.2470
February 2022	\$1.2832	\$1.2677
January 2022	\$1.2772	\$1.2474
December 2021	\$1.2942	\$1.2642
November 2021	\$1.2792	\$1.2368

For ease of reference, the following factors for converting metric measurements into Imperial equivalents are as follows:

Metric Units	Multiply by	Imperial Units
hectares	2.471	= acres
metres	3.281	= feet
kilometres	0.621	= miles (5,280 feet)
grams	0.032	= ounces (troy)
tonnes	1.102	= tons (short) (2,000 pounds)
grams/tonne	0.029	= ounces (troy)/ton

Glossary

In this AIF the following terms have the meanings set forth herein:

Regulatory Terms:

Term	Meaning
ADEC	Alaska Department of Environmental Conservation
ADNR	Alaska Department of Natural Resources
CWA	United States Clean Water Act
CWA 404 Permit Application	The permit application filed by the Pebble Partnership with the USACE pursuant to Section 404 of the CWA
EPA	United States Environmental Protection Agency
LEDPA	The " <i>least environmentally damaging practicable alternative</i> " under the CWA
NEPA	National Environmental Policy Act
Pebble EIS	The final environmental impact statement for the Pebble Project published by the USACE on July 24, 2020
Record of Decision	The record of decision of the USACE in respect of the Pebble Project issued by the USACE on November 25, 2020
USACE	United States Army Corps of Engineers

Technical Terms:

Term	Meaning
AISC	All In Sustaining Cost
AuEQ	Gold Equivalent
Alkalic	Igneous rock containing a relatively high percentage of sodium and potassium feldspar; alteration can also introduce alkali minerals.
Argillic	Hydrothermal alteration of wall rock that forms clay minerals including kaolinite, smectite, illite and other species.
C1	Cash cost per unit of extracting and processing the principal metal product, copper, to a condition in which it may be delivered to customers net of gold and silver credits from concentrates sold.
CuEQ	Copper Equivalent
Comminution	Reduction of solid materials from one average particle size to a smaller average particle size by crushing, grinding, cutting, vibrating, or other means.
Deportment	Assessment of how minerals contribute to grade, as each mineral is likely to behave differently to comminution, flotation or leaching.
Diorite	Grey to dark-grey igneous intrusive rock of intermediate composition, composed principally of plagioclase feldspar along with biotite, hornblende and/or pyroxene.
Element Abbreviations	Au - Gold; Ag - Silver; Al - Aluminum; Cu - Copper; Fe - Iron; Mo - Molybdenum; Na - Sodium; O - Oxygen; Pb - Lead; Re - Rhenium; S - Sulphur; Zn - Zinc.
Geometallurgy	Practice of combining geology and/or geostatistics with metallurgy.
Graben	Down-dropped block of land bordered by faults.

Term	Meaning
Granodiorite	Medium- to coarse-grained acid igneous rock with quartz (>20%), plagioclase and alkali feldspar, commonly with minor hornblende and/or biotite.
Hypogene	Processes below the earth's surface which, in mineral deposits, result in precipitation of primary minerals like sulphides.
Hydrothermal mineral deposit	Any concentration of metallic minerals formed by the precipitation of solids from hot waters (hydrothermal solution). The solutions may be sourced from a magma or from deeply circulating water heated by magma.
Illite Pyrite	Alteration zone with significant amounts of illite – a clay mineral and pyrite – an iron sulphide mineral.
Intrusion (batholith, dyke, pluton)	Medium to coarse grained igneous bodies that crystallized at depth within the Earth's crust. Large intrusive bodies are called batholiths; smaller bodies are plutons and linear bodies are dykes.
IRR	Internal Rate of Return
K Silicate	Alteration zone with significant potassium (K) bearing silicate minerals.
Kriging	A method of estimation of a variable value (such as metal grade) at an unmeasured location from measured values, weighted by distance and orientation, at nearby locations.
Leached Cap	Rock that originally contained mineralization that was subsequently removed due to weathering processes.
Locked Cycle Test	A repetitive batch flotation test used in mineral processing laboratories while developing a metallurgical flowsheet.
LOM	Life of Mine
Monzonite	Igneous intrusive rock with approximately equal amounts of plagioclase and alkali feldspar, and less than 5% quartz by volume.
National Instrument 43-101 ("NI 43-101")	The Canadian securities instrument which establishes disclosure standards for mineral projects held by Canadian publicly-traded resource companies.
NPV ₇	Net Present Value at 7% discount rate
NSR	Net Smelter Return, the net revenue that the owner of a mining property receives from the sale of the mine's metal products less transportation and refining costs
Porphyry deposit	A type of mineral deposit genetically related to igneous intrusions in which ore minerals are widely distributed, generally of low grade but commonly of large tonnage.
Potassic	Hydrothermal alteration that results in the production of potassium-bearing minerals such as biotite, muscovite or sericite, and/or orthoclase.
Preliminary Economic Assessment	A study that includes an economic analysis of the potential viability of mineral resources but that does not meet the definition of either a "pre-feasibility study" or a "feasibility study", as such terms are defined under Canadian Institute of Mining and Metallurgy ("CIM") Definitions below. It is a term defined under NI 43-101.
Pyrophyllite	Aluminosilicate hydroxide mineral that forms as a result of hydrothermal alteration or low grade metamorphism.

Term	Meaning
QSP	Quartz Sericite Pyrite; an alteration zone.
Sericite	Alteration zone with significant sericite, a fine-grained version of the mica mineral muscovite.
Sodic Potassic	Alteration zone with significant sodium (Na) and potassium (K) bearing minerals
Sodic	In this report, refers to a type of hydrothermal alteration that contains sodium-bearing minerals, most commonly albite feldspar.
Subduction	Process by which one tectonic plate moves under another tectonic plate.
Supergene	Refers to processes that occur relatively near the surface of the earth which modify or destroy original (hypogene) minerals by oxidation and chemical weathering.
Superterrane	A group of physically connected and related geological terranes (group of related rock units).
USGS	United States Geological Survey

Unit Abbreviations

Unit Description	Abbreviation
Billion	B
Feet	ft
Gram	g
Grams per tonne	g/t
Greater than	>
Hectare (10,000 m ²)	ha
Kilo (thousand)	k
Kilogram	kg
Kilometre	km
Less than	<
Metres	m
Microns	µm
Mile	mi
Million	M
Million tonnes	Mt
Ounce	oz
Parts per million	ppm
Percent	%
Pounds	lb
Square kilometer	km ²
Tonnes (metric - 1,000 kg)	t
Tons per day	Tpd
Tons (Imperial - 2,000 lb)	ton

Canadian Mineral Property Disclosure Standards and Resource Estimates

The discussion of mineral deposit classifications in this AIF uses the certain technical terms presented below as they are defined in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards on mineral resources and reserves (the "**CIM Standards**") adopted by the CIM Council, as required by NI 43-101. The following definitions are reproduced from the latest version of the CIM Standards, which were adopted by the CIM Council on May 10, 2014 (the "**CIM Definitions**"). Estimated mineral resources

fall into two broad categories dependent on whether the economic viability of them has been established and these are namely "resources" (potential for economic viability) and "reserves" (viable economic production is feasible). Resources are sub-divided into categories depending on the confidence level of the estimate based on level of detail of sampling and geological understanding of the deposit. The categories, from lowest confidence to highest confidence, are inferred resource, indicated resource and measured resource. The Company does not claim to have any reserves at this time. The CIM definitions are as follows:

Term	Definition
Mineral Resource	A concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.
Measured Mineral Resource	That part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A measured mineral resource has a higher level of confidence than that applying to either an Indicated mineral resource or an inferred mineral resource. It may be converted to a proven mineral reserve or to a probable mineral reserve.
Indicated Mineral Resource	That part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An indicated mineral resource has a lower level of confidence than that applying to a measured mineral resource and may only be converted to a probable mineral reserve.
Inferred Mineral Resource	That part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. 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 may not be converted to a mineral reserve. It is reasonably expected that the majority of inferred mineral resources could be upgraded to indicated mineral resources with continued exploration.
Mineral Reserve	The economically mineable part of a measured and/or indicated mineral resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of modifying factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which mineral reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The public disclosure of a mineral reserve must be demonstrated by a pre-feasibility study or feasibility study.

Term	Definition
Proven Mineral Reserve	The economically mineable part of a measured mineral resource. A proven mineral reserve implies a high degree of confidence in the modifying factors.
Probable Mineral Reserve	The economically mineable part of an indicated, and in some circumstances, a measured mineral resource. The confidence in the modifying factors applying to a probable mineral reserve is lower than that applying to a proven mineral reserve.
Modifying Factors	Considerations used to convert mineral resources to mineral reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.
Feasibility Study	A comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable modifying factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate, at the time of reporting, that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a pre-feasibility study.
Pre-feasibility Study	A comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the modifying factors and the evaluation of any other relevant factors which are sufficient for a qualified person, acting reasonably, to determine if all or part of the mineral resource may be converted to a mineral reserve at the time of reporting. A pre-feasibility study is at a lower confidence level than a feasibility study.

Cautionary Notes to United States Investors Concerning Canadian Mineral Property Disclosure Standards

As a Canadian issuer, Northern Dynasty is required to comply with reporting standards in Canada that require that we make disclosure regarding our mineral properties, including any estimates of mineral reserves and resources, in accordance with NI 43-101. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. In accordance with NI 43-101, the Company uses the terms mineral reserves and resources as they are defined in accordance with the CIM Definition Standards on mineral reserves and resources adopted by the CIM.

The United States Securities and Exchange Commission (the "**SEC**") has adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the US Exchange Act (the "**SEC Modernization Rules**") with compliance required for the first fiscal year on or after January 1, 2021. The SEC Modernization Rules have replaced the historical property disclosure requirements for mining registrants that were included in SEC Industry Guide 7 ("**Guide 7**").

The SEC Modernization Rules include the adoption of definitions of the following terms, which are substantially similar to the corresponding terms under the CIM Definition Standards that are presented above under "*Canadian Mineral Property Disclosure Standards and Resource Estimates*":

- mineral resource;
- indicated mineral resource;
- inferred mineral resource;

- mineral reserve;
- proven mineral reserve;
- probable mineral reserve;
- modifying factors;
- feasibility study; and
- preliminary feasibility study (or "**pre-feasibility study**").

As a result of the adoption of the SEC Modernization Rules, the SEC will now recognize estimates of "measured mineral resources", "indicated mineral resources" and "inferred mineral resources". In addition, the SEC has amended its definitions of "proven mineral reserves" and "probable mineral reserves" to be substantially similar to the corresponding CIM Definitions.

Northern Dynasty is not required to provide disclosure on our mineral properties, including the Pebble Project, under the SEC Modernization Rules as we are presently a "foreign issuer" under the US Exchange Act and entitled to file continuous disclosure reports with the SEC under the Multi-Jurisdictional Disclosure System ("**MJDS**") between Canada and the United States. Accordingly, we anticipate that we will be entitled to continue to provide disclosure on our mineral properties, including the Pebble Project, in accordance with NI 43-101 disclosure standards and CIM Definition Standards. However, if we either cease to be a "foreign issuer" or cease to be entitled to file reports under the MJDS, then we will be required to provide disclosure on our mineral properties under the SEC Modernization Rules. Accordingly, United States investors are cautioned that the disclosure that we provide on our mineral properties, including the Pebble Project, in the AIF and under our continuous disclosure obligations under the US Exchange Act may be different from the disclosure that we would otherwise be required to provide as a US domestic issuer or a non-MJDS foreign issuer under the SEC Modernization Rules.

United States investors are cautioned that while the above terms are substantially similar to CIM Definitions, there are differences in the definitions under the SEC Modernization Rules and the CIM Definition Standards. Accordingly, there is no assurance any mineral resources that we may report as "measured mineral resources", "indicated mineral resources" and "inferred mineral resources" under NI 43-101 would be the same had we prepared the resource estimates under the standards adopted under the SEC Modernization Rules.

Investors are cautioned not to assume that any "measured mineral resources", "indicated mineral resources", or "inferred mineral resources" that we report in this AIF are or will be economically or legally mineable.

Further, "inferred resources" have a great amount of uncertainty as to whether they can be mined legally or economically. In accordance with Canadian securities laws, estimates of "inferred mineral resources" cannot form the basis of feasibility or other economic studies, except in limited circumstances where permitted under NI 43-101.

For the above reasons, information contained in this AIF and the documents incorporated by reference herein containing descriptions of our mineral deposits 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.

Item 3. Corporate Structure

Northern Dynasty is a mineral exploration company incorporated on May 11, 1983 pursuant to the Company Act of the Province of British Columbia (predecessor statute to the British Columbia Corporations Act in force since 2004), under the name "Dynasty Resources Inc." On November 30, 1983, the Company changed its name to "Northern Dynasty Explorations Ltd." and subsequently, on October 11, 1997, changed its name to Northern Dynasty Minerals Ltd. Northern Dynasty became a reporting company in the Province of British Columbia on April 10, 1984 and was listed on the Vancouver Stock Exchange (now absorbed by the TSX Venture Exchange and herein generally "**TSX-V**") from 1984-1987, listed on the Toronto Stock Exchange ("**TSX**") from 1987-1993, and delisted from trading but continued to comply with its continuous disclosure obligations from 1993 to 1994, and thereafter listed on TSX-V from 1994 to October 30, 2007, when it again began trading on the TSX.

In November 2004, the common shares of Northern Dynasty were also listed on the American Stock Exchange ("AMEX"). AMEX was purchased by the New York Stock Exchange ("NYSE") and the Company now trades on the NYSE American Exchange ("NYSE American").

The head office of Northern Dynasty is located at 1040 West Georgia Street, 14th floor, Vancouver, British Columbia, Canada V6E 4H1, telephone (604) 684-6365, facsimile (604) 684-8092. The Company's legal registered office is in care of its Canadian attorneys, McMillan LLP, Barristers & Solicitors, at Suite 1500, 1055 West Georgia Street, Vancouver, British Columbia, Canada V6E 4N7, telephone (604) 689-9111, facsimile (604) 685-7084.

The Company's Alaska mineral resource exploration business is operated through a wholly-owned Alaskan registered limited partnership, the Pebble Limited Partnership (the "**Pebble Partnership**" or "**PLP**"), in which the Company owns a 100% interest through an Alaskan general partnership, the Northern Dynasty Partnership, which is a partnership formed by the Company and a wholly-owned subsidiary. An indirectly wholly-owned subsidiary of the Company, Pebble Mines Corp. is the general partner of the Pebble Partnership and responsible for its day-to-day operations. The business address of the Northern Dynasty Partnership is Suite 405, 2525 Gambell Street, Anchorage, Alaska, USA, 99503.

In this AIF, a reference to the "Company" or "Northern Dynasty" includes a reference to PLP and the Company's wholly-owned subsidiaries and other consolidated interests and entities, unless the context clearly indicates otherwise. Certain terms used herein are defined in the text and others are included in the glossary of this AIF.

Item 4. General Development of the Business

Company Development

Northern Dynasty is a mineral exploration company focused on the exploration and advancement towards feasibility, permitting and ultimately development of the Pebble Project, a copper-gold-molybdenum-silver-rhenium mineral project located in southwest Alaska (the "**Pebble Project**" or the "**Project**"). The Pebble Project is comprised of mineral claims that are held by subsidiaries of the Pebble Partnership, which is a 100% wholly-owned subsidiary of Northern Dynasty.

Northern Dynasty acquired a 100% interest the Pebble Project from an Alaskan subsidiary of Teck Resources Limited ("**Teck**") in a series of transactions from October 2001 through to June 2006. Teck has retained certain royalties in the Pebble Project, as described in detail below under [Item 5 – Description of Business](#).

The Pebble Partnership was converted into a limited partnership in July 2007 in connection with a joint venture for the Pebble Project entered into between the Company and an affiliate of Anglo American plc ("**Anglo American**"). From July 2007 to December 2013, approximately US\$573 million was provided to the Pebble Partnership by the affiliate of Anglo American, largely spent on exploration programs, resource estimates, environmental data collection and technical studies, with a significant portion spent on engineering of various possible mine development models and related infrastructure, power and transportation systems. The technical and engineering studies that were completed during the period prior to December 2013 relating to mine-site and infrastructure development provide background support for management's current understanding of the most likely development scenarios for the Project. However, the scenarios evaluated during that period are not considered to be current. Accordingly, the Company is uncertain as to the extent to which it can realize significant value from this prior work. Environmental baseline studies and data, as well as geological information from exploration, remain important information available to the Company from this period in continuing its advancement of the Project. Anglo American withdrew from the Pebble Partnership effective December 10, 2013.

In December 2017, Northern Dynasty and First Quantum Minerals Ltd. ("**First Quantum**" or collectively, the "**parties**") entered into a framework agreement, which contemplated that the parties would execute an option agreement whereby First Quantum could earn a 50% interest in the Pebble Partnership. First Quantum also made a non-refundable early option payment of US\$37.5 million to be applied solely for the purpose of progressing permitting of the Pebble Project. On May 25, 2018, the Company announced that the parties had

been unable to reach agreement on the option and partnership transaction contemplated in the December 2017 framework agreement, and it was terminated in accordance with its terms.

Northern Dynasty holds a 100% interest in the Pebble Partnership and the Pebble Project. Northern Dynasty continues its efforts to secure a partner for the project.

To December 31, 2021, approximately \$991 million (US\$893 million) in expenditures have been incurred on the Pebble Project. In addition, Northern Dynasty has spent approximately \$106 million in acquisition costs on the Pebble Project.

Northern Dynasty does not have any operating revenue, although currently and historically it has had non-material annual interest revenue as a consequence of investing its surplus funds, and has received consideration for the sale of a net proceeds interest royalty held on a non-core property that was carried at nominal value.

Three Year History

On December 22, 2017, the Pebble Partnership filed its 404 wetlands permit application (the "**CWA 404 Permit Application**") under the CWA with the USACE, which was "receipted" as complete by USACE on January 5, 2018 and initiated the federal Environmental Impact Statement ("**EIS**") permitting process for the Pebble Project under NEPA. The permit application included a project description (the "Project Description") that envisages the project developed as an open pit mine and processing facility with supporting infrastructure. The Pebble EIS was led by the USACE, and also involved eight federal cooperating agencies (including the EPA and US Fish & Wildlife Service), three state cooperating agencies (including the ADNR and the ADEC), the Lake & Peninsula Borough and federally recognized tribes.

The EIS process for the Pebble Project required a comprehensive "alternatives assessment" be undertaken to consider a broad range of development alternatives, such that the final project design and operating parameters for the Pebble Project and associated infrastructure may vary significantly from that being advanced. As a result, the Company has continued to consider various development options and no final project design has been selected at this time.

On May 22, 2020, the USACE announced a development alternative for the Pebble Project as the 'least environmentally damaging practicable alternative' ("**LEDPA**") for the transportation corridor for the proposed Pebble mine. The LEDPA transportation corridor includes an all land-based transportation route to connect the proposed mine site to a port site on Cook Inlet via an approximate 85-mile road north of Lake Iliamna, thereby avoiding the need for ferry transport across the lake. The transportation corridor, which is referred to as the 'northern transportation corridor' and otherwise known and evaluated in the Pebble EIS as 'Alternative 3', has been extensively studied by the Pebble Partnership, and the Company believes that this transportation corridor presents several compelling benefits over the alternative lake ferry transportation corridor options. The EPA, in a letter to the USACE dated May 28, 2020, confirmed its view that the northern corridor transportation route was the least environmentally damaging practicable alternative under the EPA's guidelines.

The USACE published the final EIS for the Pebble Project ("**Pebble EIS**") on July 24, 2020. The final Pebble EIS was viewed by the Company as positive in that it found impacts to fish and wildlife would not be expected to affect harvest levels, there would be no measurable change to the commercial fishing industry including prices and there would be a number of positive socioeconomic impacts on local communities.

Following submission of the CWA 404 Permit Application in December 2017, the permitting process over the next three years involved the Pebble Partnership being actively engaged with the USACE on the evaluation of the Pebble Project. There were numerous meetings between representatives of the USACE and the Pebble Partnership regarding, among other things, compensatory mitigation for the Pebble Project. The Pebble Partnership submitted several draft compensatory mitigation plans to the USACE, each refined to address comments from the USACE and that the Pebble Partnership believed were consistent with mitigation proposed and approved for other major development projects in Alaska. In late June 2020, USACE verbally identified the

“significant degradation” of certain aquatic resources, with the requirement of new compensatory mitigation. The Pebble Partnership understood from these discussions that the new compensatory mitigation plan for the Pebble Project would include in-kind, in-watershed mitigation and continued its work to meet these new USACE requirements.

The USACE formally advised the Pebble Partnership by letter dated August 20, 2020 that it had made preliminary factual determinations under Section 404(b)(1) of the CWA that the Pebble Project as proposed would result in significant degradation to aquatic resources. In connection with this preliminary finding of significant degradation, the USACE formally informed the Pebble Partnership that in-kind compensatory mitigation within the Kaktuli River watershed would be required to compensate for all direct and indirect impacts caused by discharges into aquatic resources at the mine site. The USACE requested the submission of a new compensatory mitigation plan to address this finding within 90 days of its letter. Based on these requirements, the Pebble Partnership continued with its efforts to develop the new compensatory mitigation plan (the “**CMP**”) to align with the requirements outlined by the USACE as conveyed to the Pebble Partnership. This plan envisioned creation of a 112,445-acre Kaktuli Conservation Area on land belonging to the State of Alaska in the Kaktuli River watershed downstream of the Project. During the period in which this CMP was developed, the Pebble Partnership continued to confer with the USACE regarding its proposed approach to mitigation. An initial draft of the CMP was submitted to the USACE for an interim review by the USACE in September 2020. The Pebble Partnership then revised the CMP based on the input from the USACE. The objective of the preservation of the Kaktuli Conservation Area was to allow the long-term protection of a large and contiguous ecosystem. If adopted, the Kaktuli Conservation Area would preserve 31,026 acres of aquatic resources within the aquatic resources within the Kaktuli River watershed. The protected resources were designed to address the physical, chemical, and biological functions highlighted by the EPA and US Fish & Wildlife Service. Preservation of the Kaktuli Conservation Area was proposed with the objective of minimizing the threat to, and preventing the decline of, aquatic resources in the Kaktuli River watershed from potential future actions, and sustaining the fish and wildlife species that depend on these aquatic resources, while protecting the subsistence lifestyle of the residents of Bristol Bay and commercial and recreational sport fisheries. The revised plan was submitted to the USACE on November 4, 2020.

On November 25, 2020, the USACE issued the ROD. The ROD rejected the compensatory mitigation plan as “noncompliant” and determined the project would cause “significant degradation” and was contrary to the public interest. Based on this finding, the USACE rejected Pebble Partnership’s permit application under the Clean Water Act.

The Pebble Partnership submitted its request for appeal of the ROD (the “**RFA**”) to the USACE Pacific Division on January 19, 2021. The RFA reflects the Pebble Partnership’s position that the USACE’s Record of Decision and permitting decision – including its “significant degradation” finding, its ‘public interest review’ findings, and its perfunctory rejection of the Pebble Partnership’s CMP – are contrary to law, unprecedented in Alaska, and fundamentally unsupported by the administrative record, including the Pebble EIS. The specific reasons for appeal asserted by the Pebble Partnership in the RFA include (i) the finding of “significant degradation” by the USACE is contrary to law and unsupported by the record, (ii) the USACE’s rejection of the compensatory mitigation plan is contrary to the USACE regulations and guidance, including the failure to provide the Pebble Partnership with an opportunity to correct the alleged deficiencies, and (iii) the determination by the USACE that the Pebble Project is not in the public interest is contrary to law and unsupported by the public record.

In a letter dated February 24, 2021, the USACE confirmed the Pebble Partnership’s RFA is “complete and meets the criteria for appeal.” The USACE completed the administrative record for the appeal and provided a copy to the Pebble Partnership in June 2021, following which the Pebble Partnership and its legal counsel reviewed the voluminous record for completeness and relevance to the USACE’s permitting decision, and its sufficiency to support a fair, transparent and efficient review. In August 2021, the USACE also informed the Pebble Partnership that a new Review Officer (“**RO**”) had been appointed to lead the Pebble Project appeal. The appeal will be reviewed by the USACE based on the administrative record and any clarifying information provided, and the Pebble Partnership will be provided with a written decision on the merits of the appeal at the conclusion of the process. The appeal is governed by the policies and procedures of the USACE administrative appeal regulations. While federal regulations suggest the appeal should conclude within 90 days, and in no case should extend beyond one year, the USACE has indicated the complexity of issues and volume of materials

associated with Pebble's case means the review will take additional time. The Pebble Partnership understands that an appeal conference will be held in the summer of 2022, and that a decision on the appeal would follow some time later. There is no assurance that the Company's appeal of the ROD will be successful or that the required permits for the Pebble Project will ultimately be issued. The permits are required in order that the Pebble Project can be developed as proposed by the Company. If the Pebble Partnership's administrative appeal of the ROD is successful, then we anticipate that the permitting decision would be remanded back to the USACE's Alaska District in order that the permitting process would then continue based on the administrative record and the findings and determinations made by the USACE Pacific Division in its appeal decision. There is no assurance that a successful appeal will ultimately result in the issuance of a positive ROD by the USACE Alaska District. If the Pebble Partnership's administrative appeal is not successful, the Company may seek judicial review of the ROD in the appropriate US District Court. There is no assurance that any judicial review would be successful in overturning an unsuccessful appellate decision.

On January 22, 2021, the State of Alaska, acting in its role as owner of the Pebble lands and subsurface mineral estate, announced that it had also filed a request for appeal. That appeal was rejected on the basis that the State did not have standing to pursue an administrative appeal with the USACE.

On September 9, 2021, the EPA announced they planned to re-initiate the process of making a CWA Section 404(c) determination for the waters of Bristol Bay (the "**Proposed Determination**"), which would set aside the 2019 withdrawal of that action that was based on a 2017 settlement agreement between the EPA and Pebble Partnership and the Company believes is supported by the results of the Pebble EIS. The 2019 withdrawal of the Proposed Determination was contested by Project opponents. In that litigation, the EPA requested the court vacate the withdrawal decision and remand the case to the EPA, which would result in the reinstatement of the Proposed Determination. The Pebble Partnership filed a response to this request in October 2021, asking the Court to impose a schedule ensuring that the EPA is not able to regulate by inaction. On October 29, 2021, the court granted the EPA's motion for remand and vacated the EPA's withdrawal decision, thus reinstating the Section 404(c) Proposed Determination. The Court declined to impose a schedule on the EPA's proceedings on remand. The EPA has since announced its intent to issue a revised Proposed Determination for the waters of Bristol Bay. CWA 404(c) regulations require the EPA to either withdraw the Proposed Recommendation or prepare a new recommended determination "within 30 days after the conclusion of the public hearing." The deadline for this determination has been extended until May 31, 2022. The EPA has announced that this extended timeline will allow the EPA to consider available information, including the substantial volume of new information that has become available since the EPA issued the Proposed Determination, to determine its next steps in the Section 404(c) process. Such EPA activity could negatively affect the ability of the Pebble Partnership to obtain required permitting and develop the Project, even if the appeal of the 2020 ROD is successful. The Company will continue to monitor these developments closely to determine the possible impacts to the project and permitting process, as it remains the Company's position that the withdrawal of the preemptive veto by the EPA was sound and appropriate.

Much of the work by the Company through the Pebble Partnership from 2017 to early 2022 has focused on facilitating and providing support to the federal EIS permitting process and subsequent appeal. The Company has also continued to actively engage and consult with project stakeholders to share information and gather feedback on the Pebble Project, its potential effects and proposed mitigation. In 2018, 2019 and 2020, right-of-way agreements were secured with Alaska Native village corporations and other landowners whose lands cover portions of several proposed transportation and infrastructure routes for the Pebble Project. Opportunities for additional community benefits from development of the project have also been explored, including the Pebble Performance Dividend revenue sharing program for full-time adult residents of Bristol Bay communities, and a Memorandum of Understanding with Alaska Peninsula Corporation announced in July 2020.

In September 2021, the Company announced the results of a Preliminary Economic Assessment of the Pebble Project ("**2021 PEA**"). 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. It also examines 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, see [Item 5 – Description of Business](#) below for additional details.

In February 2022, the Company released a comprehensive study authored by IHS Markit, a leading global source of critical information and insight, entitled *Economic Contribution Assessment of the Proposed Pebble Project to the US national and state economies*. Commissioned by the Company, the IHS Markit report is an independent expert study that provides a detailed review of the significant economic impact that the Pebble Project, if developed, could have both nationally and at the state level, but particularly for Alaskans. The report focuses on two of the potential scenarios presented in the 2021 PEA: the Proposed Project and the Production Year 5 Potential Expansion Scenario with Gold Plant. The IHS Markit report is based on the production scenarios and related assumptions as presented in the 2021 PEA. Any changes to the production scenarios outlined in the 2021 PEA as a result of these factors could have a material impact on the projections implied by the IHS Markit report.

Results are presented for three time horizons:

- The Initial capital phase, which is common to both scenarios;
- Year 1 through Year 5. Differences in the economic contributions between the scenarios are due to the capital investments required to expand mine capacity and add the gold plant in the Year 5 Potential Expansion Scenario. For example, during this period, the Proposed Project would support 5,698 full time high paying jobs across the United States; the Year 5 Potential Expansion scenario would support 13,763 of these jobs; and
- Year 6 through Year 20, which allows for comparing the difference in “steady state” mining operations of both scenarios. For example, the Proposed Project would support 5,667 full time high paying jobs across the United States, whereas the Year 5 Potential Expansion Scenario would support 12,774 of these jobs.

The results of the Economic Contribution Assessment study are summarized in detail in the Company's February 28, 2022 news release. Additional information on the Economic Contribution Assessment study can be found on the Company's website at www.northerndynastyminerals.com/responsible-mining/economic-benefits. The information regarding the Economic Contribution Assessment study in the Company's press release and on the Company's website is not incorporated into this AIF.

Corporate activities have been directed toward raising capital to support the permitting process and discussions directed toward securing a partner with which to advance the overall development of the project. Northern Dynasty has completed the following financings and/or raised funds within the past three years in order to fund its business operations:

- In 2019 and 2020, the Company completed four two-part financings.
 - in March 2019, the Company completed:
 - a bought deal offering of 17,968,750 common shares at US\$0.64 per common share for gross proceeds of US\$11.5 million (\$15.3 million), which included the exercise of an over-allotment option of 2,343,750 common shares for additional gross proceeds of US\$1.5 million. The offering was completed pursuant to an underwriting agreement, among the Company and Cantor Fitzgerald Canada Corporation, as lead underwriter and sole bookrunner, and a syndicate of underwriters including BMO Nesbitt Burns Inc., H.C. Wainwright & Co., LLC. and TD Securities Inc. (collectively, the “**Underwriters**”); and
 - a private placement of 3,769,476 common shares at \$0.86 (US\$0.64) per common share for gross proceeds of approximately \$3.2 million (US\$2.4 million).
 - in June 2019, the Company completed:
 - a bought deal offering of 12,200,000 common shares at US\$0.41 per common share for gross proceeds of approximately US\$5.0 million (\$6.6 million). The offering was made through the Underwriters described above. The Underwriters received 244,000 non-transferable common

- share warrants, each warrant exercisable into one common share of the Company at an exercise price of US\$0.41 per common share until June 24, 2020, which were all exercised; and
- a private placement of 3,660,000 common shares of the Company at US\$0.41 per common share for gross proceeds of approximately US\$1.5 million (\$2.0 million).
- in August 2019, the Company completed:
 - a bought deal offering of 15,333,334 common shares of the Company at the price of US\$0.75 per Offered Share for aggregate gross proceeds of approximately US\$11.5 million (\$15.3 million); and
 - a non-brokered private placement to investors outside of the United States of 2,866,665 common shares of the Company at the Issue Price for gross proceeds to the Company of US\$2.15 million (\$2.8 million).
- in December 2019 and January 2020, the Company completed:
 - an underwritten public offering of 41,975,000 common shares at a price of US\$0.37 per common share for gross proceeds of approximately US\$15.5 million (\$20.6 million, completed in December 2019); and
 - a non-brokered private placement of 13,688,823 common shares of the Company at a price of US\$0.37 per common share for gross proceeds of approximately US\$5.1 million (\$6.7 million, completed in January 2020).
- in May 2020, the Company completed:
 - an underwritten public offering of 14,375,000 common shares at a price of \$0.70 per common share for gross proceeds of approximately \$10.1 million; and
 - a non-brokered private placement of 10,357,143 common shares of the Company at a price of \$0.70 per common share for gross proceeds of approximately \$7.3 million.
- in July and August 2020, the Company completed:
 - an underwritten public offering of 24,150,000 common shares at a price of US\$1.46 per common share for gross proceeds of approximately US\$35.3 million (\$47.6 million, completed in August 2020); and
 - a non-brokered private placement of 5,807,534 common shares of the Company at a price of US\$1.46 per common share for gross proceeds of approximately US\$8.6 million (\$11.7 million, completed in two tranches in July and August 2020).
- in June 2021, the Company entered into an "At-the-Market Offering Agreement" (the "ATM Agreement") with H.C. Wainwright & Co. (the "Agent") whereby the Company can sell through the Agent, as sales agent, at the Company's discretion and from time-to-time during the term of the ATM Agreement, shares of the Company having an aggregate gross sales price of up to US\$14.5 million (the "ATM Facility"). Sales of the shares can only be made directly on the NYSE American or on any other existing trading market in the U.S. The Company has sold shares for an aggregate gross sales price of US\$0.7 million under the ATM Facility as of the date of this AIF.

Item 5. Description of Business

A. The Pebble Project

The Company's business is the exploration and advancement towards feasibility, permitting and ultimately development of the Pebble Project.

The Pebble Project Is Subject To State and Federal Laws

The Pebble Partnership and its subsidiaries are required to comply with all Alaska statutes in connection with the Pebble Project. These statutes govern titles, operations, environmental, development, and generally all aspects of exploration, development and operation of a mine in Alaska.

Alaska Statute 38.05.185, among others, establishes the rights to mining claims and mineral leases on lands owned by the State of Alaska and open to mineral entry. This group of statutes also cover annual labor and rental requirements, and royalties.

Operations on claims or leases on state owned land must be permitted under a plan of operations as set out in Title 11 of the Alaska Administrative Code, Chapter 86, Section 800. This regulation generally provides that the State Division of Mining can be the lead agency in coordinating the comments of all agencies which must consent to the issuance of a plan of operations, and sets the requirements for the approval of a plan of operations.

Environmental conditions are controlled by Alaska Statute 46.08 (which prohibits release of oil and hazardous substances), Alaska Statute 46.03.060 (which sets water quality standards), and Alaska Statute 46.14 (which sets air quality standards).

Once a decision is made to enter permitting, the Pebble Project will be required to satisfy permitting requirements at three levels: federal, state and local (borough). The process takes approximately 3-4 years to complete and involves 11 regulatory agencies, 60+ categories of permits and significant ongoing opportunities for public involvement. The Alaska Department of Natural Resources Large Mine Permitting Team is responsible for coordinating permitting activities for large mine projects.

To satisfy permitting requirements under NEPA and other regulatory statutes, a project must provide a comprehensive project design and operating plan for mine-site and infrastructure facilities; documentation of development alternatives investigated; mitigation and compensation strategies, and identification of residual effects; and environmental monitoring, reclamation and closure plans. The first step is to provide the required information (including a Project Description and Environmental Baseline Document) for an EIS under NEPA, prepared by a third-party contractor under the direction of a lead federal agency. The EIS determines whether sufficient evaluation of the project's environmental effects and development alternatives has been undertaken. It also provides the basis for federal, state and local government agencies to make individual permitting decisions.

Under the CWA, Section 404(c), the Administrator of the EPA is given the right to disallow the specification (including the withdrawal of specification) of any defined area as a disposal site if he or she determines that the release of material at the disposal site will have an unacceptable adverse effect on municipal water supplies, local wildlife, spawning and breeding areas of fisheries, shellfish beds, and/or recreational areas. Such decisions made by the Administrator require notice and opportunity for public hearings, and consultation with the Secretary of the Army. The Administrator shall set forth in writing and make public his or her findings and reasons for making any determination under this subsection.

B. Technical Summary

The following disclosure is based on the document entitled, *Preliminary Economic Assessment NI 43-101 Technical Report, Pebble Project, Alaska, USA*, Effective Date: September 9, 2021, by Robin Kalanchey, P.Eng., Ausenco, Hassan Ghaffari, P.Eng., Tetra Tech Canada Inc., Sabry Abdel Hafez, P.Eng., Tetra Tech Canada Inc., Les Galbraith, P.Eng., P.E., Knight Piésold Ltd., J. David Gaunt, P.Geo., Hunter Dickinson Services Inc., Eric Titley, P.Geo., Hunter Dickinson Services Inc., Stephen Hodgson, P.Eng., Hunter Dickinson Services Inc., and James

Lang, P.Geo., J M Lang Professional Consulting Inc.¹, and has been updated with information from Company files.

Introduction

The Pebble deposit was originally discovered in 1989 and was acquired by Northern Dynasty in 2001. Since that time, Northern Dynasty and subsequently the Pebble Partnership have conducted significant mineral exploration, environmental baseline data collection, and engineering work on the Pebble Project to advance it towards development.

Since the acquisition by Northern Dynasty, work at Pebble has led to an overall expansion of the Pebble deposit, as well as the discovery of several other mineralized occurrences along an extensive northeast-trending mineralized system underlying the property. Over 1 million feet of drilling has been completed on the property, a large proportion of which has been focused on the Pebble deposit.

Comprehensive deposit delineation, environmental, socioeconomic and engineering studies of the Pebble deposit began in 2004 and continued through 2013. As described in previous technical reports, the estimates indicate that the Pebble deposit contains significant amounts of copper, gold, molybdenum, silver, and rhenium.

In December 2017, Pebble Partnership filed an application for permits under the CWA and River and Harbors Act ("RHA"), triggering the requirement for an EIS under the NEPA. The EIS was prepared by the USACE with the Pebble EIS published in July 2020. The Project Description required under NEPA was updated during the EIS process. The final version, which was submitted with the Revised Project Application in June 2020, is attached to the Pebble EIS. In November 2020, USACE issued its ROD denying Pebble Partnership's application. Pebble Partnership submitted an RFA, which was accepted by USACE in February 2021 and the request is currently under adjudication.

In September 2020, Northern Dynasty published a Technical Report on the Project. The purpose of that report was to document recent studies of the occurrence of rhenium and to estimate the rhenium mineral resources in the deposit. Previous work also determined palladium is present, at least in parts of the deposit; however, insufficient analyses have been completed to date to undertake a resource estimate for that metal. The report also updated the proposed plan for the Project as documented in the Pebble EIS. In March 2021, Northern Dynasty published a Technical Report that updated the status of the Appeal of the ROD. Information on closure was added to the Project Description and Permitting Section.

The purpose of the 2021 PEA is to present the projected economics of the production plan and a corresponding project configuration which aligns with the June 2020 Revised Project Application - the Proposed Project. The 2021 PEA also explores potential expansion scenarios for the Project. The 2021 PEA is based on, and no changes have been made to, the resource estimate from the September 2020 Technical Report.

Property Description, Location and Access

Project Description

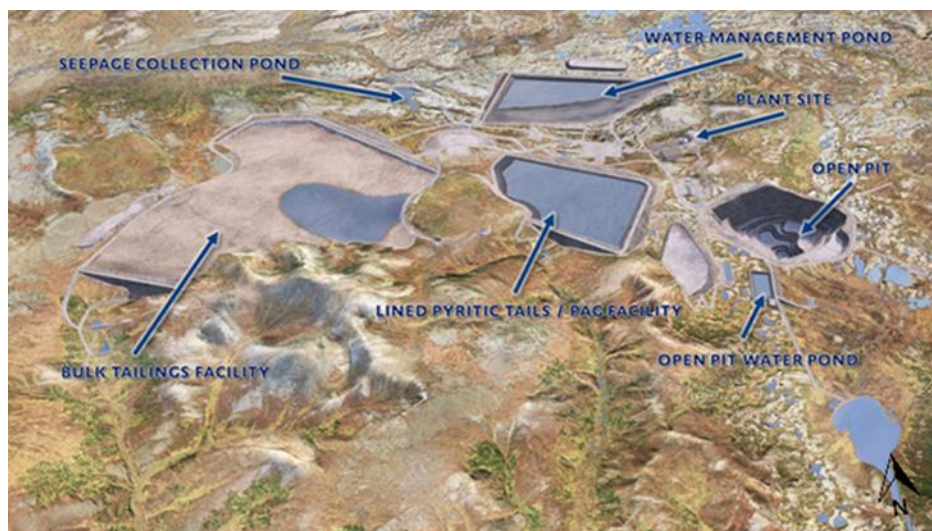
On December 22, 2017, the Pebble Partnership submitted its permit application under the CWA and RHA. The Project Description in the permit application envisaged the Pebble deposit would be developed as an open pit mine with associated on and off-site infrastructure. Over the course of the subsequent 30 months, additional engineering work completed to support the environmental assessment process, as well as recommendations from USACE in the Pebble EIS, resulted in some modifications to the plan and the Project Description was updated accordingly. The Proposed Project as described in the 2021 PEA corresponds to the Project

¹ Robin Kalanchey P.Eng., Ausenco, Hassan Ghaffari, P.Eng., Tetra Tech Canada Inc., Sabry Abdel Hafez, P.Eng., Tetra Tech Canada Inc., and Les Galbraith, P.Eng., P.E., Knight Piésold Ltd., are qualified persons who are independent of Northern Dynasty.

Description issued with the June 2020 Revised Project Application, which is attached to the FEIS. Project infrastructure includes:

- a 270-megawatt (MW) power plant located at the mine site;
- a 6-MW power plant located at the marine terminal;
- a 164-mile natural gas pipeline connecting existing supply on the Kenai Peninsula to the power plants at the marine terminal and mine sites, respectively;
- an 82-mile transportation corridor from the mine site to the marine terminal, located north of Diamond Point in Iliamna Bay on Cook Inlet, consisting of:
 - a private two-lane unpaved road that also connects to the existing Iliamna/Newhalen road system;
 - the on-shore portion of the natural gas pipeline, buried adjacent to the road;
 - a concentrate pipeline to transport copper-gold concentrate from the mine site to the port with a return water pipeline to the mine site, both buried adjacent to the road;
- a marine terminal incorporating:
 - concentrate dewatering, storage and handling;
 - fuel and supply storage; and
 - barge docks for receiving supplies and to facilitate bulk transshipment of concentrate to an offshore location in Iniskin Bay for loading onto bulk carriers.

The mine site layout is shown in below:



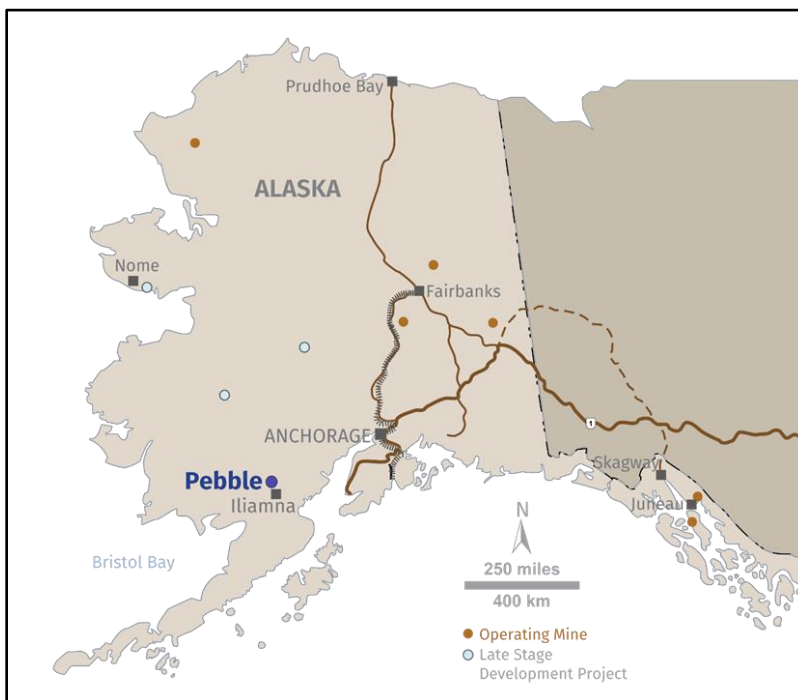
Source: September 2021 Technical Report

Following four and a half years of construction activity, the Proposed Project would operate for 20 years, with conventional drill-blast-shovel-truck operations in an open pit feeding a conventional copper porphyry flotation process plant. The mining rate would average approximately 70 million tons per year, with 66 million tons of mineralized material processed through the process plant each year (180,000 tons per day), for an extremely low life-of-mine waste to mineralized material ratio (strip ratio) of 0.12:1.

The development plan outlined in the Proposed Project uses a portion of the currently estimated Pebble mineral resources. This does not preclude future development of additional resources, but such development would require additional evaluation and would be subject to separate permitting processes.

Location and Access

The Pebble deposit is located in southwest Alaska, approximately 200 miles southwest of Anchorage, 17 miles northwest of the village of Iliamna, 100 miles northeast of Bristol Bay.



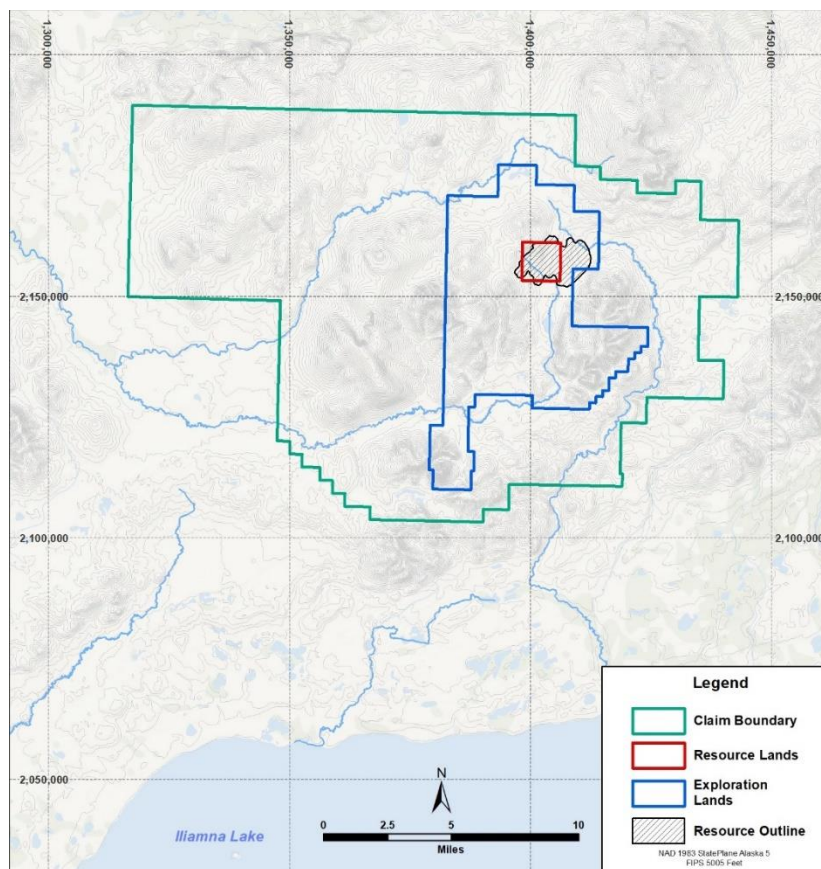
Source: September 2021 Technical Report

Northern Dynasty holds indirectly through Pebble East Claims Corporation and Pebble West Claims Corporation, wholly-owned subsidiaries of the wholly-owned Pebble Partnership, a 100% interest in a contiguous block of 1,840 administratively active mining claims² and leasehold locations covering approximately 274 mi² (which includes the Pebble deposit). The claim boundaries have not been surveyed.

State mineral claims in Alaska are kept in good standing by performing annual assessment work or in lieu of assessment work by paying \$100 per year per 40 acre (0.06 mi²) mineral claim, and by paying annual escalating State rental fees each year. Assessment work is due annually by noon of September 1. However, credit for excess assessment work can be banked for a maximum of four years after work is performed and can be applied as necessary to continue to hold the claims in good standing. The Project claims have a variable amount of assessment work credit available that can be applied in this way. Annual assessment work obligations for the Project total US\$442,900 and are due each year on September 1. Annual State rentals for 2022 are approximately US\$912,260 and are payable no later than 90 days after the assessment work is due (approximately December 1).

Teck Resources Limited ("**Teck**") holds a 4% pre-payback net profits interest (after debt service), followed by a 5% after-payback net profits interest in any mine production from the Exploration Lands, which are shown in the figure below.

² The Company reduced its claims holdings in November 2021.



Source: Company Files

In June 2020, the Pebble Partnership established the Pebble Performance Dividend LLP to distribute a 3% net profits royalty interest in the Pebble Project to adult residents of Bristol Bay villages that have subscribed as participants. The Pebble Performance Dividend will distribute a guaranteed minimum annual payment of US\$3 million each year the Pebble mine operates, beginning at the outset of Project construction.

Northern Dynasty currently does not own any surface rights associated with the mineral claims that comprise the Pebble property. All lands are held by the State of Alaska, and surface rights may be acquired from the State government once areas required for mine development have been determined and permits awarded.

The access corridor is owned by a number of landowners, including the State of Alaska, Alaska Native Village Corporations, and private individuals. Pebble Partnership has completed access agreements with two Native Village Corporations and a private individual. Negotiations have advanced with other Native Village Corporations and individuals, but no agreements are in place. In June 2021, one of the Native Village Corporations announced they had signed an agreement whereby a fund has obtained an option to buy portions of their land to create a conservation easement. The fund must exercise its option by the end of 2022. If the fund closes this agreement with the Native Village Corporation, the Pebble Partnership would be required to identify an alternate route to the proposed marine terminal on Cook Inlet.

A portion of the mineral claims are subject to a Net Profits Interest ("NPI") royalty payable to Teck, as described above. However, the portion of the deposit to be mined by the Proposed Project lies outside the portion subject to the NPI and is therefore not subject to the Teck royalty. The Project is subject to a State of Alaska royalty.

The Pebble property is within the Lake and Peninsula Borough and is subject to a 1.5% severance tax. The life of mine severance tax payments for the Proposed Project could total approximately \$480 million and range as high as \$4.5 billion for the life of the Potential Expansion Scenarios with a gold plant.

Permits necessary for exploration drilling and other field programs associated with pre-development assessment of the Pebble Project are applied for as required each year. Additional information on permitting

is provided in [Environment and Permitting](#) below. Of note is the ROD by USACE to deny Pebble Partnership's CWA 404 permit application. That denial is currently under appeal. See discussion below under [Environment and Permitting](#).

The map below shows a proposed infrastructure corridor for the Project, as further described as the LEDPA in the Pebble EIS.



Source: September 2021 Technical Report

History

Cominco Alaska, a division of Cominco Ltd., now Teck, began reconnaissance exploration in the Pebble region in the mid-1980s, and in 1984 discovered the Sharp Mountain gold prospect near the southern margin of the current property. Teck staked their first mineral claims on the Property during reconnaissance mapping and sampling programs in the Cone and Sharp Mountain areas in August and September 1984. In November 1987, Teck staked claims on the newly-discovered Sill and Pebble prospects and added claims to these two areas in July 1988. This staking, along with additional claims added in the 1990s, led to the formation of a large continuous claim group. Teck completed a two-part purchase option with Hunter Dickinson Group Inc. ("HDGI"), which in turn assigned 80% of that option to Northern Dynasty in October 2001.

The first part of the option agreement covered that portion of the property which had previously been drilled and on which the majority of the then known copper mineralization occurred (the Resource Lands Option) and the remaining area outside the Resource Lands (the "Exploration Lands"). In November 2004, Northern Dynasty exercised the Resource Lands Option and acquired 80% of the Resource Lands. In February 2005, Teck elected to sell its residual 50% interest in the Exploration Lands to Northern Dynasty for US\$4 million. Teck still retains a 4% pre-payback advance net profits royalty interest (after debt service) and 5% after-payback net profits interest royalty in any mine production from the Exploration Lands portion of the Pebble property.

In June 2006, Northern Dynasty acquired, through its Alaska subsidiaries, the remaining HDGI 20% interest in the Resource Lands and Exploration Lands by acquiring HDGI from its shareholders and through its various subsidiaries had thereby acquired an aggregate 100% interest in the Pebble Property, subject only to the Teck net-profits royalties on the Exploration Lands.

In July 2007, the Pebble Partnership was created and an indirectly wholly-owned subsidiary of Anglo American plc ("Anglo American") subscribed for 50% of the Pebble Partnership's equity effective July 31, 2007. In December 2013, Northern Dynasty exercised its right to acquire Anglo American's interest in the Pebble Partnership and now holds a 100% interest in the Pebble Partnership.

On June 29, 2010, Northern Dynasty entered into an agreement with Liberty Star Uranium and Metals Corp. and its subsidiary, Big Chunk Corp. (together, "Liberty Star"), pursuant to which Liberty Star sold 23.8 mi² of

claims (the 95 Purchased Claims) to a U.S. subsidiary of Northern Dynasty in consideration for both a \$1 million cash payment and a secured convertible loan from Northern Dynasty in the amount of \$3 million. Northern Dynasty later agreed to accept transfer of 199 claims (the "**Settlement Claims**") located north of the ground held 100% by the Pebble Partnership in settlement of the loan, and subsequently both the Purchased Claims and the Settlement Claims were transferred to a Northern Dynasty subsidiary and ultimately to Pebble West Claims Corporation, a subsidiary of the Pebble Partnership.

On January 31, 2012, the Pebble Partnership entered into a Limited Liability Company Agreement with Full Metal Minerals (USA) Inc. ("**FMMUSA**"), a wholly-owned subsidiary of Full Metal Minerals Corp., to form Kaskanak Copper LLC. On May 8, 2013, the Pebble Partnership purchased FMMUSA's entire ownership interest in the LLC for a cash consideration of \$750,000. As a result, the Pebble Partnership gained a 100% ownership interest in the LLC, the indirect owner of a 100% interest in a group of 464 claims located south and west of other ground held by the Pebble Partnership. In 2014 the LLC was merged into Pebble East Claims Corporation, a subsidiary of the Pebble Partnership, which now holds title to these claims.

On December 15, 2017, Northern Dynasty entered into a Framework Agreement with First Quantum Minerals Ltd., which made an early option payment of US\$37.5 million to Northern Dynasty, applied solely for the purposes of progressing the permitting of the Proposed Project but withdrew from the Project in 2018.

Geological Setting, Mineralization and Deposit Types

Pebble is a porphyry-style copper-gold-molybdenum-silver-rhenium deposit that comprises the Pebble East and Pebble West zones of approximately equal size, with slightly lower-grade mineralization in the center of the deposit where the two zones merge. The Pebble deposit is located at the intersection of crustal-scale structures that are oriented both parallel and obliquely to a magmatic arc which was active in the mid-Cretaceous and which developed in response to the northward subduction of the Pacific Plate beneath the Wrangellia Superterrane.

The oldest rock within the Pebble district is the Jurassic-Cretaceous age Kahiltna flysch, composed of turbiditic clastic sedimentary rocks, interbedded basalt flows and associated gabbro intrusions. During the mid-Cretaceous (99 to 96 Ma), the Kahiltna assemblage was intruded first by approximately coeval granodiorite and diorite sills and slightly later by alkalic monzonite intrusions. At approximately 90 Ma, hornblende diorite porphyry plutons of the Kaskanak batholith were emplaced. Copper-gold-molybdenum-silver-rhenium mineralization is related to smaller granodiorite plutons and dykes that are similar in composition to, and emplaced near and above the margins of, the Kaskanak batholith.

The Pebble East and Pebble West zones are coeval hydrothermal centers within a single magmatic-hydrothermal system. The movement of mineralizing fluids was constrained by a broadly vertical fracture system acting in conjunction with a hornfels aquitard that induced extensive lateral fluid migration. The large size of the deposit, as well as variations in metal grade and ratios, may be the result of multiple stages of metal introduction and redistribution.

Mineralization in the Pebble West zone extends from surface to approximately 3,000 ft deep and is centered on four small granodiorite plutons. Mineralization is hosted by flysch, diorite and granodiorite sills, and alkalic intrusions and breccias. The Pebble East zone is of higher grade and extends to a depth of at least 5,810 ft; mineralization on the eastern side of the zone was later dropped 1,970 to 2,950 ft by normal faults which bound the northeast-trending East Graben. The Pebble East zone mineralization is hosted by granodiorite plutons and dykes, and by adjacent granodiorite sills and flysch. The Pebble East and West zone granodiorite plutons merge at depth.

Mineralization at Pebble is predominantly hypogene, although the Pebble West zone contains a thin zone of variably developed supergene mineralization overlain by a thin leached cap. Disseminated and vein-hosted copper-gold-molybdenum-silver-rhenium mineralization, dominated by chalcopyrite and locally accompanied by bornite, is associated with early potassic alteration in the shallow part of the Pebble East zone and with early sodic-potassic alteration in the Pebble West zone and deeper portions of the Pebble East zone. Rhenium occurs in molybdenite and high rhenium concentrations are present in molybdenite concentrates. Elevated palladium concentrations occur in many parts of the deposit but are highest in rocks affected by advanced argillic alteration. High-grade copper-gold mineralization also is associated with younger advanced argillic alteration that overprinted potassic and sodic-potassic alteration and was controlled by a syn-hydrothermal, brittle-

ductile fault zone located near the eastern margin of the Pebble East zone. Late quartz veins introduced additional molybdenum into several parts of the deposit.

Exploration

Geological, geochemical and geophysical surveys were conducted in the Project area from 2001 to 2007 by Northern Dynasty and since mid-2007 by the Pebble Partnership.

Geological mapping for rock type, structure and alteration was done between 2001 and 2006 at the entire Project area. This work provided an important geological framework for interpretation of other exploration data and drilling programs.

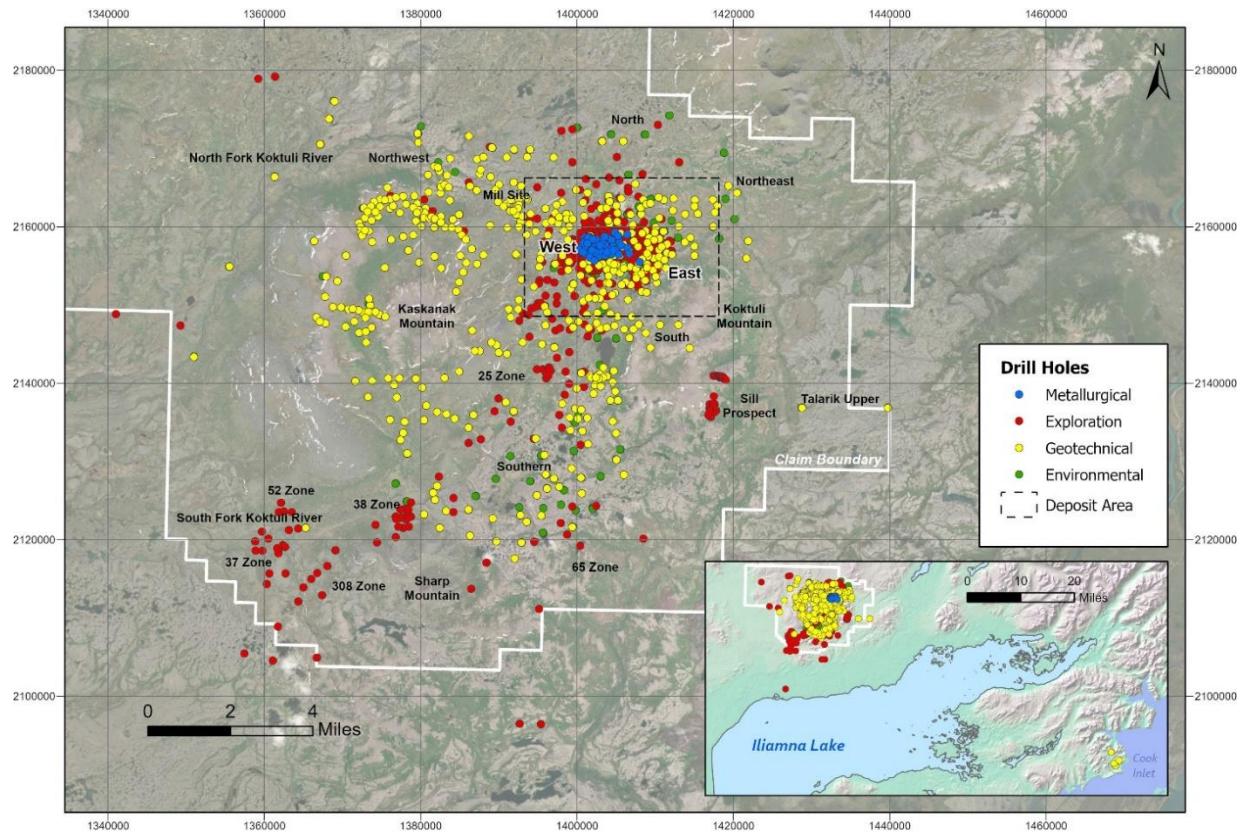
Geophysical surveys were completed between 2001 and 2010. In 2001, dipole-dipole IP surveys totalling 19.3 line-mi were completed by Zonge Geosciences for Northern Dynasty, following up on and augmenting similar surveys completed by Teck. During 2002, a ground magnetometer survey totalling 11.6 line-mi was completed at Pebble. The principal objective of this survey was to obtain a higher resolution map of magnetic patterns than was available from existing regional government magnetic maps. During 2007, a limited magnetotelluric survey was completed by GSY-USA Inc., under the supervision of Northern Dynasty geologists. The survey focused on the area of drilling in the Pebble East zone and comprised 196 stations on nine east-west lines and one north-south line, at a nominal station spacing of 656 ft. In July 2009, Spectrem Air Limited completed an airborne electromagnetic, magnetic and radiometric survey over the Pebble area. The objectives of this work included provision of geophysical constraints for structural and geological interpretation in areas with significant glacial cover. Between the second half of 2009 and mid-2010, a total of 120.5 line-mi of IP chargeability and resistivity data were collected by Zonge Engineering and Research Organization Inc. The objective of this survey was to extend the area of IP coverage completed prior to 2001 by Teck and during 2001 by Northern Dynasty. During 2010, an airborne electromagnetic and magnetometer geophysical survey was completed on the Pebble property totalling 4,009 line-mi.

Geochemical surveys were completed between 2001 and 2012. Between 2001 and 2003, Northern Dynasty collected 1,026 soil samples (Rebagliati and Lang, 2009). Samples were more widely spaced near the north, west and southwest margins of the grid. Three very limited surficial geochemical surveys were completed by the Pebble Partnership in 2010 and 2011; no significant geochemical anomalies were identified. A total of 126 samples, comprising 113 till and 13 soil samples, were collected on the KAS claims located in the southern end of the property; samples were on lines spaced approximately 8,000 ft apart with a sample spacing of approximately 1,300 ft. Additional surveys were completed between 2007 and 2012 by researchers from the USGS and the University of Alaska Anchorage. The results of these surveys were largely consistent with the results obtained by earlier soil sampling programs.

Drilling, Sampling and Data Verification

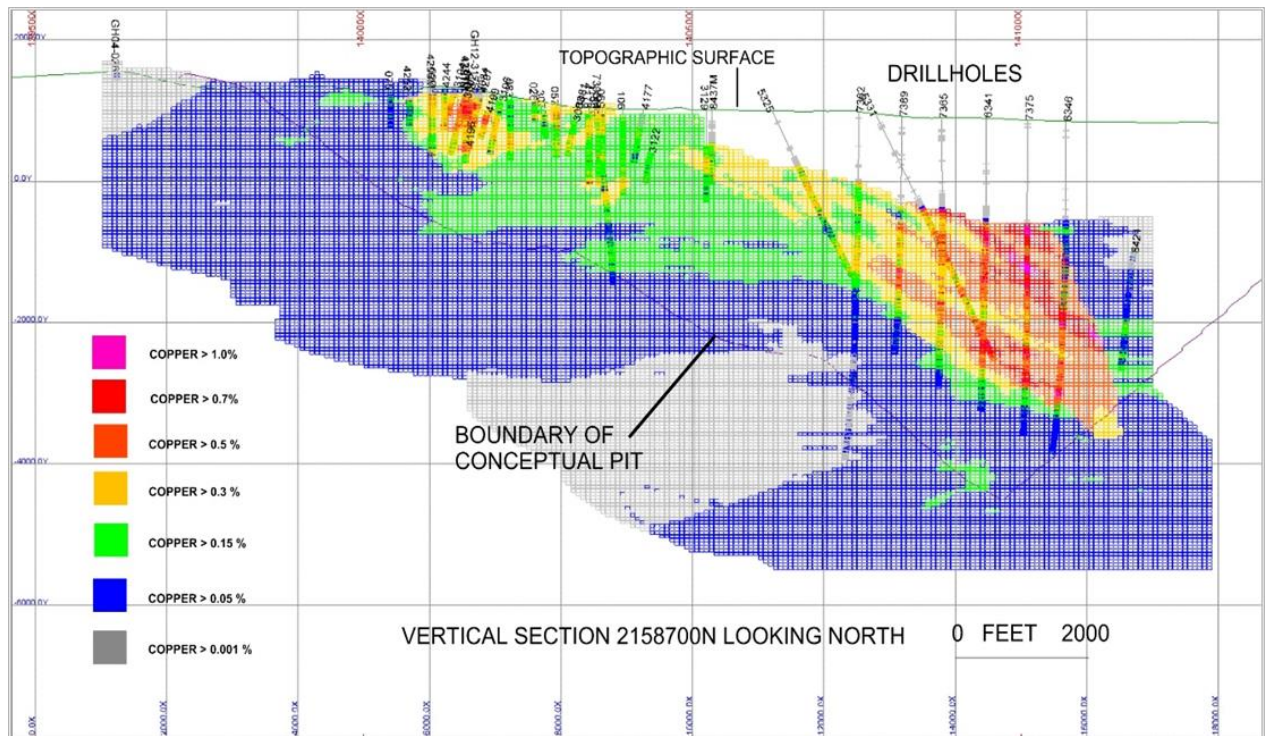
Over 1 million feet of drilling has been completed on the property; a large proportion of the drilling has been focused on the Pebble deposit, from the late 1980's to 1990's by Teck and since 2001 by Northern Dynasty and the Pebble Partnership. Drill hole locations³ are shown in the figure below.

³ Holes drilled at Cook Inlet shown in the inset map below were geotechnical holes to assess potential infrastructure at that site.



Source: Company Files

The following is vertical Section through the Pebble deposit, showing block and composite copper grades; Section Line 2158700N:



Source: 2021 Technical Report

The Pebble deposit has been extensively explored by core drilling, with 80,859 samples taken from the drill core for assay analysis. Nearly all potentially mineralized Cretaceous core drilled and recovered has been sampled by halving in 10 ft lengths. Similarly, all core recovered from the Late Cretaceous to Early Tertiary cover sequence has also been sampled, typically on 20 ft sample lengths, with some shorter sample intervals in areas of geologic interest. Unconsolidated overburden material, where it exists, is generally not recovered by core drilling and therefore not usually sampled.

Rock chips from the 223 rotary percussion holes were generally not sampled for assay analysis, as the holes were drilled for monitoring wells and environmental purposes. Only 35 samples were taken from the drill chips of 26 rotary percussion holes outside the Pebble deposit area, which were drilled for condemnation purposes.

Pebble core was boxed at the rig and transported daily by helicopter to a secure logging facility in Iliamna. Half cores remaining after sampling were replaced in the original core boxes and stored at Iliamna, AK in a secure compound. Crushed reject samples from the 2006 through 2018 analytical programs are stored in locked containers at Delta Junction, AK. Drill core assay pulps from the 1989 through 2018 programs are stored at a secure warehouse in Surrey, BC.

Analytical work in 2002 and from 2004 to 2018 was completed by ALS Minerals Laboratories of North Vancouver, an ISO/IEC 17025:2005 certified laboratory. Analytical work for the 2003 drilling program was completed by SGS Canada Inc. of Toronto, ON, an ISO 9002 registered, ISO 17025 accredited laboratory.

Northern Dynasty and the Pebble Partnership maintained an effective Quality Assurance /Quality Control ("QA/QC") program consistent with industry best practices, which was continued from 2007 to 2018 under the Pebble Partnership. This program is in addition to the QA/QC procedures used internally by the analytical laboratories. The QA/QC program has also been subject to independent review by Analytical Laboratory Consultants Ltd. and Nicholson Analytical Consulting through 2012. The analytical consultants provide ongoing monitoring, including facility inspection and timely reporting of the performance of standards, blanks and duplicates in the sampling and analytical program. The results of this program indicate that analytical results are of a high quality, suitable for use in detailed modelling and resource evaluation studies.

Samples from the 2002 through 2012 core drilling programs completed by Northern Dynasty and the Pebble Partnership provide 91% of the assays used in the Mineral Resource estimate for the Pebble deposit. These drilling and sampling programs were carried out in a proficient manner consistent with industry standard practices at the time of the programs. Core recovery was typically very good and averaged over 98%; two-thirds of all measured intervals have 100% core recovery. No significant factors of drilling, sampling, or recovery that impact the accuracy and reliability of the results were observed.

The remaining 9% of assays used in the Mineral Resource estimate derive from historical 1988 to 1992 and 1997 Teck core drill programs. Northern Dynasty expended considerable effort to assess the veracity of the Teck drilling over several years. This included: re-survey of drill hole locations, review of remaining half core, extensive re-drilling of areas targeted by Teck, and plotting and comparison of Teck drill holes with nearby Northern Dynasty drill holes. No significant factors of the drilling, sampling or recovery of the Teck program that impact the accuracy and reliability of the results were observed.

Additional details are provided in the Company's 2020 Annual Information Form and in the 2021 PEA.

Metallurgical Testing and Mineral Processing

Metallurgical testwork for the Project was initiated by Northern Dynasty in 2003 and continued under the direction of Northern Dynasty until 2008. From 2008 to 2013, metallurgical testwork progressed under the direction of the Pebble Partnership.

A conventional flotation process is proposed to produce saleable copper-gold and molybdenum concentrates. The flotation test results on variability samples derived from 103 locked cycle flotation tests and the subsequent copper-molybdenum separation flotation tests indicate that marketable copper and molybdenum concentrates can be produced. The copper concentrate will also contain gold and silver contents that meet or exceed payable levels in representative smelter contracts; the molybdenum concentrate will contain significant rhenium, with a reported grade range from 791 to 832 g/t Re observed in the locked cycle test ("LCT") results of the copper-molybdenum separation tests.

Gravity gold recovery tests were completed on three composite samples in 2010 and on four composite samples from the continuous testwork program. These demonstrated gold was recoverable by gravity and accordingly treatment of a side stream from the regrind circuit, with 1% overall gold recovery to a gravity concentrate. In the flowsheet for the Proposed Project, the gravity concentrate would be bagged and shipped off-site to a refinery. In the potential expansion scenarios with production of gold doré at site, the gravity concentrate would comprise a portion of the secondary gold plant feed.

A preliminary hydrometallurgical test program was performed on rougher and cleaner molybdenum concentrates to investigate the production of the marketable products of molybdenum trioxide (MoO_3) and ammonium perrhenate (NH_4ReO_4). The test program included pressure oxidation leach, a series of metal extractions/purifications from the pregnant leach solution, and a calcination process. The tested methods were found technically feasible. Satisfactory dissolution rates of molybdenum and rhenium were obtained from the rougher molybdenum concentrate samples while additional alkaline leach is required on the pressure oxidation leach residues for the cleaner molybdenum concentrate samples.

In the 2021 PEA, the overall metal recovery projections of copper, gold, silver and molybdenum to concentrate are adjusted to an increased primary grind size (from 125 μm to 135 μm) from those published in the 2018 technical report. A rhenium recovery estimate at a high level has been completed and included. The table below provides projected metals recoveries via flotation concentration. The recovery estimate bases are summarized as follows:

- The initial metal recovery projections of copper, gold, silver and molybdenum were published in 2014 based on a combined flotation and cyanide leach method. A total of 111 LCTs on the 103 samples representing 8 geometallurgical domains across the east and west parts of the Pebble deposit were reviewed to establish the copper, gold and molybdenum distributions to the bulk copper-molybdenum concentrate. Ten of the 111 LCTs with silver assay results were utilized to estimate the silver recovery to the bulk flotation concentrate.
- The 2018 metal recoveries were updated to reflect the changes of the proposed processing methods, including the exclusion of the cyanide leach process and the implementation of a coarser primary grind particle size.
- The 2020 metal recovery projections were further updated to include rhenium recovery from the molybdenum concentrate. The estimated rhenium recovery was 70.8%, based on the 10 LCT results of the rhenium recovery to the bulk concentrate, a one LCT stage recovery result in the subsequent separation of copper and molybdenum, as well as a recovery adjustment due to the change of primary grind size.

Projected Metallurgical Recoveries

Domain	Flotation Recovery %				
	Cu Con, 26% Cu			Mo Con, 50% Mo	
	Cu	Au	Ag	Mo	Re
Supergene:					
Sodic Potassic	74.7	60.4	64.1	51.2	70.8
Illite Pyrite	68.1	43.9	64.1	62.6	70.8
Hypogene:					
Illite Pyrite	91.0	46.2	67.5	77.1	70.8
Sodic Potassic	91.0	63.8	67.7	80.9	70.8
Potassic	93.0	63.1	66.0	84.8	70.8
Quartz Pyrophyllite	95.0	65.5	64.6	80.7	70.8
Sericite	91.0	41.3	67.5	77.1	70.8
Quartz Sericite Pyrite	90.5	33.3	67.5	86.8	70.8
LOM Average	87	60	67	75	71

Note: Prepared by Tetra Tech, 2021. An additional 1% Au recovery to the gravity concentrate is expected.

Mineral Resource Estimates

The current resource estimate is based on approximately 59,000 assays obtained from 699 drill holes. The resource was estimated by ordinary kriging and is tabulated below. The tabulation is based on copper equivalency ("CuEq") that incorporates the contribution of copper, gold and molybdenum. Although the estimate includes silver and rhenium, neither were used as part of the copper equivalency calculation in order to facilitate comparison with previous estimates which did not consider the lesser economic contribution of either of these metals. The highlighted 0.3% CuEq cut off is considered appropriate for deposits of this type in the Americas.

Pebble Resource Estimate August 2020

MEASURED			METAL GRADES					CONTAINED METAL				
Cutoff CuEq (%)	CuEq (%)	Tonnage	Cu (%)	Au (g/t)	Mo (ppm)	Ag (g/t)	Re (ppm)	Cu (Blbs)	Au (Moz)	Mo (Blbs)	Ag (Moz)	Re (Kg)
0.1	0.64	531,000,000	0.33	0.35	177	1.7	0.31	3.87	5.96	0.21	28.4	167,000
0.2	0.64	530,000,000	0.33	0.35	177	1.7	0.32	3.87	5.96	0.21	28.4	167,000
0.3	0.65	527,000,000	0.33	0.35	178	1.7	0.32	3.83	5.93	0.21	28.1	167,000
0.4	0.66	508,000,000	0.34	0.36	180	1.7	0.32	3.81	5.88	0.20	27.4	163,000
0.6	0.77	279,000,000	0.40	0.42	203	1.8	0.36	2.46	3.77	0.12	16.5	100,000
1.0	1.16	28,000,000	0.62	0.62	302	2.3	0.52	0.38	0.56	0.02	2.0	14,000

INDICATED			METAL GRADES					CONTAINED METAL				
Cutoff CuEq (%)	CuEq (%)	Tonnage	Cu (%)	Au (g/t)	Mo (ppm)	Ag (g/t)	Re (ppm)	Cu (Blbs)	Au (Moz)	Mo (Blbs)	Ag (Moz)	Re (Kg)
0.1	0.73	6,409,000,000	0.39	0.32	233	1.6	0.39	54.38	66.56	3.29	328.5	2,500,000
0.2	0.73	6,305,000,000	0.39	0.33	236	1.6	0.40	54.20	66.08	3.28	326.0	2,497,000
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	2,443,000
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	2,271,000
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	1,748,000
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	853,000

MEASURED+INDICATED			METAL GRADES					CONTAINED METAL				
Cutoff CuEq (%)	CuEq (%)	Tonnage	Cu (%)	Au (g/t)	Mo (ppm)	Ag (g/t)	Re (ppm)	Cu (Blbs)	Au (Moz)	Mo (Blbs)	Ag (Moz)	Re (Kg)
0.1	0.72	6,941,000,000	0.38	0.33	228	1.6	0.39	58.29	72.53	3.49	357.1	2,672,000
0.2	0.73	6,835,000,000	0.39	0.33	231	1.6	0.39	58.15	72.08	3.49	354.5	2,666,000
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	2,615,000
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	2,431,000
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	1,848,000
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	867,000

INFERRED			METAL GRADES					CONTAINED METAL				
Cutoff CuEq (%)	CuEq (%)	Tonnage	Cu (%)	Au (g/t)	Mo (ppm)	Ag (g/t)	Re (ppm)	Cu (Blbs)	Au (Moz)	Mo (Blbs)	Ag (Moz)	Re (Kg)
0.1	0.45	6,435,000,000	0.20	0.23	174	1.1	0.28	28.22	47.38	2.47	232.1	1,789,000
0.2	0.48	5,819,000,000	0.22	0.24	190	1.1	0.30	27.57	44.34	2.44	212.2	1,763,000
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	1,603,000
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	1,154,000
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	673,000
1.0	1.20	361,000,000	0.68	0.45	377	2.3	0.69	5.41	5.22	0.30	26.3	251,000

- David Gaunt, P. Geo, a qualified person who is not independent of Northern Dynasty is responsible for the estimate.
- CuEq calculations use the following metal prices: US\$1.85 /lb for Cu, US\$902 /oz for Au and US\$12.50 /lb for Mo, and recoveries: 85% Cu, 69.6% Au, and 77.8% Mo (Pebble West zone) and 89.3% Cu, 76.8% Au, 83.7% Mo (Pebble East zone).
- Contained metal calculations are based on 100% recoveries.
- The base case Mineral Resource estimate (bolded) is reported above a 0.30% CuEq cut-off.
- The Mineral Resource estimate is constrained by a conceptual pit shell that was developed using a Lerchs-Grossmann algorithm and is based in the following parameters: 42 degree pit slope; metal prices and recoveries for gold of US\$1,540.00/oz and 61% Au, for copper of US\$3.63/lb and 91% Cu, for silver of US\$20.00/oz and 67% Ag and for molybdenum of US\$12.36/lb and 81% Mo, respectively; a mining cost of US\$1.01/ton with a US\$0.03/ton/bench increment and other costs (including processing, G&A and transport) of US\$6.74/ton.
- The terms "Measured Resources", "Indicated Resources" and "Inferred Resources" are recognized and required by Canadian regulations under 43-101. The SEC has adopted amendments to its disclosure rules to modernize the mineral property disclosure required for issuers whose securities are registered with the SEC under the US Securities Exchange Act of 1934 that adopt definitions of the terms and categories of resources which are "substantially similar" to the corresponding terms under Canadian Regulations in 43-101. Accordingly, there is no assurance any mineral resources that we may report as Measured Resources, Indicated Resources and Inferred Resources under 43-101 would be the same had we prepared the resource estimates under the standards adopted under the SEC Modernization Rules. Investors are cautioned not to assume that all or any part of mineral deposits in these categories will ever be converted into Mineral Reserves or be legally or economically mineable. In addition, Inferred Resources have a great amount of uncertainty as to their economic and legal feasibility. Under Canadian rules, estimates of Inferred Resources may not form the basis of feasibility or pre-feasibility studies, or economic studies except for a Preliminary Economic Assessment as defined under 43-101.
- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- The Mineral Resource estimates contained herein have not been adjusted for any risk that the required environmental permits may not be obtained for the Project. The risk associated with the ability of the Project to obtain required environmental permits is a risk to the reasonable prospects for eventual economic extraction of the mineralization and the classification of the estimate as a Mineral Resource.

Proposed Mining

Mining Methods

The 2021 PEA is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that the 2021 PEA results will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

The mining operations are planned to use conventional open pit mining methods and equipment. The proposed Pebble mine (Proposed Project) would be a conventional drill, blast, truck, and shovel operation with an average mining rate of approximately 70 million tons per year and an overall strip ratio of 0.12 ton of waste per ton of mineralized material.

The open pit would be developed in stages, with each stage expanding the area and deepening the previous stage. The final dimensions of the open pit would be approximately 6,800 ft long and 5,600 ft wide, with depths to 1,950 ft.

The projected mining schedule was generated using five pushbacks and was based on a maximum processing capacity of 180,000 ton/d. Based on the selected ultimate pit, final pit design and the generated production schedule, the Proposed Project's total LOM is 21 years, including 1 year of pre-stripping followed by 20 years of production.

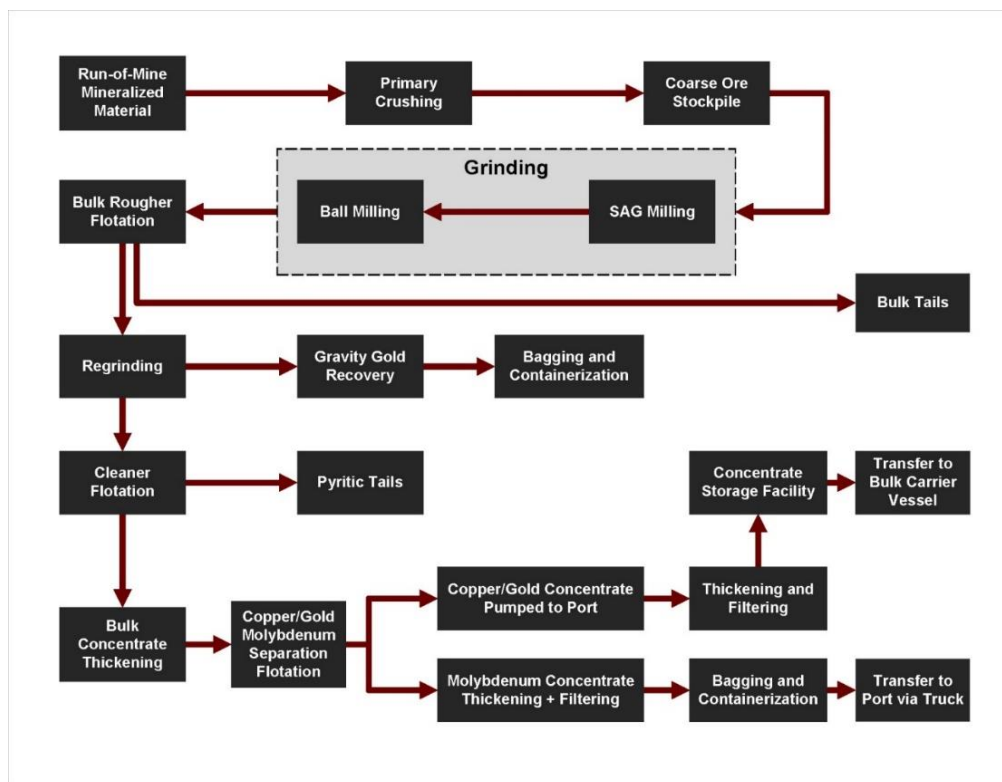
Recovery Methods

The proposed processing plant is designed to process mineralized feed material at a rate of 180,000 tons per day. The designed process to treat feed material contemplates methods that are conventional and well-proven in the industry. The comminution and recovery processes proposed are used widely in commercial practice, with no significant elements of technological innovation.

The following unit operations would be employed to produce three final products: a copper-gold flotation concentrate, a molybdenum flotation concentrate and a gravity gold concentrate:

- Primary crushing;
- Grinding with semi-autogenous grinding (“SAG”) and ball mills;
- Bulk copper-gold-molybdenum flotation;
- Molybdenum flotation to separate a copper-gold flotation concentrate and a molybdenum flotation concentrate; and
- Gravity concentration to produce a gravity gold concentrate.

A simplified process flow diagram of the entire process route is shown below.



Source: September 2021 Technical Report

The process plant flowsheet design was based on testwork results, previous study designs and industry standard practices. Further, the testwork results support the recovery projections used in the economic analysis. The production summary for the Proposed Project is shown in the table below.

Proposed Project Production Summary

Proposed Project	Units	
Mineralized Material	B tons	1.3
Copper Equivalent ⁴	%	0.58
Copper	%	0.29
Gold	oz/ton	0.009
Molybdenum	ppm	154
Silver	oz/ton	0.042
Rhenium	ppm	0.28
Waste	B tons	0.2
Open Pit Strip Ratio		0.12
Open Pit Life	Years	20
Life of Mine	Years	20
Metal Production (LOM)		
Copper	M lb	6,400
Gold (in Cu Concentrate)	k oz	7,300
Silver (in Cu Concentrate)	k oz	37,000
Gold (in Gravity Concentrate)	k oz	110
Molybdenum	M lb	300
Rhenium	k kg	230
Metal Production (Annual)⁵		
Copper	M lb	320
Copper Concentrate	k tons	559
Gold (in Cu Concentrate)	k oz	363
Silver (in Cu Concentrate)	k oz	1,800
Molybdenum	M lb	15
Molybdenum Concentrate	k tons	14
Rhenium	k kg	12

Infrastructure

The Project is located in an area of Alaska that has minimal development and would require construction of both on-site and off-site infrastructure to support construction and operations of the Proposed Project.

The primary off-site infrastructure⁶ would incorporate a natural gas pipeline, marine terminal, access road between the marine terminal and mine site, and a pipeline system to transport concentrate to the marine

⁴ CuEq calculations use metal prices: US\$1.85/lb for Cu, US\$902/oz for Au and US\$12.50/lb for Mo, and recoveries of 85% Cu, 69.6% Au, and 77.8% Mo (Pebble West zone) and 89.3% Cu, 76.8% Au, 83.7% Mo (Pebble East zone).

⁵ Life of mine volumes ÷ life of mine years.

⁶ For the Proposed Project and the Potential Expansion Scenarios, the 2021 PEA 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.

terminal. The marine terminal facility would include facilities capable of handling barges for concentrate bulk transshipment as well as large ocean barges (400 x 100 ft) for transport of construction materials and operating supplies by container. The access road would provide year-round access between the marine terminal and the mine site for construction and operations. The natural gas and concentrate pipelines would be buried adjacent to the access road.

The onsite facilities would provide all necessary support for construction and operation. These include temporary and permanent worker accommodations, power reticulation, site roads, administration buildings, truck shop, warehouse and maintenance facilities.

The Proposed Project site would also include tailings storage facilities, water management ponds, and water treatment plants (**WTPs**). Waste and water management at the Project would be an integrated system designed to safely contain these materials, to facilitate water treatment and discharge, and to provide adequate process water to support the operations. The design of these facilities would incorporate a significant climate record, extensive site investigation, and several features intended to ensure safe operation.

The Proposed Project would incorporate a sophisticated water management plan with water collection, treatment, and discharge. That plan requires attention to the annual and seasonal variability of the incoming and receiving flows and achieving very specific water quality standards for the released water. Temporary water treatment facilities would be in place during construction, followed by three WTPs during the operations and closure phases.

Natural gas-fired power plants would be constructed at both the mine site and the marine terminal.

Capital and Operating Costs

Capital Costs

The total initial capital cost for the design, construction, installation, and commissioning of the Proposed Project is estimated to be \$6.05 billion, which includes all direct, indirect, and Owner's costs, as well as a contingency. Northern Dynasty believes it is most likely that, if approved, the Proposed Project would be developed with partners who will provide the primary infrastructure (marine terminal, access road, natural gas pipeline, mine site power plant) in return for lease payments or tolls at rates which provide a return on investment to the providers of the infrastructure. The capital cost of this infrastructure which may be provided by third parties is estimated at \$1.68 billion, which reduces the cash outlay required for construction. In addition, precious metal streaming is considered a viable project financing alternative and the 2021 PEA assumes \$1.14 billion would be available to the Proposed Project in the form of various streaming agreements. The combination of third-party infrastructure financing and precious metal streaming would reduce the required capital investment for the Proposed Project to \$3.44 billion; this scenario was evaluated in the economic model as the Base Case. A Full Capital Case, without the benefit of the precious metal stream financing and third-party infrastructure participation, was also evaluated.

Sustaining capital investment in the Proposed Project over the 20-year mine life is limited to TSF improvements, and replacement of mobile equipment for mining and road maintenance. These life cycle costs are applied in the financial model on a year-by-year basis, with a cumulative total of \$1.52 billion including indirect and Owner's costs as well as contingency costs.

⁶(continued) The effective date of the cost estimates is Q1 2021.

Estimated initial capital cost for these components, including indirect costs, owners' costs and contingency are \$784 million for transportation infrastructure (marine terminal/related facilities and access road) and \$896 million for power supply (mine site power plant and natural gas pipeline).

Financial results presented in the 2021 PEA also incorporate the impact of gold streaming. The calculation assumes that 30% of gold production at Pebble would be streamed at a delivery price of \$500/oz in consideration for an estimated upfront payment of \$1.3 billion.

While Northern Dynasty does not have any arrangements or commitments for infrastructure or gold streaming in place, and any arrangements or commitments secured may ultimately be on different terms than those assumed in the 2021 PEA, it is considered to be a realistic potential outcome.

Initial reclamation trust funding and letter of credit premiums during construction would total \$179 million. The remaining mine closure and reclamation costs are not included in the capital or operating costs but are factored into the financial model to account for long term closure and water treatment plant requirements. A reclamation fund of \$1,396 million would be accumulated over the mine life comprising \$831 million in contributions and \$565 million in accrued interest.

Pebble Proposed Project – Initial Capital

Description	Cost (\$M)
Mining	321
Process	736
Other Infrastructure	345
Tailings	1,278
Pipelines	189
Access Road	296
Port Infrastructure	246
Power Generation	779
Indirect Costs	1,182
Contingency	678
Total Capital Cost Estimate	6,049
Add: Reclamation and other funding during construction	211
Initial Capital Investment – Full Capital Case	6,259
Less: Outsourced Infrastructure	(1,680)
Less: Pre-production proceeds from gold stream partners	(1,142)
Initial Capital Investment - Base Case	3,439

Operating Costs

The average life of mine operating costs for the Proposed Project Base Case, based on the 180,000 ton/day plant capacity, are estimated to be:

- Average operating cost – \$10.98/ton milled
- Average copper C1 cost (co-product basis) – \$1.65/lb CuEq
- All-in sustaining cost (AISC) (co-product basis) – \$1.88/lb CuEq
- Average gold C1 cost (co-product basis) – \$753/oz AuEq
- Average copper C1 cost (by-product basis) – \$0.69/lb
- All-in sustaining cost (AISC) (by-product basis) – \$1.10/lb
- Average gold C1 cost (by-product basis) – (\$1,148)/oz

Economic Analysis

An economic model was developed to estimate annual pre-tax and post-tax cash flows and sensitivities of the Proposed Project based on a 7% discount rate. By convention, a discount rate of 8% is typically applied to copper and other base metal projects, while 5% is applied to gold and other precious metal projects. Given the polymetallic nature of the Pebble deposit and the large contribution of gold to total revenues, a 7% blended discount rate was selected and is considered appropriate for the purposes of discounted cash flow analyses. The net present value ("NPV₇") is calculated by discounting cash flows to start of construction. The combination of third-party infrastructure financing and precious metal streaming was evaluated in the

economic model as the Base Case. A Full Capital Case, without the benefit of the precious metal stream financing and third-party infrastructure participation, was also evaluated.

Calendar years used in the economic analysis are provided for conceptual purposes only. Permits still must be obtained in support of operations and approval to proceed is still required from Northern Dynasty's Board of Directors.

The Proposed Project and the potential alternative scenarios in the 2021 PEA are preliminary in nature and include Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that the 2021 PEA results will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Proposed Project Cost and Tax Summary

	Units	Base Case	Full Capital
Costs			
Total Initial Capital Cost	\$billion	6.05	6.05
Infrastructure Lease	\$billion	1.68	-
Net Initial Capital Cost	\$billion	4.37	6.05
Sustaining Capital Cost	\$billion	1.52	1.54
Life of Mine Operating Cost ⁷	\$/ton	10.98	8.31
Copper C1 Cost ⁸	\$/lb CuEq	1.65	1.32
AISC (Co-Product Basis)	\$/lb CuEq	1.88	1.56
Gold C1 Cost ⁸	\$/oz AuEq ⁹	753	605
Closure Funding			
Annual Contribution	\$million/yr	34	34
Life of Mine Contribution	\$billion	0.83	0.83
Life of Mine Bond Premium	\$billion	0.16	0.16
Closure Fund ¹⁰	\$billion	1.4	1.4
Life of Mine Taxes¹¹			
Alaska Mining License	\$billion	0.69	0.76
Alaska Royalty	\$billion	0.30	0.33
Alaska Income Tax	\$billion	0.75	0.87
Borough Severance & Tax	\$billion	0.49	0.53
Federal Income Tax	\$billion	1.38	1.61
Annual Taxes¹²			
Alaska Mining License	\$million	34	38
Alaska Royalty	\$million	15	17
Alaska Income Tax	\$million	38	44
Borough Severance & Tax	\$million	25	26
Federal Income Tax	\$million	69	81

⁷ Includes cost of infrastructure lease - \$2.80/ton milled

⁸ C1 costs calculated on co product basis

⁹ AuEq calculation uses long term metal prices

¹⁰ Maximum value of closure fund during life of mine based on 4% compound interest

¹¹ Estimated based on current Alaskan statutes

¹² Life of mine taxes ÷ life of mine years

Financial Results

Metal Price Assumptions

Metal	Unit	Long-term (\$)
Copper	lb	3.50
Gold	oz	1,600
Molybdenum	lb	10
Silver	oz	22
Rhenium	kg	1,500

Proposed Project Forecast Financial Results

Proposed Project			
	Units	Base Case	Full Capital
Revenue¹³			
Annual Gross Revenue	\$million	1,700	1,800
Life of Mine Gross Revenue	\$million	35,000	37,000
Realization Charges			
Annual Charges	\$million	150	150
Life of Mine Charges	\$million	2,900	2,900
Net Smelter Return			
Annual NSR	\$million	1,600	1,700
Life of Mine NSR	\$million	32,000	34,000
Financial Model Results			
Post Tax IRR	%	15.7	11.2
Post Tax NPV ₇	\$million	2,300	2,000
Payback	Years	4.8	6.1

Potential Expansion Scenarios

The Proposed Project evaluated in the 2021 PEA would extract only a small portion of the total Mineral Resources estimated at Pebble. To evaluate the possible extent of opportunities for the Project, seven potential expansion scenarios were identified for consideration. Six of these potential expansion scenarios contemplate an expansion of the open pit mine and increased mill throughput over a significantly longer mine life. These scenarios were modeled on an expanded scenario outlined in a response to a Request for Information from USACE during the EIS process and which is incorporated in the EIS administrative record. Three of these six scenarios consider the addition of an onsite gold plant. The seventh potential expansion scenario contemplates the addition of the onsite gold plant to the Proposed Project without changes to its throughput or mine life. Each of the potential expansion scenarios would require additional permitting and environmental regulatory review, and there is no certainty that any of the potential expansion scenarios could be pursued. The potential expansion scenarios are designated by the year in which the contemplated expanded process plant would commence operation. They utilize the same life of mine open pit design, with variations based on the year of the expansion and the expanded throughput rate. The Year 21 potential expansion scenario is based on the scenario outlined in the EIS, with the plant expanded to 250,000 tons per day. The expanded rate in the other two potential expansion scenarios is 270,000 tons per day.

¹³ Revenue values do not include a gold plant contribution

The table below presents production information from three potential expansion scenarios and compares them to the Proposed Project.

Summary Potential Expansion Case Scenario Production Information

	Units	Proposed Project	Potential Expansion Scenarios		
			Year 21	Year 10	Year 5
Mineralized Material	B tons	1.3	8.6	8.6	8.6
CuEq ¹⁴	%	0.57	0.72	0.72	0.72
Copper	%	0.29	0.39	0.39	0.39
Gold	oz/ton	0.009	0.01	0.01	0.01
Molybdenum	ppm	154	208	208	208
Silver	oz/ton	0.042	0.047	0.046	0.046
Rhenium	ppm	0.28	0.36	0.36	0.36
Waste	B tons	0.2	14.4	14.4	14.4
Open Pit Strip Ratio		0.12	1.67	1.67	1.67
Open Pit Life	Years	20	78	73	68
Life of Mine	Years	20	101	91	90
Metal Production (LOM)					
Copper	M lb	6,400	60,400	60,400	60,400
Gold (in Cu Concentrate)	k oz	7,300	50,400	50,500	50,500
Silver (in Cu Concentrate)	k oz	37,000	267,000	267,000	267,000
Gold (in Gravity Concentrate)	k oz	110	782	783	782
Molybdenum	M lb	300	2,900	2,900	2,900
Rhenium	k kg	200	2,000	2,000	2,000
Metal Production (Annual¹⁵)					
Copper	M lb	320	600	660	670
Copper Concentrate	k tonne	559	1,000	1,200	1,200
Gold (in Cu Concentrate)	k oz	363	500	560	560
Silver (in Cu Concentrate)	k oz	1,800	2,600	2,900	3,000
Molybdenum	M lb	15	29	32	32
Molybdenum Concentrate	k tonnes	14	26	29	29
Rhenium	k kg	12	20	22	22

The estimated costs for the potential expansion scenarios are tabulated below.

¹⁴ CuEq calculations use metal prices: US\$1.85/lb for Cu, US\$902/oz for Au and US\$12.50/lb for Mo, and recoveries: 85% Cu, 69.6% Au, and 77.8% Mo (Pebble West zone) and 89.3% Cu, 76.8% Au, 83.7% Mo (Pebble East zone).

¹⁵ Life of mine volumes ÷ life of mine years

Potential Expansion Scenarios Estimated Costs

	Units	Potential Expansion Scenarios		
		Year 21	Year 10	Year 5
Costs				
Total Initial Capital Cost	\$billion	6.05	6.05	6.05
Infrastructure Lease	\$billion	1.68	1.68	1.68
Net Initial Capital Cost	\$billion	4.37	4.37	4.37
Sustaining Capital Cost	\$billion	16.9	17.0	17.2
Life of Mine Operating Cost ¹⁶	\$/ton	12.46	12.14	12.21
Copper C1 Cost ¹⁷	\$/lb CuEq	1.56	1.53	1.54
AISC (Co-Product Basis)	\$/lb CuEq	1.77	1.74	1.74
Gold C1 Cost ¹⁷	\$/oz AuEq ¹⁸	712	699	702
Closure Funding				
Annual Contribution	\$million/yr	9	10	11
Life of Mine Contribution	\$billion	1.00	0.97	1.01
Life of Mine Bond Premium	\$billion	1.14	0.78	0.85
Closure Fund ¹⁹	\$billion	3.2	3.3	3.1
Life of Mine Taxes²⁰				
Alaska Mining License	\$billion	8.16	8.34	8.32
Alaska Royalty	\$billion	3.61	3.68	3.68
Alaska Income Tax	\$billion	10.20	10.46	10.40
Borough Severance & Tax	\$billion	4.34	4.33	4.34
Federal Income Tax	\$billion	18.94	19.42	19.31
Annual Taxes²¹				
Alaska Mining License	\$million	81	92	93
Alaska Royalty	\$million	36	41	41
Alaska Income Tax	\$million	101	115	116
Borough Severance & Tax	\$million	43	48	47
Federal Income Tax	\$million	188	213	215

The economic analysis for all potential expansion scenarios included third party infrastructure and precious metal streaming partners that was further described in the Proposed Project section. The financial results for the potential expansion scenarios are tabulated below.

¹⁶ Includes cost of infrastructure lease:

- Year 21 Expansion - \$0.54/ton milled
- Year 10 Expansion - \$0.53/ton milled
- Year 5 Expansion - \$0.53/ton milled

¹⁷ C1 costs calculated on co-product basis

¹⁸ AuEq calculation uses long term metal prices

¹⁹ Maximum value of closure fund during life of mine based on 4% compound interest

²⁰ Estimated based on current Alaskan statutes

²¹ Life of mine taxes ÷ life of mine years

Potential Expansion Scenarios Financial Results²²

Potential Expansion Scenarios				
	Units	Year 21	Year 10	Year 5
Revenue²³				
Annual Gross Revenue	\$million	3,100	3,400	3,500
Life of Mine Gross Revenue	\$million	312,000	312,000	312,000
Realization Charges				
Annual Charges	\$million	270	300	310
Life of Mine Charges	\$million	28,000	28,000	28,000
Net Smelter Return				
Annual NSR	\$million	2,800	3,100	3,200
Life of Mine NSR	\$million	285,000	285,000	285,000
Financial Model Results				
Post Tax IRR	%	18.1	19.5	21.5
Post Tax NPV ₇	\$million	5,700	7,300	8,500
Payback	Years	4.4	4.4	5.0

The gold plant included in the potential expansion scenarios was based on metallurgical testwork results for a specific gold recovery technology. However, other technologies may be applicable for the Pebble deposit. Further, the addition of a gold plant under any scenario will require additional testwork and engineering and will require the receipt of pertinent Federal and State permits prior to implementation.

The onsite gold plant would process the pyrite concentrate in conjunction with the gravity concentrate to produce a precious metal doré. In all but the Year 5 scenario, the gold plant capacity would match the 180,000 tons per day process plant capacity. In the Year 5 scenario, it would match the expanded plant capacity while in the Year 10 and Year 21 scenarios, it would be expanded with the process plant.

The total metal production and financial results, respectively, for the potential expansion scenarios with the gold plant are provided in the tables below.

²² Includes infrastructure partners and precious metal streaming

²³ Revenue values do not include a gold plant contribution

Summary Gold Plant Potential Expansion Scenarios Information

	Units	Proposed Project	Potential Expansion Scenarios		
			Year 21	Year 10	Year 5
Concentrate (LOM)					
Copper	M lb	6,500	61,200	61,200	61,200
Gold (in Cu Concentrate)	k oz	7,300	50,400	50,500	50,500
Silver (in Cu Concentrate)	k oz	37,000	267,000	267,000	267,000
Molybdenum	M lb	300	2,900	2,900	2,900
Rhenium	k kg	200	2,000	2,000	2,000
Gold Plant (LOM)					
Gold (as Doré)	k oz	1,800	14,500	14,500	14,400
Silver (as Doré)	k oz	2,600	22,600	22,600	22,500
Total Production (LOM)					
Gold	k oz	9,000	65,000	65,100	64,900
Silver	k oz	39,000	289,000	289,000	289,000

Potential Gold Plant Scenario Financial Results²⁴

	Units	Proposed Project	Potential Expansion Scenarios		
			Year 21	Year 10	Year 5
IRR	%	16.5	18.8	20.3	22.7
NPV ₇	\$million	2,700	6,600	8,400	9,700
Payback	Years	4.9	4.6	4.5	5.0

Environment and Permitting

The Pebble deposit is located on State land that has been specifically designated for mineral exploration and development. The Pebble area has been the subject of two comprehensive land-use planning exercises conducted by the ADNRP, the first in the 1980s and the second completed in 2005 and subsequently revised in 2013. ADNRP identified five land parcels (including Pebble) within the Bristol Bay planning area as having “significant mineral potential,” and where the planning intent is to accommodate mineral exploration and development. These parcels total 2.7% of the total planning area. Environmental standards and permitting requirements in Alaska are stable, objective, rigorous and science-driven. These features are an asset to projects like Pebble that are being designed to meet U.S. and international best practice standards of design and performance.

Northern Dynasty began an extensive field study program in 2004 to characterize the existing physical, chemical, biological, and social environments in the Bristol Bay and Cook Inlet areas where the Project might occur. The Pebble Partnership compiled the data for the 2004-2008 study period into a multi-volume Environmental Baseline Document (“**EBD**”, PLP, 2012). These studies have been designed to:

- fully characterize the existing biophysical and socioeconomic environment;
- support environmental analyses required for effective input into project design;
- provide a strong foundation for internal environmental and social impact assessment to support corporate decision-making;
- provide the information required for stakeholder consultation and eventual mine permitting in Alaska; and
- provide a baseline for long-term monitoring of potential changes associated with mine development.

²⁴ Proposed Project and Potential Expansion Scenarios include infrastructure partners and precious metal streaming.

Additional data collected from the 2009-2013 period was compiled into the Supplemental EBD (PLP, 2018) and transmitted to USACE. In 2017, select environmental baseline studies were re-initiated and expanded. Monitoring data collected through 2019 has been provided to USACE.

The baseline study program includes:

surface water hydrology	wildlife
groundwater hydrology	air quality
surface and groundwater quality	cultural resources
geochemistry	subsistence
snow surveys	land use
fish and aquatic resources	recreation
noise	socioeconomics
wetlands	visual aesthetics
trace elements	climate and meteorology
fish habitat – stream flow modelling	Iliamna Lake
marine	

The Pebble Partnership's core operating principles are governed by a commitment to conduct all mining operations, including reclamation and closure, in a manner that adheres to socially and environmentally responsible stewardship while maximizing benefits to state and local stakeholders.

Reclamation and closure of the Proposed Project falls under the jurisdiction of the ADNR Division of Mining, Land, and Water, and the ADEC. A miner may not engage in a mining operation until the ADNR has approved a reclamation plan for the operation. The Pebble Partnership submitted a preliminary closure plan to USACE in support of the EIS analysis. Four phases of closure are envisioned for the Proposed Project.

To prepare its CWA permit application, the Pebble Partnership developed a mine plan of smaller scale and footprint and shorter mine life than had been included in previous analyses. The application under Section 404 of the CWA and Section 10 of the RHA was submitted to USACE on December 22, 2017. On January 8, 2018, USACE deemed the permit application complete and confirmed that an EIS level of analysis was required to comply with its NEPA review of the Proposed Project. The EIS process progressed through the scoping phase in 2018. USACE delivered the Draft EIS in the first quarter of 2019 and completed a public comment period from March to July 2019. In the latter part of 2019 and early 2020, USACE advanced toward a Final EIS. The preliminary Final EIS was circulated to cooperating agencies for review in February 2020. As part of the EIS preparation process, USACE had undertaken a comprehensive alternatives assessment to consider a broad range of development alternatives and announced the conclusions of the draft LEDPA in May 2020. USACE published the Pebble EIS on July 24, 2020.

The Department of the Army Permit Application was submitted in December 2017 and the permitting process over the next three years involved the Pebble Partnership being actively engaged with USACE on the evaluation of the Proposed Project. There were numerous meetings between representatives of USACE and the Pebble Partnership regarding, among other things, compensatory mitigation for the Proposed Project. The Pebble Partnership submitted several draft compensatory mitigation plans to the USACE, each refined to address comments from the USACE and that the Pebble Partnership believed was consistent with mitigation proposed and approved for other major development projects in Alaska.

The Pebble EIS published by USACE on July 24, 2020, was the culmination of a 2½ year long, intensive review process under NEPA. Led by USACE, the Pebble EIS also involved eight federal cooperating agencies (including the EPA and US Fish & Wildlife Service), three State cooperating agencies (including the ADNR and the ADEC), the Lake & Peninsula Borough and two federally recognized tribes.

The Pebble EIS was viewed by Pebble Partnership as positive in that it found impacts to fish and wildlife would not be expected to affect subsistence harvest levels, there would be no measurable change to the commercial fishing industry including prices, and there would be a number of positive socioeconomic impacts on local communities.

In late June 2020, USACE verbally identified a preliminary finding of “significant degradation” of certain aquatic resources, with the requirement of new compensatory mitigation. The Pebble Partnership understood from these discussions that the new compensatory mitigation plan for the Proposed Project would include in-kind, in-watershed mitigation and continued its work to meet these new USACE requirements. USACE formally advised the Pebble Partnership by letter dated August 20, 2020, that it had made preliminary factual determinations under Section 404(b)(1) of the CWA that the Proposed Project would result in significant degradation to aquatic resources. In connection with this preliminary finding of significant degradation, USACE formally informed the Pebble Partnership that in-kind compensatory mitigation within the Koktuli River Watershed would be required to compensate for all direct and indirect impacts caused by discharges into aquatic resources at the mine site. USACE requested the submission of a new compensatory mitigation plan to address this finding within 90 days of its letter.

In response, the Pebble Partnership developed a CMP to align with the requirements outlined by the USACE. This plan envisioned creation of a 112,445-acre Koktuli Conservation Area on land belonging to the State of Alaska in the Koktuli River Watershed downstream of the Project. The plan was submitted to the USACE on November 4, 2020.

On November 25, 2020, USACE issued a ROD rejecting the Pebble Partnership’s permit application, finding concerns with the proposed CMP and determining that the Proposed Project would cause significant degradation and be contrary to the public interest. USACE concluded the proposed CMP was not compliant with USACE regulations.

The Pebble Partnership submitted its request for appeal of the ROD to USACE Pacific Ocean Division on January 19, 2021. The request for appeal reflects the Pebble Partnership’s position that USACE’s ROD and permitting decision – including its “Significant Degradation” finding, its “public interest review” findings, and its rejection of the Pebble Partnership’s CMP – are contrary to law, unprecedented in Alaska, and fundamentally unsupported by the administrative record, including the Proposed Project Pebble EIS. In a letter dated February 24, 2021, USACE confirmed the Pebble Partnership’s RFA is “complete and meets the criteria for appeal.” Further information on the status of the appeal process is provided in [Three Year History](#).

The Project will require additional Federal permits, in addition to those issued under the CWA and RHA permits, as well as a range of permits issued by the State of Alaska.

Community Consultation and Stakeholder Relations

Pebble Project technical programs are supported by stakeholder engagement activities in Alaska. The objective of stakeholder outreach programs undertaken by the Pebble Partnership are to:

- advise residents of nearby communities and other regional interests about Pebble work programs and other activities being undertaken in the field;
- provide information about the proposed development plan for the Pebble Project, including potential environmental, social and operational effects, proposed mitigation and environmental safeguards;
- allow the Pebble Partnership to better understand and address stakeholder priorities and concerns with respect to development of the Pebble Project;
- encourage stakeholder and public participation in the USACE-led EIS permitting process for Pebble; and
- facilitate economic and other opportunities associated with advancement and development of the Pebble Project for local residents, communities and companies.

In addition to meeting with stakeholder groups and individuals, and providing project briefings in communities throughout Bristol Bay and the State of Alaska, the Pebble Partnership’s outreach and engagement program includes:

- workforce and business development initiatives intended to enhance economic opportunities for regional residents and Alaska Native corporations;
- initiatives to develop partnerships with Alaska Native corporations, commercial fishing interests and other in-region groups and individuals;

- outreach to elected officials and political staff at the national, State and local levels; and
- outreach to third-party organizations and special interest groups with an interest in the Pebble Project, including business organizations, community groups, outdoor recreation interests, Alaska Native entities, commercial and sport fishery interests, conservation organizations, among others.

Through these various stakeholder initiatives, the Pebble Partnership seeks to advance a science-based project design that is responsive to stakeholder priorities and concerns, provides meaningful benefits and opportunities to local residents, businesses and Alaska Native corporations, and energizes the economy of Southwest Alaska.

In April 2021, the Pebble Partnership published an Environmental, Social & Governance ("ESG") Report for the Pebble Project which addresses the broad range of progressive principles, practices and commitments employed at Pebble by the Company and the Pebble Partnership over the past two decades to advance the project.

Risks

The 2021 PEA identified the following risks related to the development of the Pebble Project:

Resource

- Inferred Mineral Resources. The 2021 PEA includes the use of Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that the 2021 PEA results will be realized.
- The Mineral resources estimates may ultimately be affected by a broad range of environmental, permitting, legal, title, socio-economic, marketing and political factors pertaining to the specific characteristics of the Pebble deposit (including its scale, location, orientation and polymetallic nature) as well as its setting (from a natural, social, jurisdictional and political perspective).
- Factors that may affect the Mineral Resource estimate include:
 - changes to the geological, geotechnical and geometallurgical models as a result of additional drilling or new studies;
 - the discovery of extensions to known mineralization as a result of additional drilling;
 - changes to the correlation coefficients between rhenium and molybdenum and resultant regression equation due to additional drilling;
 - changes to commodity prices resulting in changes to the test for reasonable prospects for eventual economic extraction; and
 - changes to the metallurgical recoveries resulting in changes to the test for reasonable prospects for eventual economic extraction.
- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- The Mineral Resource estimates contained have not been adjusted for any risk that the required environmental permits may not be obtained for the Project. The uncertainty associated with the ability of the Project to obtain required environmental permits is a risk to the reasonable prospects for eventual economic extraction of the mineralisation and the classification of the estimate as a Mineral Resource.

Mining

- Pit wall slopes. The pit wall slope assessments were completed to a prefeasibility level of confidence. Additional field work and analysis are required to confirm these designs for operations.

Process

- Process recoveries. The metallurgical testwork completed on the Pebble deposit has been extensive but additional work is required to complete a feasibility study and design.
- Deleterious elements. The metallurgical testwork highlighted the low levels of impurity elements in the Project feed materials and correspondingly low deportment to saleable products, and likewise the process plant design incorporated no special treatment steps to manage impurities in the feed. There is a risk that pockets of the Pebble deposit will contain elevated levels of deleterious elements that could report to the concentrates products at levels which could incur penalty charges or adversely influence the saleability of the products. Operational controls could avoid these potential impacts.

Project Execution

- Weather. Adverse weather conditions and other factors such as pandemics could impact on the construction schedule.
- Labour. The construction schedule and operations performance require deployment of sufficient numbers of adequately trained and experienced personnel. Inability to realize this deployment could impact the construction schedule and operational results.

Tailings and Water Management

- Tailings structures designs. The tailings and water management pond structures designs have been completed to a preliminary level. Significant additional field data and design are required to prepare these structures for construction.
- Alaska dam permitting. The tailings and water management structures will be subject to an extensive design review and permitting process in Alaska. The process may result in changes to the designs.
- Groundwater. Additional field work and analysis are required to confirm specific design criteria for open pit wall and tailings structures.

Social Issues

- Land tenure. While the Pebble deposit lies within claims on State land, for which there is an identified path forward to gaining tenure, the transportation corridor crosses land belonging to Native Village Corporations and private individuals and agreements have not been reached with several of these entities. One of the Native Village Corporations has signed an agreement whereby a fund has obtained an option to buy portions of their land to create a conservation easement. The fund must exercise its option by the end of 2022. If the fund closes this agreement with the Native Village Corporation, the Pebble Partnership would be required to identify an alternate route to the proposed marine terminal on Cook Inlet.
- Project opposition. The Project is the subject of significant public opposition in Alaska and elsewhere in the United States.

Legal

- Legal actions. Northern Dynasty is party to several class action legal complaints and Pebble Partnership is subject to a government investigation regarding public statements made regarding the project. While these matters do not directly affect the development of the Project, they could negatively impact Northern Dynasty's and the Pebble Partnership's ability to finance the development of the Project or the ability to obtain required permitting.
- EPA. The EPA has announced it plans to re-initiate the process of making a CWA Section 404(c) determination for the waters of Bristol Bay, which would set aside the 2019 withdrawal of that action that was based on a 2017 settlement agreement between the EPA and Pebble Partnership. The 2019 withdrawal was contested by Project opponents and is currently subject to ongoing litigation. Such EPA activity could negatively affect the ability of the Pebble Partnership to obtain required permitting and develop the Project.

Permitting

- USACE Record of Decision. In November 2020, USACE denied Pebble Partnership's permit application. That decision is currently under appeal. The Proposed Project cannot proceed unless and until the ROD is overturned and all necessary permits, including the CWA 404 Permit, are obtained. There is no certainty that these permits will be obtained.
- Bristol Bay Forever. Bristol Bay Forever was a public initiative approved by Alaskan voters in November 2014. Based on that initiative, development of the Proposed Project requires legislative approval upon securing all other permits and authorizations.

Financial Results

- Cost estimates. The cost estimates contained in the 2021 PEA are completed to a preliminary level. Additional analysis and engineering are required to confirm these results.
- Metal prices and realization costs. Metal prices and realization costs are subject to significant fluctuation, particularly over the periods identified for the Proposed Project and potential expansion scenarios. These fluctuations could have a significant impact on the financial results of future studies and the actual results achieved by an operating mine.
- Taxation. The Proposed Project is subject to taxation at three government levels (local, State, and Federal). These tax regimes may change over time, resulting in different results than those identified in the 2021 PEA.

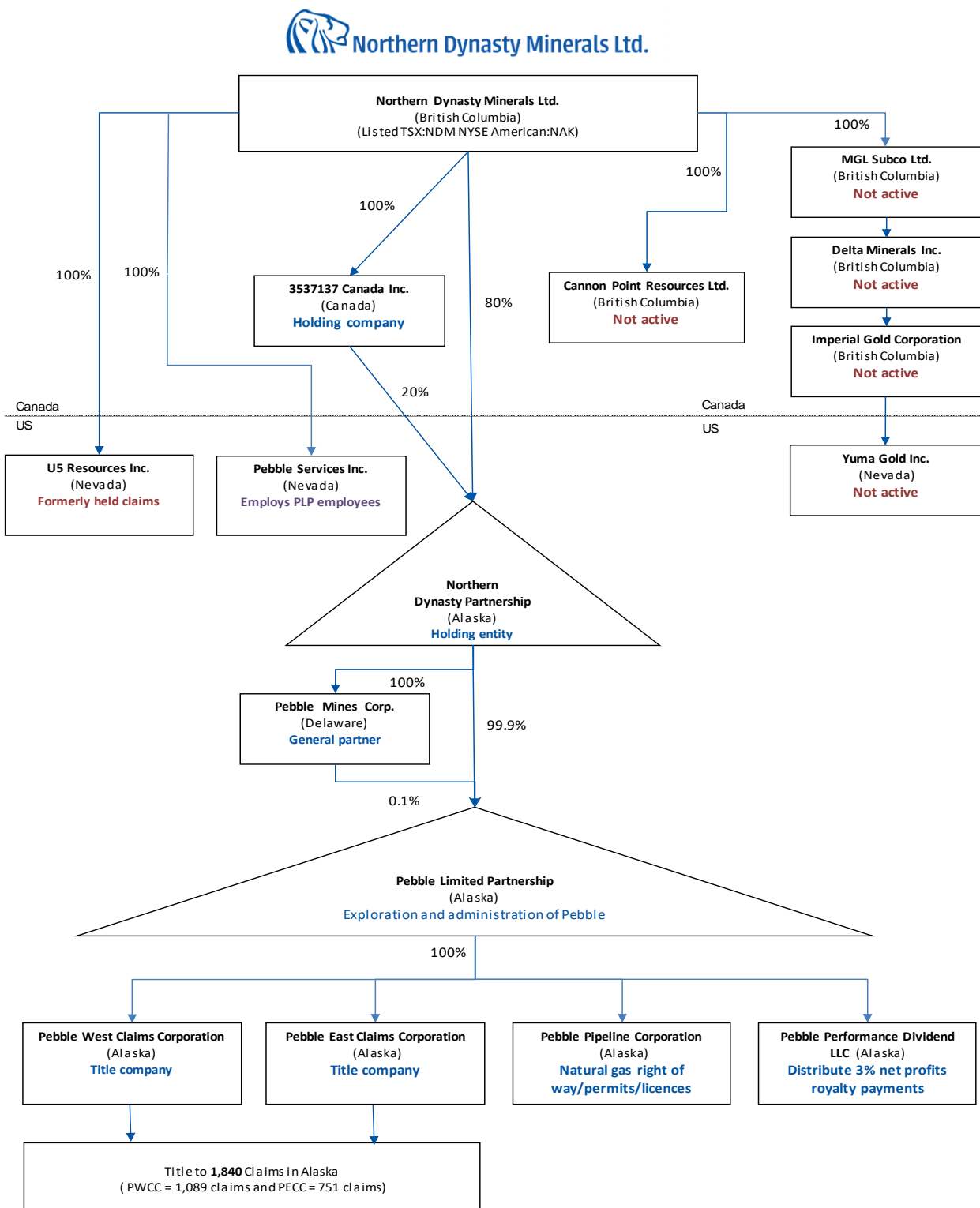
C. Plans For 2022

In 2022, the Company plans to complete a site program that will include ongoing site maintenance and activities to support permits and to maintain an active corporate presence in Alaska and Washington, D.C. to engage and consult with project stakeholders through the Pebble Partnership. Corporate activities will continue to be directed toward the appeal of the ROD, raising capital, as necessary, to support the permitting process, corporate reporting and discussions directed toward securing a partner with which to advance the overall development of the project.

Additional details for the Company's plan of operations for 2022 is provided in the Company's 2021 Annual MD&A.

D. Organizational Structure

Structure as at December 31, 2021:



E. Property, Plant and Equipment

The Company's principal property is the Pebble Project, as discussed in A and B, above.

The Company has approximately \$100 in plant and equipment (excluding right-of-use assets) primarily at the Pebble Project site located in Iliamna.

The Company, through the Pebble Partnership, has leased premises in Anchorage and at the Pebble Project site and as result the Company has lease commitments which have been disclosed in the accompanying audited financial statements.

F. Risk Factors

The securities of Northern Dynasty are highly speculative and subject to a number of risks. A prospective investor or other person reviewing Northern Dynasty for a prospective investor should not consider an investment in Northern Dynasty unless the investor is capable of sustaining an economic loss of their entire investment. The risks associated with Northern Dynasty's business include:

Northern Dynasty May be Unsuccessful in Appealing the Record of Decision and may Ultimately not be able to Obtain the Required Environmental Permits for the Pebble Project.

The USACE's ROD issued on November 25, 2020, has denied Northern Dynasty's environmental permit for development of the Pebble Project under the Clean Water Act. This environmental permit is required for Northern Dynasty to proceed with the development of the Pebble Project. While the Pebble Partnership is appealing this Record of Decision, there is no assurance that the appeal of the Record of Decision will be successful. Even if the appeal is successful, there is no assurance that a positive Record of Decision will ultimately be obtained by the Pebble Partnership or that the required environmental permit will be obtained. An inability to successfully appeal the Record of Decision will mean that Northern Dynasty cannot proceed with development of the Pebble Project as presently envisioned. There is no assurance that Northern Dynasty will be able to redesign the Pebble Project in a manner that addresses the "significant degradation" conclusion reached by the USACE or ultimately develop any compensatory mitigation plan that the USACE accepts as appropriately addressing the "significant degradation" determination or that will change the USACE's position that environmental permitting of the Pebble Project under the CWA is against the public interest. Northern Dynasty's inability to address these issues may mean that the Company is ultimately not able to secure the environmental permits that are required to develop the Pebble Project. Accordingly, there is no assurance that investors will be able to recover their investment in the Company.

In addition, the EPA has re-initiated the CWA Section 404(c) process, and has announced its intent to issue a revised Proposed Determination for the waters of Bristol Bay. Such EPA activity could negatively affect the ability of the Pebble Partnership to obtain required permitting and develop the Project, even if the appeal of the 2020 ROD is successful.

Inability to Ultimately Achieve Mine Permitting and Build a Mine at the Pebble Project

The Company may ultimately be unable to secure the necessary permits under United States Federal and Alaskan State laws to build and operate a mine at the Pebble Project. There is no assurance that the EPA will not seek to undertake future regulatory action to impede or restrict the Pebble Project. In addition, there are prominent and well-organized opponents of the Pebble Project and the Company may be unable, even if it present solid scientific and technical evidence of risk mitigation, to overcome such opposition and convince governmental authorities that a mine should be permitted at the Pebble Project. The Company faces not only the permitting and regulatory issues typical of companies seeking to build a mine, but additional public and regulatory scrutiny due to its location and potential size. Accordingly, there is no assurance that the Company will obtain the required permits. Although, the Company received a denial of its CWA 404 permit application from the USACE, the Company has submitted an appeal of the ROD, and should the appeal be successful, the Company will still be required to secure the full range of permits and authorizations from multiple federal and state regulatory agencies, which will take several years. After all permits necessary to begin construction are in hand, a number of years would be required to finance and build a mine and commence operations. During

these periods, the Company would likely have no income and so would require additional financing to continue its operations. Unless and until the Company builds a mine at the Pebble Project it will be unable to achieve revenues from operations and may not be able to sell or otherwise recover its investment in the Pebble Project, which would have a material adverse effect on the Company and an investment in the Company's common shares.

The Current Mine Plan for the Pebble Project in the 2021 PEA is Not Supported by Any Preliminary or Final Feasibility Study.

The current mine plan that is included in the Project Description for the development of the Pebble Project is supported by the 2021 PEA but is not supported by any preliminary or final feasibility study. Accordingly, there is a substantial risk that the Company will not be able to proceed with the development of the Pebble Project, that the Pebble Project cannot be economically mined or that shareholders may not be able to recover their investment in the Company. The 2021 PEA is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that the 2021 PEA results will be realized. 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 mineral 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, however there is no assurance that these permits will be obtained. 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 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. For these reasons, there is significant risk that the economics for the Pebble Project indicated in the PEA, including production forecasts, capital costs, operating costs, revenues from operations, net present values and internal rates of return, will not be achieved should the Pebble Project be developed. The 2021 PEA should be viewed in this context and should not be considered a substitute for a preliminary or final feasibility study.

The IHS Markit report on the economic contribution assessment of the Pebble Project is based on the production scenarios and related assumptions presented in the 2021 PEA. Any changes to the production scenarios outlined in the 2021 PEA as a result of these factors could have a material impact on the projections implied by the IHS Markit report. Accordingly, there is no assurance that contributions and benefits implied by the economic contribution assessment report will be realized.

If Northern Dynasty is Unable to Defend the "Class Action" Lawsuits against it, there is No Assurance that Northern Dynasty will not be Subject to Judgements for Damages against it

Northern Dynasty is the subject of proposed class action lawsuits against it that assert liability against Northern Dynasty on behalf of a purported class of shareholders under securities laws, both in Canada and in the United States. While Northern Dynasty intends to vigorously defend these claims, there is no assurance that Northern Dynasty will be successful in defending all claims made against it. Should Northern Dynasty not be successful in defending these claims, it may be subject to judgements against it and be required to pay substantial amounts in damages to the plaintiffs under these judgements. These damages could result in a material and adverse impairment to Northern Dynasty's financial condition and capital resources, and may further impair its ability to pursue the development of the Pebble Project.

In addition, Northern Dynasty is required under the terms of the indemnification agreements that it has entered into with underwriters in connection with Northern Dynasty's public financings to indemnify the underwriters for any losses that they incur. As certain of Northern Dynasty's underwriters have been named as defendants in certain of these class action lawsuits, Northern Dynasty may be required to indemnify and pay monies to the underwriters for any losses that they suffer and expenses that they incur. In addition, Northern Dynasty may

be required to indemnify certain of its officers and directors for any losses that they suffer or expenses that they incur.

There is no assurance that Northern Dynasty's existing insurance policies will respond and be sufficient to cover any amounts that it may be required to pay to the plaintiffs in these class action lawsuits, or the underwriters under our indemnification obligations. We may also be required to indemnify certain of our officers and directors who have been named as party to these lawsuits. These damages could result in a material and adverse impairment to our financial condition and capital resources, and may further impair our ability to raise additional financing and pursue the development of the Pebble Project.

Grand Jury Investigation and Related Matters

The Company is cooperating with a grand jury investigation involving the United States Attorney's Office for the District of Alaska, and an SEC inquiry, as described below under [Item 12. Legal](#). The Company is not able to provide investors with guidance as to the outcome of the grand jury investigation or SEC inquiry, or whether either of them will result in any charges or other claims against the Company, the Pebble Partnership or their associated individuals. The Company does anticipate, however, that it will incur substantial expenses in connection with cooperating with the grand jury and SEC matters, including legal fees and expenses related to the collection, review, and production of documents, among other things. Any adverse civil or criminal proceedings could have a material adverse impact on Northern Dynasty's prospects and ability to advance development of the Pebble Mine project.

In addition, Northern Dynasty and the Pebble Partnership may face ongoing and further inquiries, demands or allegations concerning future plans for the Pebble Project from the US Congress' House Committee on Transportation and Infrastructure. Again, any adverse civil or criminal proceedings relating to the Committee's investigation could have a material adverse impact on Northern Dynasty's prospects and ability to advance development of the Pebble Project. In addition, these inquiries or any possible resulting civil or criminal proceedings could erode any existing political support for the Pebble Project which may reduce the likelihood of the Pebble Project obtaining the required environmental permitting.

The Record of Decision has had and will have an Ongoing Adverse Impact on Northern Dynasty's Ability to Finance the Pebble Project.

Northern Dynasty believes that the USACE's ROD has had a material adverse impact on its ability to finance its operations and will continue to adversely impact its financing options for so long as the ROD remains outstanding. As Northern Dynasty does not have any revenues, and does not anticipate revenues in the foreseeable future, Northern Dynasty will require additional financing to continue its operations. If Northern Dynasty is unsuccessful in its appeal of the ROD, Northern Dynasty's financing options may be substantially limited and it may not be able to generate the necessary financing to enable continued operations without a substantial reduction or restructuring of the Pebble Project.

Risk associated with the Novel Coronavirus ("COVID-19")

The current outbreak of COVID-19, and any future emergence and spread of similar pathogens, could have a material adverse effect on global and local economic and business conditions which may adversely impact Northern Dynasty's business and results of operations and the operations of contractors and service providers. The extent to which COVID-19 impacts our operations will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information that may emerge concerning its severity and the actions taken to contain the virus or treat its impact, among others. The adverse effects on the economy, the stock market and Northern Dynasty's share price could adversely impact its ability to raise capital, with the result that our ability to pursue development of the Pebble Project could be adversely impacted, both through delays and through increased costs. Any of these developments, and others, could have a material adverse effect on the Company's business and results of operations and could delay its plans for development of the Pebble Project.

Risk of Secure Title or Property Interest

There can be no certainty that title to any property interest acquired by the Company or any of its subsidiaries is without defects. Although the Company has taken reasonable precautions to ensure that legal title to its properties is properly documented, there can be no assurance that its property interests may not be challenged or impugned. Such property interests may be subject to prior unregistered agreements or transfers or other land claims, and title may be affected by undetected defects and adverse laws and regulations.

The Pebble Partnership's mineral concessions at Pebble are located on State of Alaska lands specifically designated for mineral exploration and development. Alaska is a stable jurisdiction with a well-developed regulatory and legal framework for resource development and public lands management, a strong commitment to the rule of law and lengthy track record for encouraging investment in the development of its land and natural resources.

The Pebble Project is Subject to Political and Environmental Regulatory Opposition

The Pebble Project faces concerted opposition from certain individuals and organizations who are motivated to preclude any possible mining in the Bristol Bay Watershed (the "BBW"). The BBW is an important wildlife and salmon habitat area. Accordingly, one of the greatest risks to the Pebble Project is seen to be political/permitting risk, which may ultimately preclude construction of a mine at the Pebble Project. Opposition may include legal challenges to exploration and development permits, which may delay or halt development. Other tactics may also be employed by opposition groups to delay or frustrate development at Pebble, included political and public advocacy, electoral strategies, media and public outreach campaigns and protest activity. These efforts could materially increase the cost and time for development of the Pebble Project and the related infrastructure, or require changes to development plans, which could adversely impact project economics.

The Pebble Partnership's Mineral Property Interests Do Not Contain Any Mineral Reserves or Any Known Body of Economic Mineralization.

Although there are known bodies of mineralization on the Pebble Project, and the Pebble Partnership has completed core drilling programs within, and adjacent to, the known deposits to determine measured and indicated resources, there are currently no known reserves or body of commercially viable ore. Accordingly, the Pebble Project must be considered an exploration prospect only. Extensive additional work is required before Northern Dynasty or the Pebble Partnership can ascertain if any mineralization may be economic and hence constitute "ore".

The current mine plan that is included in the Project Description for the development of the Pebble Project is supported by a preliminary economic assessment but is not supported by any preliminary or final feasibility study. Accordingly, even if permitting is achieved, there is a substantial risk that the Company will not be able to proceed with the development of the Pebble Project, that the Pebble Project may not be proven to be economically mineable and shareholders may not be able to recover their investment in the Company. See discussion above under ["The Current Mine Plan for the Pebble Project in the 2021 PEA is Not Supported by Any Preliminary or Final Feasibility Study."](#)

Mineral Resources Disclosed by Northern Dynasty or the Pebble Partnership for the Pebble Project are Estimates Only.

Northern Dynasty has included mineral resource estimates that have been made in accordance with NI 43-101. These resource estimates are classified as "measured resources", "indicated resources" and "inferred resources". Northern Dynasty advises United States investors that although, with the adoption of the SEC Modernization Rules, the SEC now recognizes estimates of "measured mineral resources", "indicated mineral resources" and "inferred mineral resources", there is no assurance any mineral resources that Northern Dynasty may report as "measured mineral resources", "indicated mineral resources" and "inferred mineral resources" under NI 43-101 would be the same had Northern Dynasty prepared the resource estimates under the standards adopted under the SEC Modernization Rules. Further, "inferred resources" have a great amount

of uncertainty as to their economic and legal feasibility. Under Canadian securities law, estimates of inferred mineral resources may not form the basis of feasibility or prefeasibility studies, or any economic study except a Preliminary Economic Assessment as prescribed under NI 43-101.

All amounts of mineral resources are estimates only, and Northern Dynasty cannot be certain that any specified level of recovery of metals from the mineralized material will in fact be realized or that the Pebble Project or any other identified mineral deposit will ever qualify as a commercially mineable (or viable) ore body that can be economically exploited. Mineralized material which is not mineral reserves does not have demonstrated economic viability. In addition, the quantity of mineral reserves and mineral resources may vary depending on, among other things, metal prices and actual results of mining. There can be no assurance that any future economic or technical assessments undertaken by the Company with respect to the Pebble Project will demonstrate positive economics or feasibility.

The mineral resource estimates contained herein have not been adjusted for any risk that the required environmental permits may not be obtained for the Pebble Project. The risk associated with the ability of the Pebble Project to obtain required environmental permits is a risk to the reasonable prospects for eventual economic extraction of the mineralization and their definition as a mineral resource.

There Is No Assurance That Northern Dynasty Will Be Able To Partner The Pebble Project.

One of Northern Dynasty's business objectives is to enter into a joint venture or other partnership arrangement with a third-party partner to fund the advancement of the development of the Pebble Project. There is no assurance that the Company will be able to enter into an arrangement with a partner for the development of the Pebble Project. To the extent that the Company does not enter into any agreement to partner the Pebble Project, it will continue to be required to fund all exploration and other related expenses for advancement of the Pebble Project.

Negative Operating Cash Flow

The Company currently has a negative operating cash flow and anticipates that it will continue for the foreseeable future. Accordingly, the Company will require substantial additional capital in order to fund its future exploration and development activities. The Company does not have any arrangements in place for this additional funding and there is no assurance that such funding will be achieved when required. Any failure to obtain additional financing or failure to achieve profitability and positive operating cash flows will have a material adverse effect on its financial condition and results of operations.

Northern Dynasty Has No History of Earnings and No Foreseeable Earnings, and May Never Achieve Profitability or Pay Dividends.

Northern Dynasty has only had losses since inception and there can be no assurance that Northern Dynasty will ever be profitable. Northern Dynasty has paid no dividends on its shares since incorporation. Northern Dynasty presently has no ability to generate earnings from its mineral properties as its mineral properties are in the pre-development stage.

Northern Dynasty's Consolidated Financial Statements Have Been Prepared Assuming Northern Dynasty Will Continue on a Going Concern Basis.

Northern Dynasty' has prepared its Financial Statements on the basis that Northern Dynasty will continue as a going concern. At December 31, 2021, the Company had working capital of approximately \$21.7 million. Northern Dynasty has prioritized the allocation of its financial resources to meet key corporate and Pebble Project expenditure requirements in the near term, including the funding of the appeal of the ROD. Additional financing will be required to progress any material expenditures at the Pebble Project and for working capital. Northern Dynasty's continuing operations and the underlying value and recoverability of the amounts shown for mineral property interest are entirely dependent upon the existence of economically recoverable mineral reserves at the Pebble Project, the ability of the Company to finance its operating costs, the completion of the exploration and development of the Pebble Project, the Pebble Partnership obtaining the necessary permits to

mine, and on future profitable production at the Pebble Project. Furthermore, failure to continue as a going concern would require that Northern Dynasty's assets and liabilities be restated on a liquidation basis, which would likely differ significantly from their going concern assumption carrying values.

As the Pebble Project is Northern Dynasty's Only Mineral Property Interest, the Failure to establish that the Pebble Project Possesses Commercially Viable and Legally Mineable Deposits of Ore May Cause a Significant Decline in the Trading Price of Northern Dynasty's Common Shares and Reduce Its Ability to Obtain New Financing.

The Pebble Project, through the Pebble Partnership, is Northern Dynasty's only mineral project. Northern Dynasty's principal business objective is to carry out further exploration and related activities to establish whether the Pebble Project possesses commercially viable deposits of ore. If Northern Dynasty is not successful in its plan of operations, Northern Dynasty may have to seek a new mineral property to explore or acquire an interest in a new mineral property or project. Northern Dynasty anticipates that such an outcome would adversely impact the price of Northern Dynasty's common shares. Furthermore, Northern Dynasty anticipates that its ability to raise additional financing to fund exploration of a new property or the acquisition of a new property or project would be impaired as a result of the failure to establish commercial viability of the Pebble Project.

If Prices for Copper, Gold, Molybdenum, Silver and Rhenium Decline, Northern Dynasty May Not Be Able to Raise the Additional Financing Required to Fund Expenditures for the Pebble Project.

The ability of Northern Dynasty to raise financing to fund the Pebble Project, will be significantly affected by changes in the market price of the metals for which it explores. The prices of copper, gold, molybdenum, silver and rhenium are volatile, and are affected by numerous factors beyond Northern Dynasty's control. The level of interest rates, the rate of inflation, the world supplies of and demands for copper, gold, molybdenum, silver and rhenium and the stability of exchange rates can all cause fluctuations in these prices. Such external economic factors are influenced by changes in international investment patterns and monetary systems and political developments. The prices of copper, gold, molybdenum, silver and rhenium have fluctuated in recent years, and future significant price declines could cause investors to be unprepared to finance exploration of copper, gold, molybdenum, silver and rhenium, with the result that Northern Dynasty may not have sufficient financing with which to fund its activities related to the advancement of the Pebble Project.

The Russian-Ukrainian Conflict – Potential Effects Which Could Detrimentially Affect the Global Economy, Peace and Stability in Europe and Beyond, and Our Business and Share Price

In February 2022, Russian military forces invaded Ukraine. In response, Ukrainian military personnel and civilians are actively resisting the invasion. Many countries throughout the world have provided aid to the Ukraine in the form of financial aid and in some cases military equipment and weapons to assist in their resistance to the Russian invasion. The North Atlantic Treaty Organization ("NATO") has also mobilized forces to NATO member countries that are close to the conflict as deterrence to further Russian aggression in the region. The outcome of the conflict is uncertain and is likely to have wide-ranging consequences on the peace and stability of the region and the world economy. In addition, certain countries including Canada and the United States, have imposed strict financial and trade sanctions against Russia, which sanctions may have far reaching effects on the global economy. The long-term impacts of the conflict and the sanctions imposed on Russia remain uncertain and could have an adverse impact on the Company's business and results of operations and may have wide-ranging consequences on the peace and stability of the region and the world economy.

The conflict could affect the economies and securities markets of countries in ways that cannot necessarily be foreseen at the present time. These events could also exacerbate other pre-existing political, social and economic risks. Such events could also cause substantial market volatility, exchange trading suspensions and closures and affect the Company's performance, the price of its securities and its ability to successfully raise capital at reasonable rates or at all. As a result, the market price of the Common Shares may decline even if the Company's operating results, underlying asset values or prospects have not changed.

Although we do not have employees, suppliers or business activities in Ukraine or Russia at this time, the conflict may have a detrimental impact on our business and operations at some point in the future if the conflict spreads, escalates or affects Europe or the world more broadly.

Mining is Inherently Dangerous and subject to Conditions or Events beyond the Company's control, which could have a Material Adverse Effect on the Company's Business.

Hazards such as fire, explosion, floods, structural collapses, industrial accidents, unusual or unexpected geological conditions, ground control problems, power outages, inclement weather, seismic activity, cave-ins and mechanical equipment failure are inherent risks in the Company's exploration, development and mining operations. These and other hazards may cause injuries or death to employees, contractors or other persons at the Company's mineral properties, severe damage to and destruction of the Company's property, plant and equipment and mineral properties, and contamination of, or damage to, the environment, and may result in the suspension of the Company's exploration and development activities and any future production activities. Safety measures implemented by the Company may not be successful in preventing or mitigating future accidents.

Northern Dynasty Competes with Larger, Better Capitalized Competitors in the Mining Industry.

The mining industry is competitive in all of its phases, including financing, technical resources, personnel and property acquisition. It requires significant capital, technical resources, personnel and operational experience to effectively compete in the mining industry. Because of the high costs associated with exploration, the expertise required to analyze a project's potential and the capital required to develop a mine, larger companies with significant resources may have a competitive advantage over Northern Dynasty. Northern Dynasty faces strong competition from other mining companies, some with greater financial resources, operational experience and technical capabilities than Northern Dynasty possesses. As a result of this competition, Northern Dynasty may be unable to maintain or acquire financing, personnel, technical resources or attractive mining properties on terms Northern Dynasty considers acceptable or at all.

Compliance with Environmental Requirements will take Considerable Resources and Changes to these Requirements Could Significantly Increase the Costs of Developing the Pebble Project and Could Delay these Activities.

The Pebble Partnership and Northern Dynasty must comply with stringent environmental legislation in carrying out work on the Pebble Project. Environmental legislation is evolving in a manner that will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. Changes in environmental legislation could increase the cost to the Pebble Partnership of carrying out its exploration and, if warranted, development of the Pebble Project. Further, compliance with new or additional environmental legislation may result in delays to the exploration and, if warranted, development activities.

Changes in Government Regulations or the Application Thereof and the Presence of Unknown Environmental Hazards on Northern Dynasty's Mineral Properties May Result in Significant Unanticipated Compliance and Reclamation Costs.

Government regulations relating to mineral rights tenure, permission to disturb areas and the right to operate can adversely affect Northern Dynasty. Northern Dynasty and the Pebble Partnership may not be able to obtain all necessary licenses and permits that may be required to carry out exploration at the Pebble Project. Obtaining the necessary governmental permits is a complex, time-consuming and costly process. The duration and success of efforts to obtain permits are contingent upon many variables not within the Company's control. Obtaining environmental permits may increase costs and cause delays depending on the nature of the activity to be permitted and the interpretation of applicable requirements implemented by the permitting authority. There can be no assurance that all necessary approvals and permits will be obtained and, if obtained, that the costs involved will not exceed those that the Company previously estimated. It is possible that the costs and

delays associated with the compliance with such standards and regulations could become such that the Company would not proceed with the development or operation of a mine at the Pebble Project.

Litigation

The Company is, and may in future be subject to legal proceedings, including with regard to actions in [Item 12 Legal](#) in the pursuit of its Pebble Project. Given the uncertain nature of these actions, the Company cannot reasonably predict the outcome thereof. If the Company is unable to resolve these matters favorably, it will likely have a material adverse effect on the Company.

Northern Dynasty is Subject to Many Risks that Are Not Insurable and, as a Result, Northern Dynasty Will Not Be Able to Recover Losses Through Insurance Should Certain Events Occur.

Hazards such as unusual or unexpected geological formations and other conditions are involved in mineral exploration and development. Northern Dynasty may become subject to liability for pollution, cave-ins or hazards against which it cannot insure. The payment of such liabilities could increase Northern Dynasty's operating expenses which could, in turn, have a material adverse effect on Northern Dynasty's financial position and its results of operations. Although Northern Dynasty and the Pebble Partnership maintain liability insurance in an amount which they consider adequate, the nature of these risks is such that the liabilities might exceed policy limits, the liabilities and hazards might not be insurable against, or Northern Dynasty and the Pebble Partnership might elect not to insure themselves against such liabilities due to high premium costs or other reasons, in which event Northern Dynasty could incur significant liabilities and costs that could materially increase Northern Dynasty's operating expenses.

If Northern Dynasty Loses the Services of Key Personnel that It Engages to Undertake Its Activities, then Northern Dynasty's Plan of Operations May Be Delayed or Be More Expensive to Undertake than Anticipated.

Northern Dynasty's success depends to a significant extent on the performance and continued service of certain contractors, including Hunter Dickinson Services Inc. ("HDSI"). The Company has access to the full resources of HDSI, an experienced exploration and development firm with in-house geologists, engineers and environmental specialists, to assist in its technical review of the Pebble Project. There can be no assurance that the services of all necessary key personnel will be available when required or, if obtained, that the costs involved will not exceed those previously estimated. It is possible that the costs and delays associated with the loss of services of key personnel could become such that the Company would not proceed with the development or operation of a mine at the Pebble Project.

The Volatility of Northern Dynasty's Common Shares Can Expose Northern Dynasty to the Risk of Litigation.

Northern Dynasty's common shares are listed on the TSX and NYSE American. Securities of mining companies have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved (see previous risk). These factors include macroeconomic developments in North America and globally, currency fluctuations and market perceptions of the attractiveness of particular industries. The price of Northern Dynasty's common shares is also likely to be significantly affected by short-term changes in copper, gold, molybdenum, silver and rhenium prices or in Northern Dynasty's financial condition or results of operations as reflected in quarterly earnings reports.

As a result of any of these factors, the market price of Northern Dynasty's common shares at any given point in time may not accurately reflect their long-term value. Securities class action litigation often has been brought against companies following periods of volatility in the market price of their securities. Northern Dynasty is, and may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

Northern Dynasty Will Require Additional Funding to Meet the Development Objectives of the Pebble Project.

Northern Dynasty will need to raise additional financing (through share issuances, debt or asset level partnering) to achieve permitting and development of the Pebble Project. In addition, a positive production decision at the Pebble Project would require significant capital for project engineering and construction. Accordingly, the continuing permitting and development of the Pebble Project will depend upon Northern Dynasty's ability to obtain financing through debt financing, equity financing, the joint venturing of the project, or other means. There can be no assurance that Northern Dynasty will be successful in obtaining the required financing, or that it will be able to raise the funds on terms that do not result in high levels of dilution to shareholders. If we are unable to raise the necessary capital resources, we may at some point have to reduce or curtail our operations, which would have a material adverse effect on our ability to pursue the permitting and development of the Pebble Project.

Item 6. Dividends

The Company has not paid any dividends on any of its shares since incorporation and does not presently have any intention of paying dividends.

Item 7. Description of Capital Structure

Northern Dynasty's share capital consists of no par value common shares only, with an unlimited number being authorized, of which 529,779,388 common shares were issued and outstanding as fully paid and non-assessable as of December 31, 2021. The audited consolidated annual financial statements describe share issuances effected by Northern Dynasty and the weighted average issue price for shares since January 1, 2020.

There have been no changes in the classification of common shares (reclassifications, consolidations, reverse splits or the like) within the previous five years. All common shares of Northern Dynasty rank pari passu (i.e. equally) for voting and the payment of any dividends and distributions in the event of a windup.

There are no constraints imposed on the ownership of securities of Northern Dynasty.

Northern Dynasty's securities have not received any ratings from any rating organization.

Northern Dynasty has entered into registration rights agreements with certain United States shareholders as part of past financing activities. See the Company's US public filings at www.sec.gov.

Item 8. Market for Securities**Trading Markets**

Northern Dynasty's common shares have been listed in Canada on the TSX since October 2007, under the symbol NDM and have traded in the US on NYSE American (formerly NYSE MKT), since November 2004, under the symbol NAK.

The following tables set forth, for the periods indicated, the share price history on the TSX and on the NYSE American. Share trading information is available through free internet search services (see below).

Fiscal Year Ended December 31,	TSX Trading under the symbol NDM			NYSE American Trading under the symbol NAK		
	High (\$)	Low (\$)	Average daily trading volume	High (US\$)	Low (US\$)	Average daily trading volume
2021	1.45	0.41	674,605	1.15	0.32	15,662,088
2020	3.28	0.39	1,455,055	2.49	0.31	10,183,409
2019	1.47	0.50	290,638	1.12	0.38	1,722,131
2018	2.32	0.55	309,266	1.86	0.43	1,416,234
2017	4.54	1.43	1,700,010	3.45	1.06	5,399,128
2016	3.12	0.28	775,654	2.50	0.20	1,295,079

Fiscal Quarter	TSX Trading under the symbol NDM			NYSE American Trading under the symbol NAK		
	High (\$)	Low (\$)	Average daily trading volume	High (US\$)	Low (US\$)	Average daily trading volume
Q4 2021	0.65	0.41	216,990	0.54	0.32	5,320,943
Q3 2021	0.78	0.47	282,495	0.62	0.37	8,321,317
Q2 2021	0.88	0.58	305,425	0.70	0.47	6,423,732
Q1 2021	1.45	0.41	1,913,170	1.15	0.32	43,754,861
Q4 2020	1.67	0.39	1,357,256	1.26	0.31	14,736,695
Q3 2020	3.28	0.77	2,817,989	2.49	0.58	18,375,268
Q2 2020	2.07	0.54	1,135,533	1.53	0.38	4,574,946
Q1 2020	0.93	0.50	509,441	0.71	0.35	2,726,052

Last twelve months	TSX Trading under the symbol NDM			NYSE American Trading under the symbol NAK		
	High (\$)	Low (\$)	Average daily trading volume	High (US\$)	Low (US\$)	Average daily trading volume
February 2022	0.45	0.38	118,019	0.36	0.29	2,538,438
January 2022	0.45	0.37	164,653	0.36	0.29	2,641,865
December 2021	0.50	0.41	207,788	0.42	0.32	3,662,182
November 2021	0.54	0.48	151,692	0.44	0.38	4,375,856
October 2021	0.65	0.51	298,479	0.54	0.41	8,003,780
September 2021	0.78	0.50	544,682	0.62	0.40	17,878,545
August 2021	0.55	0.47	134,777	0.44	0.37	3,112,824
July 2021	0.64	0.49	168,026	0.51	0.39	4,220,604
June 2021	0.73	0.58	292,895	0.60	0.47	6,201,516
May 2021	0.74	0.60	315,444	0.61	0.49	5,321,663
April 2021	0.88	0.64	309,009	0.70	0.52	7,706,120
March 2021	1.07	0.73	818,348	0.85	0.58	15,496,009

Source for share price information:

- For TSX, refer to www.tmxmoney.com, enter NDM.TO; and.
- For NYSE American, use either https://www.nyse.com/listings_directory/stock or <https://ca.finance.yahoo.com/> and enter NAK.

Item 9. Escrowed Securities

Following the Company's acquisition of Mission Gold Ltd. on December 24, 2015 there are currently 753,728 common shares in the capital of the Company held in escrow pursuant to TSX-V value escrow agreements and supplemental escrow agreements dated February 13, 2013 among Delta Gold Corporation, a predecessor company to Mission Gold Ltd. (the "issuer"), Olympia Trust Company and the holder of the escrowed shares.

In addition to the applicable TSX-V time-based release conditions, the supplemental escrow agreements provide, among other things, that the escrowed shares shall not be released from escrow until the issuer has obtained requisite permits authorizing exploration and development activities at the issuer's Imperial Project which would allow the issuer to complete the drilling component of the Phase 1 recommended work program as set out in the issuer's filing statement dated December 28, 2012.

Except as outlined above, there are no shares of Northern Dynasty held in escrow.

Item 10 Directors and Officers

The names and municipalities of residence of the directors and officers of the Company, their principal occupations during the past five years, and the period of time they have served as directors or officers of Northern Dynasty are presented in the table below. Except where indicated, each director and senior officer of Northern Dynasty has held the same or similar principal occupation with the organization indicated or a predecessor thereof for the last five years. Where shown, the reference to "CEO" refers to "Chief Executive Officer" and "CFO" to "Chief Financial Officer".

Name	Position	Director or Officer Since
Desmond M. Balakrishnan Vancouver, BC, Canada	Director	December 2015
Steven A. Decker ⁴ Sherman Oaks, CA, United States	Director	March 2016
Robert A. Dickinson Lions Bay, BC, Canada	Chairman of the Board and Director	June 1994
Gordon B. Keep ^{2, 3} Vancouver, BC, Canada	Director	October 2015
Wayne Kirk ⁴ Orcas, WA, United States	Director	March 2021
David C. Laing ^{3, 4, 5} Vancouver, BC, Canada	Director	May 2016
Christian Milau ^{2, 4, 5} Vancouver, BC, Canada	Director	May 2016
Kenneth W. Pickering ^{2, 3, 5} Chemainus, BC, Canada	Director	August 2013
Mark Peters North Vancouver, BC, Canada	CFO	April 2019
Ronald W. Thiessen West Vancouver, BC, Canada	President, CEO and Director	November 1995
Trevor Thomas Vancouver, BC, Canada	Secretary and General Counsel	February 2008
Bruce Jenkins Vancouver, BC, Canada	Executive Vice President, Environment and Sustainability	June 2004
Stephen Hodgson Vancouver, BC, Canada	Vice President Engineering	March 2005

Name	Position	Director or Officer Since
Adam Chodos Vancouver, BC, Canada	Executive Vice President, Corporate Development	August 2020
Mike Westerlund North Vancouver, BC, Canada	Vice President, Investor Relations	September 2020

- (1) To the best of the Company's knowledge, none of such persons has any family relationship with any other and none were elected as a director or appointed as an officer as a result of an arrangement or understanding with a major shareholder, customer, supplier, or any other party.
- (2) Member of the Audit and Risk Committee. Mr. Milau serves as Chair.
- (3) Member of the Compensation Committee. Mr. Pickering serves as Chair.
- (4) Member of the Nominating and Governance Committee. Mr. Laing serves as Chair.
- (5) Member of the Sustainability Committee. Mr. Pickering serves as Chair.

As at March 30, 2022, the directors and officers of Northern Dynasty, and their respective affiliates, directly and indirectly, own or control as a group an aggregate of 11,804,082 common shares (2.2%), or 24,791,765 common shares (4.5%) on a diluted basis.

Biographical information

The following is the biographical information on each of the persons listed above:

Desmond M. Balakrishnan BA., LLB. – Director

Mr. Balakrishnan is a lawyer practicing in the areas of Corporate Finance and Securities, Mergers and Acquisitions, Lending, Private Equity and Gaming and Entertainment for McMillan LLP, where he has been a partner since 2004. McMillan serves as the Company's Canadian attorneys. He has been lead counsel on over \$3 billion in financing transactions and in mergers and acquisitions aggregating in excess of \$6 billion. He also serves as a director and/or officer of several resource, finance and gaming firms. He holds CLA and BA from Simon Fraser University and a Bachelor of Laws (with Distinction) from the University of Alberta.

Mr. Balakrishnan is, or was within the past five years, an officer and/or director of the following public companies:

Company	Name of Market	Positions Held	From	To
Northern Dynasty Minerals Ltd.	TSX, NYSE American	Director	December 2015	Present
Aroway Energy Inc.	TSX-V	Director	July 2010	June 2017
Big Sky Petroleum Corporation	TSX-V	Director	November 2011	November 2020
Contagious Gaming Inc.	TSX-V	Director	August 2014	Present
GrowMax Resources Corp.	TSX-V	Director	May 2020	Present
Isracann Biosciences Inc.	CSE	Director	July 2019	June 2020
Karam Minerals Inc.	CSE	Director	November 2018	Present
Ynvisible Interactive Inc. (formerly Network Exploration Ltd.)	TSX-V	Secretary	May 2008	Present
Liberty One Lithium Corp. (formerly Petro Basin Energy Corp.)	TSX-V (NEX)	Director	February 2012	May 2017
Netcoins Holdings Inc.	CSE	Director	August 2018	Present
Red Rock Capital Corp.	TSX-V (NEX)	Director	February 2012	July 2017

Company	Name of Market	Positions Held	From	To
Solution Financial Inc.	TSX-V (NEX)	Director	December 2010	Present
Strategem Capital Corp.	TSE-V	Director	October 2020	Present

Steven A. Decker, CFA – Director

Mr. Decker is a Chartered Financial Analyst® charter-holder with more than 20 years of investment experience as an Analyst and Portfolio Manager. He holds an MBA in Finance from the Marshall School of Business at the University of Southern California where he received the Marcia Israel Award for Entrepreneurship and was a manager of the California Equity Fund.

Mr. Decker is, or was within the past five years, an officer and/or director of the following public companies:

Company	Name of Market	Positions Held	From	To
Northern Dynasty Minerals Ltd.	TSX, NYSE American	Director	March 2016	Present

Robert A. Dickinson, B.Sc., M.Sc. – Chairman of the Board and Director

Mr. Dickinson is an economic geologist who has been actively involved in mineral exploration and mine development for over 45 years. He was inducted into the Canadian Mining Hall of Fame in 2012. He is Chairman of HDI and HDSI as well as a director and member of the management team of a number of the public companies associated with Hunter Dickinson Inc. He is also President and Director of United Mineral Services Ltd., a private resources company.

Mr. Dickinson is, or was within the past five years, an officer and/or director of the following public companies:

Company	Name of Market	Positions Held	From	To
Northern Dynasty Minerals Ltd.	TSX, NYSE American	Director	June 1994	Present
		Chairman	April 2004	Present
Amarc Resources Ltd.	TSX-V, OTCBB	Director	April 1993	Present
		Chairman	April 2004	Present
Heatherdale Resources Ltd.	TSX-V	Director	November 2009	September 2020
Northcliff Resources Ltd.	TSX	Director	June 2011	Present
Quartz Mountain Resources Ltd.	TSX-V	Director	December 2011	February 2019
		Chairman	December 2011	February 2019
		President & CEO	November 2017	February 2019
Taseko Mines Limited	TSX, NYSE American	Director	January 1991	Present

Gordon B. Keep, B.Sc., MBA, P.Geo. – Director

Mr. Keep is a Professional Geologist with extensive business experience in investment banking and creating public natural resource companies. Mr. Keep is CEO of Fiore Management & Advisory Corp., a private financial advisory firm. He also serves as an officer and/or director for several natural resource companies. He holds a B.Sc. in Geological Science from Queen's University and an MBA from the University of British Columbia.

Mr. Keep is, or was within the past five years, an officer and/or director of the following public companies:

Company	Name of Market	Positions Held	From	To
Northern Dynasty Minerals Ltd.	TSX, NYSE American	Director	October 2015	Present
Encanto Potash Corp.	TSX-V	Director	December 2008	December 2017
		Chairman	October 2009	December 2017

Company	Name of Market	Positions Held	From	To
Gold X Mining Corp. (previously Sandspring Resources Ltd.)	TSX-V	Director	March 2017	March 2020
Klondike Gold Corp.	TSX-V	Director	December 2013	Present
NG Energy International Corp. (previously Cruzsur Energy Ltd.)	TSX-V	Director	July 2017	Present
Oceanic Iron Ore Corp.	TSX-V	Director	September 2010	Present
Rusoro Mining Ltd.	TSX-V	Director	November 2006	Present
Total Helium Ltd.	TSX-V	Director	September 2021	Present
Vanadian Energy Ltd. (previously Uracon Resources Ltd.)	TSX-V	Director	November 2003	Present

Wayne Kirk, LL.B – Director

Mr. Kirk has over 35 years of experience as a corporate attorney, including nine years' experience as Vice President, General Counsel and Corporate Secretary of Homestake Mining Company, and over 17 years of experience as a director of publicly held companies. Mr. Kirk holds a B.A. in Economics (Distinction) from the University of California (Berkeley) and an LL.B (magna cum laude) degree from Harvard University, and has been a member of the California Bar since 1969. Mr. Kirk was a director of the Company from July 2004 to February 2016.

Mr. Kirk is, or was within the past five years, an officer and/or director of the following public companies:

Company	Name of Market	Positions Held	From	To
Northern Dynasty Minerals Ltd.	TSX, NYSE American	Director	March 2021	Present
Gabriel Resources Ltd.	TSXV	Director	June 2008	September 2020
Nickel Creek Platinum Corp.	TSX	Director	March 2016	Present

David Laing, BSc Mining Engineering – Director

Mr. Laing is a Mining Engineer with 40 years' experience in mining operations, projects, engineering studies, mining finance, investor relations, mergers and acquisitions, corporate development, and company building. Mr. Laing was Chief Operating Officer ("COO") of Equinox Gold Corp. Previously he was COO and director of Trek Mining Inc., Luna Gold Corp. and COO of True Gold Mining Inc. Prior to joining True Gold Mining Inc., Mr. Laing was COO and led the origination and execution of stream financing transactions of Quintana Resources Capital ULC, a base metals streaming company. He was also one of the original executives of Endeavour Mining Corporation as the group grew from one mine in Burkina Faso to a 500,000 ounce gold producer in West Africa. Mr. Laing was an integral part of the acquisition and integration of three junior gold producers and led the feasibility of a fourth project, in Burkina Faso. Prior to these recent roles, Mr. Laing held senior positions in mining investment banking at Standard Bank in New York, technical consulting at MRDI in California, the Refugio project at Bema Gold Corp. and various roles at Billiton and Royal Dutch Shell's mining business.

Mr. Laing is, or was within the past five years, an officer and/or director of the following public companies:

Company	Name of Market	Positions Held	From	To
Northern Dynasty Minerals Ltd.	TSX, NYSE American	Director	May 2016	Present
Amarillo Gold Corporation	TSX-V	Director	October 2020	Present
Aton Resources Inc.	TSX-V	Director	May 2016	April 2021
Blackrock Gold Corp.	TSX-V	Director	April 2020	Present
Equinox Gold Corp. ¹	TSX, NYSE American	COO	December 2017	November 2018
Fortuna Silver Mines Inc.	TSX, NYSE	Director	September 2016	Present

Company	Name of Market	Positions Held	From	To
Luna Gold Corp. ¹	TSX	COO and Director	August 2016	March 2017
Gold X Mining Corp. (previously Sandspring Resources Ltd.)	TSX-V	Director	August 2015	March 2020
Trek Mining Inc. ¹	TSX-V	COO and Director	March 2017	December 2017

Note:

- Equinox Gold Corp. is the result of the merger in December 2017 of Trek Mining Inc., NewCastle Gold Ltd. and Anfield Gold Corp. Trek Mining Inc. was the result of the merger of Luna Gold Corp. and TSX-V listed JDL Gold Corp. in March 2017.

Christian Milau, CPA, CA, CPA (Illinois) – Director

Mr. Milau is a Chartered Professional Accountant (Chartered Accountant). Mr. Milau is CEO and Director of Equinox Gold Corp. Prior to this he was President and CEO of Trek Mining Inc., Luna Gold Corp. and True Gold Mining Inc. Mr. Milau has finance and capital markets experience as well as operational, government and stakeholder relations experience in North and South America and West Africa. Prior to these recent roles, Mr. Milau was CFO at Endeavour Mining Corporation and was Treasurer at New Gold Inc.

Mr. Milau is, or was within the past five years, an officer and/or director of the following public companies:

Company	Name of Market	Positions Held	From	To
Northern Dynasty Minerals Ltd.	TSX, NYSE American	Director	May 2016	Present
Equinox Gold Corp. ¹	TSX, NYSE American	CEO and Director	December 2017	Present
Luna Gold Corp. ¹	TSX	CEO and Director	August 2016	March 2017
Plateau Energy Metals Inc.	TSX-V	Director	June 2016	Present
Trek Mining Inc. ¹	TSX-V	CEO and Director	March 2017	December 2017

Note:

- Equinox Gold Corp. is the result of the merger in December 2017 of Trek Mining Inc., NewCastle Gold Ltd. and Anfield Gold Corp. Trek Mining Inc. was the result of the merger of Luna Gold Corp. and TSX-V listed JDL Gold Corp. in March 2017.

Kenneth W. Pickering, PEng. – Director

Mr. Pickering is a Professional Engineer and mining executive with 40 years of experience in a variety of capacities in the natural resources industry. He has led the development, construction and operation of world-class mining projects in Canada, Chile, Australia, Peru and the United States, focusing on operations, executive responsibilities and country accountabilities.

Mr. Pickering is, or was within the past five years, an officer and/or director of the following public companies:

Company	Name of Market	Positions Held	From	To
Northern Dynasty Minerals Ltd.	TSX, NYSE American	Director	August 2013	Present
Enaex Chile	IPSA	Director	May 2011	May 2018
Endeavour Silver Corp.	TSX, NYSE	Director	August 2012	Present
Taseko Mines Limited	TSX, NYSE American	Director	July 2018	Present
Teck Resources	TSX, NYSE	Director	March 2015	Present

Ronald W. Thiessen, FCPA, FCA – Director, President and Chief Executive Officer

Mr. Thiessen is a Chartered Professional Accountant (CPA, CA) with professional experience in finance, taxation, mergers, acquisitions and re-organizations. Since 1986, Mr. Thiessen has been involved in the

acquisition and financing of mining and mineral exploration companies. Mr. Thiessen is a director of HDI and HDSI, a company providing management and administrative services to several publicly-traded companies and focuses on directing corporate development and financing activities.

Mr. Thiessen is, or was within the past five years, an officer and/or director of the following public companies:

Company	Name of Market	Positions Held	From	To
Northern Dynasty Minerals Ltd.	TSX, NYSE American	Director	November 1995	Present
		President and CEO	November 2001	Present
Amarc Resources Ltd.	TSX-V, OTCBB	Director	September 1995	February 2019
		CEO	September 2000	February 2019
Quartz Mountain Resources Ltd.	TSX-V	President, CEO and Director	December 2011	December 2017
Taseko Mines Limited	TSX, NYSE American	Director	October 1993	Present
		Chairman	May 2006	Present

Mark Peters, CPA, CA – Chief Financial Officer

Mr. Peters is a Chartered Professional Accountant (CPA, CA) who has more than 18 years of experience in the areas of financial reporting and taxation, working primarily with Canadian and US public corporations. He is an experienced CFO, having served as CFO for HDSI since 2016 and for a TSX Venture-listed company from 2012 until 2020. Prior to that, Mr. Peters led the tax department for the HDI group of companies. Before joining HDI in 2007, Mr. Peters worked for PricewaterhouseCoopers LLP in the both the audit and tax groups.

Mr. Peters is, or was within the past five years, an officer and/or director of the following public companies:

Company	Name of Market	Positions Held	From	To
Northern Dynasty Minerals Ltd.	TSX, NYSE American	CFO	April 2019	Present
Heatherdale Resources Ltd.	TSX-V	CFO	March 2012	August 2020
Canada Rare Earth Corp.	TSX-V	Director	March 2017	Present

Trevor Thomas, LLB – Secretary

Trevor Thomas has practiced in the areas of corporate commercial, corporate finance, securities and mining law since 1995, both in private practice environment as well as in house positions and is currently general counsel for HDI. Prior to joining HDI, he served as in-house legal counsel with Placer Dome Inc.

Mr. Thomas is, or was within the past five years, an officer and/or director of the following public companies:

Company	Name of Market	Positions Held	From	To
Northern Dynasty Minerals Ltd.	TSX, NYSE American	Secretary	February 2008	Present
		General Counsel	April 2021	Present
Amarc Resources Ltd.	TSX-V, OTCBB	Secretary	February 2008	Present
Heatherdale Resources Ltd.	TSX-V	Secretary	June 2013	August 2020
Mineral Mountain Resources Ltd.	TSX-V	Director	September 2016	Present
Northcliff Resources Ltd.	TSX	Secretary	June 2011	Present
Quadro Resources Ltd.	TSX-V	Secretary	June 2017	Present
Quartz Mountain Resources Ltd.	TSX-V	Secretary	June 2013	Present
Rathdowney Resources Ltd.	TSX-V	Secretary	March 2011	Present
RE Royalties Ltd.	TSX-V	Secretary	November 2018	Present
Taseko Mines Limited	TSX, NYSE American	Secretary	July 2008	Present

Bruce Jenkins – Executive Vice President, Environment and Sustainability

Mr. Jenkins is an environmental and government relations executive with more than 40 years of experience in project and corporate management. He supports the Pebble Partnership and helps guide environmental studies, mitigation planning and permitting activities. Mr. Jenkins is also Executive Vice President of Environment and Sustainability for HDI.

Stephen Hodgson – Vice President, Engineering

Mr. Hodgson is a professional engineer with over 40 years of experience in consulting, project management, feasibility-level design and implementation, and mine operations at some of the largest mineral development projects in the world. He brings a unique perspective to the Pebble team with his experience at northern and Arctic mines. He has led the Northern Dynasty engineering team since 2005. He was also Senior Vice President of Engineering and Project Director, Engineering, for the Pebble Limited Partnership until February 28, 2021.

Adam Chodos – Executive Vice President, Corporate Development

Mr. Chodos is a senior executive with over 19 years of experience in Corporate Development and Investment Banking advisory. Mr. Chodos was most recently a Director of Corporate Development for Teck Resources and, prior to that, was a Group Executive with Newmont's Corporate Development team. Before joining Newmont, Mr. Chodos spent nine years as an Investment Banker with J.P. Morgan Securities Inc., in New York, specializing in the Natural Resources sector. He had a significant role in over US\$28 billion of mergers, acquisitions, divestitures and capital markets transactions. Mr. Chodos has a Bachelor of Commerce degree from McGill University. He is also Executive Vice President, Corporate Development for HDSI.

Mike Westerlund – Vice President, Investor Relations

Mr. Westerlund is a seasoned investor relations executive with 20 years' experience in the North American metals and mining industry. Most recently, Mr. Westerlund was Vice President, Investor Relations with Hecla Mining Company, a US\$3 billion NYSE-listed precious metals company with five operating mines in Canada, the United States and Mexico, where he directed the investor relations department for eight years. Previously, Mr. Westerlund worked with a series of mineral exploration and mining firms with development stage and operating assets throughout North America.

Committees of the Board of Directors

The following committees have been established by the members of Northern Dynasty's board of directors:

Committee	Membership
Audit and Risk Committee	Christian Milau (Chair) Gordon Keep Kenneth Pickering
Compensation Committee	Kenneth Pickering (Chair) Gordon Keep David Laing
Nominating and Governance Committee	David Laing (Chair) Steven Decker Wayne Kirk Christian Milau
Sustainability Committee	Kenneth Pickering (Chair) David Laing Christian Milau

The mandate of each of these committees is more particularly described in Northern Dynasty's Corporate Governance Policies and Procedures Manual available on the Company's website at: www.northerndynastyminerals.com.

Bankruptcies, Cease Trade Orders, Penalties or Sanctions

No director or officer of Northern Dynasty is, as of the date of this Annual Information Form, or has been within the ten years before the date of this Annual Information Form, a director or officer of any company that while that person was acting in that capacity, was the subject of a bankruptcy, cease trade order, penalties or sanctions, during the time the individual was a director or within a one year period thereafter, or was a director or officer of a company during the time in which an event occurred which led to a bankruptcy, cease trade order, penalties or sanctions subsequent to the individual ceasing to act as a director or officer. This information has been provided by each director or officer, as the Company is unable to verify these statements independently.

Exceptions

As publicly disclosed at www.sedar.com, Great Basin Gold Ltd. ("**GBG**"), a company for which Messrs. Kirk and Thiessen were at one time directors, became bankrupt due to heavy indebtedness, mine production issues and falling gold prices. GBG was liquidated, commencing in September 2012. Mr. Kirk resigned in January 2012 and Mr. Thiessen resigned in June 2013.

On May 21, 2013, the British Columbia Securities Commission ("**BCSC**") issued a cease trade order against Rusoro Mining Ltd. ("**Rusoro**"), a company for which Mr. Keep serves as a director. The cease order was for the failure by Rusoro to file its audited financial statements for the year ended December 31, 2012 and related MD&A ("**2012 Year End Disclosure**"). On June 5, 2013, and June 7, 2013, respectively, similar cease trade orders were issued against Rusoro by the Ontario Securities Commission ("**OSC**") and the Autorité des Marchés Financiers ("**AMF**"). On August 19, 2013, Rusoro filed its 2012 Year End Disclosure. On August 21, 2013, August 28, 2013 and September 4, 2013, BCSC, AMF and OSC respectively, granted full revocations of their cease trade orders. Rusoro was unable to file its 2012 Year End Disclosure by the required filing deadline because it experienced significant delays in preparing them due to the nationalization by the Venezuelan government of Rusoro's gold mining assets in Venezuela.

Potential Conflicts of Interest

Other than Mr. Decker, the directors of Northern Dynasty also serve as directors of other similar companies involved in natural resource development. It may occur from time to time that, as a consequence of a particular director's activity in the mining and mineral industry and serving on such other boards, a director may become aware of potential resource property opportunities which are of interest to more than one of the companies on whose boards that person serves. Furthermore, it is possible that the directors Northern Dynasty and the directors of one or more such other companies (many of which are described herein) may also agree to allow joint participation on Northern Dynasty's properties or the properties of that other company. Accordingly, situations may arise in the ordinary course which involve a director in an actual or potential conflict of interest as well as issues in connection with the general obligation of a director to make corporate opportunities available to Northern Dynasty and other companies on whose board the director serves. In all such events, any director is required to disclose a financial interest in a contract or transaction by virtue of office, employment or security holdings or other such interest in another company or in a property interest under consideration by the Board, and is obliged to abstain from voting as a director of Northern Dynasty in respect of any transaction involving that other company or in respect of any property in which an interest is held by said director. The directors will use their best business judgment to help avoid situations where conflicts or corporate opportunity issues might arise and they must at all times fulfil their duties to act honestly and in the best interests of Northern Dynasty as required by law.

Item 11. Promoters

Not applicable.

Item 12. Legal

Grand Jury Subpoena

On September 23, 2020, the Company announced that Tom Collier, the former Chief Executive Officer of the Pebble Partnership, had submitted his resignation in light of comments made about elected and regulatory officials in Alaska and the Pebble Project in private conversations covertly videotaped by an environmental activist group. Conversations with Mr. Collier, as well as others with Ron Thiessen, Northern Dynasty's President and Chief Executive Officer, were secretly videotaped or audiotaped by unknown individuals posing as representatives of a Hong Kong-based investment firm, which represented that it was linked to a Chinese State-Owned Enterprise (SOE). The Company understands that a Washington DC-based environmental group, the Environmental Investigation Agency, released portions of the recordings online after obscuring the voices and identities of the individuals posing as investors.

Following the release of the recordings, the USACE issued a statement that, following a review of the transcripts of the recordings, they had "*identified inaccuracies and falsehoods relating to the permit process and the relationship between our regulatory leadership and the applicant's executives*". Further, the Pebble Partnership received a letter from the Committee on Transportation and Infrastructure of the United States House of Representatives on November 19, 2020, stating that the comments made by Mr. Collier and Mr. Thiessen regarding the expansion, capacity, size and duration of the potential Pebble mine were believed to be inconsistent with the testimony of Mr. Collier before the Committee and demanding production of documents apparently related to the comments. The Company has been producing documents in response to those requests. The Company also responded to the Committee by letter denying and refuting that there was any inconsistency as raised in the Committee's November 19, 2020 correspondence.

On February 5, 2021, the Company announced that the Pebble Partnership and Tom Collier, the former Chief Executive Officer of the Pebble Partnership, had each been served with a subpoena issued by the United States Attorney's Office for the District of Alaska to produce documents in connection with a grand jury investigation. The Company is not aware of any criminal charges having been filed against any entity or individual in this matter. The Company also self-reported this matter to the SEC, and there is a related inquiry being conducted

by the enforcement staff of the SEC's San Francisco Regional Office. The Company and the Pebble Partnership are cooperating with each of these investigations.

Class Action Litigation relating to the USACE'S Record of Decision

On December 4 and December 17, 2020, separate putative shareholder class action lawsuits were filed against the Company and certain of its current and former officers and directors in the U.S. District Court for the Eastern District of New York regarding the drop in the price of the Company's stock following the ROD by the USACE regarding the Pebble Project. These cases are captioned *Darish v. Northern Dynasty Minerals Ltd. et al.*, Case No. 1:20-cv-05917-ENV-RLM, and *Hymowitz v. Northern Dynasty Minerals Ltd. et al.*, Case No. 1:20-cv-06126-PKC-RLM. Each of the complaints was filed on behalf of a purported class of investors who purchased shares of the Company's stock from December 21, 2017, through November 25, 2020, the date the USACE announced its decision, and seeks damages allegedly caused by violations of the federal securities laws. On March 17, 2021, the two cases were consolidated and a lead plaintiff and counsel were appointed. A consolidated and amended complaint was filed in June 2021, naming the Company, the Company's CEO and the Pebble Partnership's former CEO as defendants. The Company intends to defend itself vigorously and has filed a motion to dismiss the complaint on behalf of all defendants.

On December 3, 2020, a putative shareholder class action lawsuit was filed against the Company, certain of its current and former officers and directors, and one of its underwriters in the Supreme Court of British Columbia regarding the decrease in the price of the Company's stock following the USACE's November 25, 2020 decision regarding the Pebble Project. The case is captioned *Haddad v. Northern Dynasty Minerals Ltd. et al.*, Case No. VLC-S-S-2012849. The claim was filed on behalf of a purported class of investors, wherever they may reside, who acquired common shares of the Company's stock between December 21, 2017 and November 25, 2020, and seeks damages for (i) alleged misrepresentations in the Company's primary market offering documents and continuous disclosure documents, and (ii) allegedly oppressive conduct. The Company has been served the claim and intends to defend itself vigorously. The underwriter has asserted contractual rights of indemnification against the Company for any loss that the underwriter may incur in connection with the lawsuit.

On February 17, 2021, a putative shareholder class action lawsuit was filed against the Company, certain of its current and former officers and directors, and certain of its underwriters in the Supreme Court of British Columbia regarding the decrease in the price of the Company's stock following (i) the USACE's August 24, 2020 announcement that the Pebble Project could not be permitted as proposed, and (ii) the USACE's November 25, 2020 decision regarding the Pebble Project. The case is captioned *Woo v. Northern Dynasty Minerals Ltd. et al.*, Case No. VLC-S-S-211530. The claim was filed on behalf of a purported class of investors, wherever they may reside, who purchased securities of the Company between June 25, 2020 and November 25, 2020, and seeks damages for (i) alleged misrepresentations in the Company's primary market offering documents and continuous disclosure documents, (ii) allegedly oppressive conduct, (iii) alleged unjust enrichment, and (iv) negligence. The Company has been served and intends to defend itself vigorously. The underwriters have asserted contractual rights of indemnification against the Company for any loss that they may incur in connection with the lawsuit.

On March 5, 2021, a putative shareholder class action lawsuit was filed against the Company, certain of its current and former officers and directors, and certain of its underwriters in the Ontario Superior Court of Justice regarding the decrease in the price of the Company's stock following the USACE's November 25, 2020 decision regarding the Pebble Project. The case is captioned *Pirzada v. Northern Dynasty Minerals Ltd. et al.*, Case No. CV-21-00658284-00CP. The claim was filed on behalf of a purported class of investors, wherever they may reside, who acquired securities of the Company between June 25, 2020 and November 25, 2020, and seeks damages for (i) alleged misrepresentations in the Company's primary market offering documents and continuous disclosure documents, (ii) allegedly oppressive conduct, and (iii) alleged negligence. The Company has been served and intends to defend itself vigorously. The underwriters have asserted contractual rights of indemnification against the Company for any loss that they may incur in connection with the lawsuit. In February 2022, the plaintiff delivered a motion to discontinue the Pirzada claim, advising that the claim would be consolidated with the British Columbia actions instead.

Indemnification Obligations

The Company is subject to certain indemnification obligations to both present and former officers and directors, including Mr. Collier, in respect to the legal proceedings described above. These indemnification obligations will be subject to limitations prescribed by law and the articles of the Company, and may also be subject to contractual limitations.

Risk Factors

The outcomes of the legal proceedings described above cannot be predicted and resolution of these legal proceedings will likely involve significant expense to the Company. In addition, adverse outcomes in these legal proceedings may have a material adverse effect on the Company's business, future prospects and financial condition. Investors should refer to the risk factors identified above under Item 5 – *Description of Business – Risk Factors*, starting on page 49, for a discussion of risks relating to the legal proceedings described above.

Regulatory Actions

There have been no:

- (a) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during the most recently completed financial year, or
- (b) other material penalties or sanctions imposed by a court or regulatory body against the Company, or
- (c) settlement agreements the Company entered into before a court relating to securities legislation or with a securities regulatory authority during the most recently completed financial year.

Item 13. Interest of Management and Others in Material Transactions

None of the directors or senior officers of the Company, nor any person who has held such a position since the beginning of the last completed financial year end of the Company, nor any associate or affiliate of the foregoing persons, has any substantial or material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, in any material transactions of the Company other than as set out herein.

Certain directors of a private company, HDSI, a wholly owned subsidiary of HDI (see Item 10) are also directors of the Company. Pursuant to a management services agreement with HDSI, HDSI provides geological, corporate development, administrative and management services to, and incurs third party costs on behalf of, the Company and its subsidiaries at annually set rates. During the year ended December 31, 2021, the Company paid HDSI approximately \$5.36 million (2020 – \$5.57 million) for services rendered by HDSI and reimbursed HDSI approximately \$0.62 million (2020 – \$0.59 million) for third party costs incurred on the Company's behalf. Certain members of the Company's senior management including the Company's CEO and CFO are employed by HDSI rather than by Northern Dynasty directly.

Item 14. Transfer Agent and Registrar

The Company's registrar and transfer agent is Computershare Trust Company of Canada, located in Vancouver, BC.

Item 15. Material Contracts

Northern Dynasty's only material contract as of March 30, 2022 is:

- Corporate Services Agreement between Northern Dynasty and Hunter Dickinson Services Inc. dated July 2, 2010.

Other agreements are in the normal course of business.

Item 16. Interests of Experts

David Gaunt, P.Geo., Eric Titley, P.Geo., and Stephen Hodgson, P.Eng.²⁵, of Hunter Dickinson Services Inc. ("HDSI"), and Robin Kalanchey, P.Eng., Hassan Ghaffari, P.Eng., Sabry Abdel Hafez, P.Eng., Les Galbraith, P.Eng., P.E., and James Lang, P.Geo., consultants, are persons:

- who are named as in a report described in a filing, or referred to in a filing by the Company made under National Instrument 51-102, *Continuous Disclosure Obligations*, during, or relating to, the Company's most recently completed financial year; and
- whose profession or business gives authority to the report made by each of them.

Messrs. Gaunt, Titley and Hodgson, employees of HDSI, and Dr. Lang, a former employee and currently a consultant to HDSI, hold interests in the common shares of the Company, directly or indirectly, or through share purchase options, each representing less than 1% of the Company's outstanding share capital. Robin Kalanchey, P.Eng., Ausenco, Hassan Ghaffari, P.Eng., Tetra Tech Canada Inc., Sabry Abdel Hafez, P.Eng., Tetra Tech Canada Inc., and Les Galbraith, P.Eng., P.E., Knight Piésold Ltd., hold no interest in the Company.

Deloitte LLP, Independent Registered Public Accounting Firm, is the auditor of Northern Dynasty and is independent of Northern Dynasty within the meaning of the Rules of Professional Conduct of the Chartered Professional Accountants of British Columbia and within the meaning of U.S. Securities Exchange Act of 1933, as amended, and the applicable rules and regulations thereunder adopted by the SEC and the Public Company Accounting Oversight Board (United States).

Item 17. Additional Information

Additional information, including directors' and officers' remuneration, indebtedness of officers, executive stock options and interests of management and others in material transactions, where applicable, is contained in annual financial statements, management's discussion and analysis, proxy circulars and interim financial statements of the Company, available under the Company's profile on SEDAR at www.sedar.com and from the SEC's Electronic Document Gathering and Retrieval System ("EDGAR") at www.sec.gov.

The following documents can be obtained upon request from Northern Dynasty's Shareholder Communication Department by calling (604) 684-6365:

- this AIF, together with any document incorporated herein by reference;
- interim consolidated financial statements filed with Securities Commissions subsequent to the audited consolidated financial statements for the Company's most recently completed financial year; and
- the Proxy Circular for the annual general meeting of the Company when available.

The Company may require the payment of a reasonable charge from persons, other than security holders of the Company, requesting copies of these documents.

²⁵ Mr. Hodgson has been the Vice President, Engineering for the Company since March 2005. In July 2018, he was transferred to Hunter Dickinson (US) Servicepay Inc. and acted as Senior Vice President, Engineering and Project Director for the Pebble Partnership. He held that role until February 28, 2021, when he was transferred back to HDSI and continues to act as the Vice President, Engineering for the Company.

Item 18. Disclosure for Companies not Sending Information Circulars

Not applicable.

Item 19. Audit and Risk Committee, Auditor Fees, Exemptions, Code of Ethics

Audit and Risk Committee (the "Audit Committee")

Audit Committee Charter

The Audit Committee has adopted a charter that sets out its mandate and responsibilities, and is attached to this AIF as Appendix A.

Composition of the Audit Committee

The Audit Committee currently consists of Christian Milau (Chair), Ken Pickering and Gordon Keep. The Audit Committee reviews all financial statements of the Company prior to their publication, reviews audits performed, considers the adequacy of audit procedures, recommends the appointment of independent auditors, reviews and approves the professional services to be rendered by them and reviews fees for audit services. The Audit Committee Charter has set criteria for membership which all committee members are required to meet, consistent with National Instrument 52-110, *Audit Committees* ("**NI 52-110**"), and other applicable regulatory requirements. The Audit Committee, as needed, meets separately (without management present) with the Company's auditors to discuss the various aspects of the Company's financial statements and the independent audit.

Each Audit Committee member is an independent director and is financially literate. Mr. Keep has extensive business knowledge and is a director of a number of companies. Mr. Pickering has been a member on other audit committees of publicly listed companies. Mr. Milau, the Audit and Risk Committee Chairman is a Chartered Professional Accountant and is a financial expert.

Relevant Education and Experience

As a result of their education and experience, each member of the Audit Committee has familiarity with, an understanding of, or experience in:

- the accounting principles used by the Company to prepare its financial statements, and the ability to assess the general application of those principles in connection with estimates, accruals and reserves;
- reviewing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements, and
- an understanding of internal controls and procedures for financial reporting.

See disclosure regarding biographical information in [Item 10](#).

Reliance on Certain Exemptions Available in NI 52-110

The Company's auditor, Deloitte LLP, has not provided any non-audit services during the most recently completed fiscal year.

Pre-Approval Policies and Procedures

The Company has procedures for the review and pre-approval of any services performed by its auditor. The procedures require that all proposed engagements of its auditor for audit and non-audit services be submitted to the Audit Committee for approval prior to the beginning of any such services. The Audit Committee considers such requests and, if acceptable to a majority of the Audit Committee members, pre-approves such

audit and non-audit services by a resolution authorizing management to engage the Company's auditor for such audit and non-audit services, with set maximum dollar amounts for each itemized service. During such deliberations, the Audit Committee assesses, among other factors, whether the services requested would be considered "prohibited services" as contemplated by the regulations of the SEC, and whether the services requested and the fees related to such services could impair the independence of the auditors.

Principal Accountant Fees and Services

The Audit Committee has reviewed the nature and amount of the audit and non-audit services provided by Deloitte LLP to the Company to ensure auditor independence. Fees incurred with Deloitte LLP for audit and non-audit services in the last two fiscal years are outlined in the following table:

Nature of Services		Year ended December 31 2021	Year ended December 31 2020
Audit Fees	the aggregate fees billed by our independent auditor for the audit of our annual consolidated financial statements, reviews of interim consolidated financial statements and attestation services that are provided in connection with statutory and regulatory filings or engagements.	\$ 246,000	\$ 229,000
Audit-Related Fees	include services that are traditionally performed by the auditor. These audit-related services include employee benefit audits, due diligence assistance, accounting consultations on proposed transactions, internal control reviews and audit or attest services not required by legislation or regulation.	84,000 ²	74,000 ¹
Tax Fees	include fees for all tax services other than those included in "Audit Fees" and "Audit-Related Fees". This category includes fees for tax compliance, tax planning and tax advice. Tax planning and tax advice includes assistance with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from tax authorities.	—	—
All Other Fees	include all other non-audit services.	—	—
Total		\$ 330,000	\$ 303,000

Note

1. Fees relate to assistance with the Company's prospectus supplements filed in December/January 2019/2020 and April/May 2020, the short form base shelf prospectus filed in July 2020 and the prospectus supplement filed in July 2020.
2. Fees relate to assistance with the Company's June 2021 ATM Offering and subsequent updates to Deloitte LLP's comfort letter thereon.

From time to time, management of the Company recommends to and requests approval from the Audit Committee for audit and non-audit services to be provided by the Company's auditors. The Audit Committee routinely considers such requests at committee meetings, and if acceptable to a majority of the Audit Committee members, pre-approves such audit and non-audit services by a resolution authorizing management to engage the Company's auditors for such non-audit services, with set maximum dollar amounts for each itemized service. During such deliberations, the Audit Committee assesses, among other factors, whether the non-audit services requested would be considered "prohibited services" as contemplated by the SEC, and whether the non-audit services requested and the fees related to such services could impair the independence of the auditors.

Code of Ethics

The Company has adopted a code of ethics that applies to all directors, officers and employees of the Company. A copy of the Code of Ethics, which is included as part of the Company's Governance Policies and Procedures

Manual is available for download from the Company's website at www.northerndynastyminerals.com and under the Company's profile on SEDAR at www.sedar.com.

Appendix A - Audit and Risk Committee Charter

1. Purpose: Responsibilities and Authority

The Audit and Risk Committee (the “Audit Committee” or “Committee”) shall carry out its responsibilities under applicable laws, regulations and stock exchange requirements with respect to the employment, compensation and oversight of the Company’s independent auditor, and other matters under the authority of the Committee. The Committee also shall assist the Board of Directors in carrying out its oversight responsibilities relating to the Company’s financial, accounting and reporting processes, the Company’s system of internal accounting and financial controls, the Company’s compliance with related legal and regulatory requirements, and the fairness of transactions between the Company and related parties. In furtherance of this purpose, the Committee shall have the following responsibilities and authority:

(a) *Relationship with Independent Auditor.*

- (i) Subject to the law of British Columbia as to the role of the Shareholders in the appointment of independent auditors, the Committee shall have the sole authority to appoint or replace the independent auditor.
- (ii) The Committee shall be directly responsible for the compensation and oversight of the work of the independent auditor (including resolution of disagreements between management and the independent auditor regarding financial reporting) for the purpose of preparing or issuing an audit report or related work.
- (iii) The independent auditor shall report directly to the Committee.
- (iv) The Committee shall approve in advance all audit and permitted non-audit services with the independent auditor, including the terms of the engagements and the fees payable; provided that the Committee Chair may approve services to be performed by the independent auditors and the fee therefor between Committee meetings if the amount of the fee does not exceed \$50,000, provided that any such approval shall be reported to the Committee at the next meeting thereof. The Committee may delegate to a subcommittee the authority to grant pre-approvals of audit and permitted non-audit services, provided that the decision of any such subcommittee shall be presented to the full Committee at its next scheduled meeting.
- (v) At least annually, the Committee shall review and evaluate the experience and qualifications of the lead partner and senior members of the independent auditor team.
- (vi) At least annually, the Committee shall obtain and review a report from the independent auditor regarding:
 - (A) the independent auditor’s internal quality-control procedures;
 - (B) any material issues raised by the most recent internal quality-control review, or peer review, of the auditor, or by any inquiry or investigation by governmental or professional authorities within the preceding five years respecting one or more independent audits carried out by the firm;
 - (C) any steps taken to deal with any such issues; and
 - (D) all relationships between the independent auditor and the Company.

- (vii) At least annually, the Committee shall evaluate the qualifications, performance and independence of the independent auditor, including considering whether the auditor's quality controls are adequate and the provision of permitted non-audit services is compatible with maintaining the auditor's independence.
- (viii) The Committee shall ensure the rotation of the lead (or coordinating) audit partner having primary responsibility for the audit, the concurring partner responsible for reviewing the audit, and other audit partners as required by law.
- (ix) The Committee shall consider whether, in order to assure continuing auditor independence, it is appropriate to adopt a policy of rotating the independent auditing firm on a regular basis.
- (x) The Committee shall recommend to the Board policies for the Company's hiring of employees or former employees of the independent auditor who were engaged on the Company's account or participated in any capacity in the audit of the Company.
- (xi) The Committee shall oversee the implementation by management of appropriate information technology systems for the Company, including as required for proper financial reporting and compliance.

(b) ***Financial Statement and Disclosure Review.***

- (i) The Committee shall review and discuss with management and the independent auditor the annual audited financial statements, including disclosures made in management's discussion and analysis, and recommend to the Board whether the audited financial statements should be filed with applicable securities regulatory authorities and included in the Company's annual reports.
- (ii) The Committee shall review and discuss with management (and, to the extent the Committee deems it necessary or appropriate, the independent auditor) the Company's quarterly financial statements, including disclosures made in management's discussion and analysis, and recommend to the Board whether such financial statements should be filed with applicable securities regulatory authorities.
- (iii) The Committee shall review and discuss with management and the independent auditor significant financial reporting issues and judgments made in connection with the preparation of the Company's financial statements, including the independent auditor's assessment of the quality of the Company's accounting principles, any significant changes in the Company's selection or application of accounting principles, any major issues as to the adequacy of the Company's internal controls over financial reporting, and any special steps adopted in light of material control deficiencies.
- (iv) At least annually and prior to the publication of annual audited financial statements, the Committee shall review and discuss with management and the independent auditor a report from the independent auditor on:
 - (A) all critical accounting policies and practices used by the Company;
 - (B) all alternative accounting treatments of financial information that have been discussed with management since the prior report, ramifications of the use of such alternative disclosures and treatments, the treatment preferred by the independent auditor, and an explanation of why the independent auditor's preferred method was not adopted; and.

- (C) other material written communications between the independent auditor and management since the prior report, such as any management letter or schedule of unadjusted differences, the development, selection and disclosure of critical accounting estimates, and analyses of the effect of alternative assumptions, estimates or GAAP methods on the Company's financial statements.
 - (v) Prior to their filing or issuance, the Committee shall review the Company's Annual Information Form/Annual Report to the SEC, quarterly and annual earnings press releases, and other financial press releases, including the use of "pro forma" or "adjusted" non-GAAP information.
 - (vi) The Committee shall review and discuss with management the financial information and earnings guidance provided to analysts and rating agencies. Such discussion may be specific or it may be in general regarding the types of information to be disclosed and the types of presentations to be made.
- (c) ***Conduct of the Annual Audit.***

The Committee shall oversee the annual audit, and in the course of such oversight the Committee shall have the following responsibilities and authority:

 - (i) The Committee shall meet with the independent auditor prior to the audit to discuss the planning and conduct of the annual audit, and shall meet with the independent auditor as may be necessary or appropriate in connection with the audit.
 - (ii) The Committee shall ascertain that the independent auditor is registered and in good standing with the Canadian Public Accountability Board and the Public Company Accounting Oversight Board ("PCAOB") and that the independent auditor satisfies all applicable Canadian independence standards (Canadian Auditing Standard 200), PCAOB Rule 3526 and SEC Regulation S-X, Section 2-01. The Committee shall obtain from the auditor a written description of all relationships between the auditor and the Company and persons in a financial reporting oversight role at the Company as per PCAOB Rule 3526 that may reasonably be thought to bear on independence.
 - (iii) The Committee shall discuss with the independent auditor the matters required to be discussed by PCAOB Auditing Standard No. 16 and Canadian Auditing Standard 260 relating to the conduct of the audit.
 - (iv) The Committee shall obtain from the independent auditor assurance that the audit was conducted in a manner consistent with Section 10A of the Securities Exchange Act of 1934 and that, in the course of conducting the audit, the independent auditor has not become aware of information indicating that an illegal act has or may have occurred or, if such an act may have occurred, that the independent auditor has taken all action required by Section 10A(b) of the Securities Exchange Act of 1934.
 - (v) The Committee shall make such inquiries to the management and the independent auditor as the Committee members deem necessary or appropriate to satisfy themselves regarding the efficacy of the Company's financial and internal controls and procedures and the auditing process.
- (d) ***Compliance and Oversight.***
 - (i) The Committee shall meet periodically with management and the independent auditor in separate executive sessions. The Committee may also, to the extent it

deems necessary or appropriate, meet with the Company's investment bankers and financial analysts who follow the Company.

- (ii) The Committee shall discuss with management and the independent auditor the effect of regulatory and accounting initiatives as well as off-balance sheet structures on the Company's financial statements.
- (iii) The Committee shall discuss with management the Company's major financial risk exposures and the steps management has taken to monitor and control such exposures, including the Company's risk assessment and risk management policies, and regularly review the top risks identified by management and the policies and practices adopted by the Company to mitigate those risks.
- (iv) At least annually and prior to the filing of the AIF/Annual Report to the SEC, the Committee shall review with management and the independent auditor the disclosure controls and procedures and confirm that the Company (with CEO and CFO participation) has evaluated the effectiveness of the design and operation of the controls within 90 days prior to the date of filing of the AIF/Annual Report to the SEC. The Committee also shall review with management and the independent auditor any deficiencies in the design and operation of internal controls and significant deficiencies or material weaknesses therein and any fraud involving management or other employees who have a significant role in the Company's internal controls. As a part of that review, the Committee shall review the process followed in preparing and verifying the accuracy of the required CEO and CFO annual certifications.
- (v) At least annually and prior to the filing of the AIF/Annual Report to the SEC, the Committee shall review with management and the independent auditor management's internal control report and assessment of the internal controls and procedures, and the independent auditor's report on and assessment of the internal controls and procedures. In connection with its review of interim and annual financial statements and related management's discussion and analysis, the Committee shall confirm with management that the Company (with CEO and CFO participation) has taken all actions required in connection with the certifications required by NI 52-109, Certification of Disclosure in Issuers' Annual and Interim Filings.
- (vi) The Committee shall establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters, and the confidential, anonymous submission by employees of concerns regarding questionable accounting or auditing matters.
- (vii) The Committee shall discuss with management and the independent auditor any correspondence with regulators or governmental agencies and any employee complaints or reports which raise material issues regarding the Company's financial statements or accounting policies.
- (viii) At least annually, the Committee shall meet with the Company's legal counsel and discuss any legal matters that may have a material impact on the financial statements or the Company's compliance policies.
- (ix) The Committee shall oversee the preparation of reports relating to the Audit Committee required under applicable laws, regulations and stock exchange requirements.
- (x) The Committee shall exercise oversight with respect to anti-fraud programs and controls

(e) ***Related Party Transactions.***

- (i) The Committee shall review for fairness to the Company proposed transactions, contracts and other arrangements between the Company and its subsidiaries and any related party or affiliate, and make recommendations to the Board whether any such transactions, contracts and other arrangements should be approved or continued. The foregoing shall not include any compensation payable pursuant to any plan, program, contract or arrangement subject to the authority of the Company's Compensation Committee.
- (ii) As used herein the term "related party" means any officer or director of the Company or any subsidiary, or any shareholder holding a greater than 10% direct or indirect financial or voting interest in the Company, and the term "affiliate" means any person, whether acting alone or in concert with others, that controls, is controlled by or is under common control with another person. "Related party" includes Hunter Dickinson Services Inc., its principals, and their affiliates.

(f) ***Additional duties.*** The Committee shall perform the following additional duties:

- (i) The Committee shall review and recommend dividend policies.
- (ii) The Committee shall oversee the Company's insurance program..
- (iii) The Committee shall review the appointment of senior financial personnel and make recommendations to the Board of Directors regarding the appointment of the Chief Financial Officer.
- (iv) The Committee shall recommend to the Nominating and Governance Committee the qualifications and criteria for membership on the Committee.
- (v) The Committee shall review and discuss with management the requirement for annual public disclosure pursuant to the Extractive Sector Transparency Measures Act and shall be responsible for approving such disclosures.

2. **Structure and Membership**

(a) ***Number and qualification.***

The Committee shall consist of three persons unless the Board should from time to time otherwise determine. All members of the Committee shall meet the experience and financial literacy requirements of NI 52-110 and the rules of the Toronto Stock Exchange and the NYSE American. At least one member of the Committee shall be a "financial expert" as defined in Item 407 of SEC Regulation S-K.

(b) ***Selection and Removal.***

Members of the Committee shall be appointed by the Board, upon the recommendation of the Nominating and Governance Committee. The Board may remove members of the Committee at any time with or without cause.

(c) ***Independence.***

All of the members of the Committee shall be "independent" as required for audit committees by NI 52-110, the rules of the Toronto Stock Exchange and the NYSE American, and SEC Rule 10A-3.

(d) ***Chair.***

Unless the Board elects a Chair of the Committee, the Committee shall elect a Chair by majority vote.

(e) ***Compensation.***

The compensation of the Committee shall be as determined by the Board.

(f) ***Term.***

Members of the Committee shall be appointed for one-year terms. Each member shall serve until his or her replacement is appointed, or until he or she resigns or is removed from the Board or the Committee.

3. Procedures and Administration

(a) ***Meetings.***

The Committee shall meet as often as it deems necessary in order to perform its responsibilities, but not less than quarterly. The Committee shall keep minutes of its meetings and any other records as it deems appropriate.

(b) ***Subcommittees.***

The Committee may form and delegate authority to one or more subcommittees, consisting of at least one member, as it deems appropriate from time to time under the circumstances.

(c) ***Reports to the Board.***

The Committee shall regularly report to the Board with respect to such matters as are relevant to the Committee's discharge of its responsibilities, and shall report in writing on request of the Chair of the Board.

(d) ***Charter.***

The Committee shall, at least annually, review and reassess the adequacy of this Charter and recommend any proposed changes to the Board for approval.

(e) ***Independent Advisors.***

The Committee shall have the authority to engage such independent legal and other advisors as it deems necessary or appropriate to carry out its responsibilities. Such independent advisors may be regular advisors to the Company. The Committee is empowered, without further action by the Board, to cause the Company to pay appropriate compensation to advisors engaged by the Committee.

(f) ***Investigations.***

The Committee shall have the authority to conduct or authorize investigations into any matters within the scope of its responsibilities as it deems appropriate, including the authority to request any Officer or other person to meet with the Committee and to access all Company records.

(g) ***Annual Self-Evaluation.***

The Committee shall evaluate its own performance at least annually.

4. Additional Powers

The Committee shall have such other duties as may be delegated from time to time by the Board of Directors.

5. Limitation of Committee's Role

While the Committee has the responsibilities and powers set forth in this Charter, it is not the duty of the Committee to plan or conduct audits or to determine that the Company's financial statements and disclosures are complete and accurate and are in accordance with GAAP and applicable rules and regulations. These are the responsibilities of management and the independent auditor.

6. Committee Member Independence, Financial Literacy and Financial Expert Requirements

A. Independence

- (a) See Appendix 2 of the Company's Corporate Governance Overview and Guidelines.

B. Financial Literacy and Financial Expert Requirements

NI 52-110

Section 3.1(4) states that each audit committee member must be financially literate.

Section 1.6 defines the meaning of financial literacy as follows:

"For the purposes of this Instrument, an individual is financially literate if he or she has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the issuer's financial statements."

NYSE AMERICAN Section 803(B)(2)(a)(iii)

Each issuer must have an Audit Committee of at least three members, each of whom:

"is able to read and understand fundamental financial statements, including a company's balance sheet, income statement, and cash flow statement. Additionally, each issuer must certify that it has, and will continue to have, at least one member of the audit committee who is financially sophisticated, in that he or she has past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in the individual's financial sophistication, including but not limited to being or having been a chief executive officer, chief financial officer, other senior officer with financial oversight responsibilities. A director who qualifies as an audit committee financial expert under Item 407(d)(5)(ii) of Regulation S-K is presumed to qualify as financially sophisticated."

ITEM 407(d)(5)(ii) OF REGULATION S-K, DEFINITION OF FINANCIAL EXPERT

For purposes of this Item, an audit committee financial expert means a person who has the following attributes:

- (A) An understanding of generally accepted accounting principles and financial statements;
- (B) The ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves;
- (C) Experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the registrant's financial statements, or experience actively supervising one or more persons engaged in such activities;
- (D) An understanding of internal control over financial reporting; and
- (E) An understanding of audit committee functions.

A person shall have acquired such attributes through:

- (A) Education and experience as a principal financial officer, principal accounting officer, controller, public accountant or auditor or experience in one or more positions that involve the performance of similar functions;
- (B) Experience actively supervising a principal financial officer, principal accounting officer, controller, public accountant, auditor or person performing similar functions;
- (C) Experience overseeing or assessing the performance of companies or public accountants with respect to the preparation, auditing or evaluation of financial statements; or