



**CONSOLIDATED
FINANCIAL STATEMENTS**

**FOR THE YEARS ENDED
DECEMBER 31, 2022 AND 2021**

(Expressed in thousands of Canadian Dollars)

Northern Dynasty Minerals Ltd.
Consolidated Financial Statements

Table of Contents	Page
Report of Independent Registered Public Accounting Firm (PCAOB ID No. 1208)	
Opinion on the Financial Statements	1-4
Opinion on Internal Control over Financial Reporting	5-6
Consolidated Statements of Financial Position	7
Consolidated Statements of Comprehensive Loss	8
Consolidated Statements of Cash Flows	9
Consolidated Statements of Changes in Equity	10
Notes to the Consolidated Financial Statements	11-42

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of
Northern Dynasty Minerals Ltd.

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of Northern Dynasty Minerals Ltd. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of comprehensive loss, changes in equity, and cash flows, for each of the two years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and its financial performance and its cash flows for each of the two years in the period ended December 31, 2022, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 30, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company incurred a consolidated net loss of \$24 million during the year ended December 31, 2022 and, as of that date, the Company's consolidated deficit was \$676 million. These conditions, along with other matters set forth in Note 1, raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing a separate opinion on the critical audit matters or on the accounts or disclosures to which it relates.

Mineral property, plant and equipment – Assessment of Whether Indicators of Impairment Exist – Refer to Notes 1 and 2(p) to the financial statements

Critical Audit Matter Description

At the end of each reporting period, the carrying amounts of the Company's non-financial assets are reviewed to determine whether there is any indication that these assets are impaired. The Company holds the rights to the Pebble exploration stage mineral property (the "Pebble Project"). In 2020, the US Army Corps of Engineers ("USACE") issued a negative Record of Decision (the "ROD") on the Pebble Partnership's permit application for the Pebble Project. The Company submitted its request for appeal of the ROD with the USACE on January 19, 2021. In addition, the Environment Protection Agency ("EPA") issued its Final Determination in January 2023 which established a "defined area for prohibition" imposing limitations on the use of certain waters in the Bristol Bay watershed as disposal sites for certain discharges of dredged or fill material associated with development of a mine at the Pebble deposit. The Company plans to seek judicial review of the Final Determination through a challenge in a U.S. federal district court (the "Final Determination challenge"). Taking into consideration the Company's options in the event the ROD appeal is successful or unsuccessful, the outcome of the Final Determination challenge and the Company's market capitalization as at December 31, 2022, the Company concluded there were no indicators of impairment on the Pebble Project as at December 31, 2022.

While there are several factors that must be considered to determine whether or not an indicator of impairment exists for the Pebble Project, the judgments associated with the Company's ability to develop the Pebble Project including the options to obtain federal and state permits, the outcome of the Final Determination challenge and the considerations of the Company's market capitalization excess are the most subjective factors. Auditing these judgements required a high degree of subjectivity in applying audit procedures and in evaluating the results of those procedures. This resulted in an increased extent of audit effort.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to management's assessment of indicators of impairment of whether there were events or change in circumstances that may suggest that the carrying amount of the Pebble Project is impaired included the following, among others:

- Evaluated the effectiveness of controls over management's assessment of indicators of impairment relating to the Pebble Project, including the identification of events or changes in circumstances that may suggest that the carrying amount of the Pebble Project is impaired.
- Evaluated the reasonableness of the Company's ability and options to obtain federal and state permits to develop the Pebble Project, including consideration of the outcome of the Final Determination challenge by:
 - Evaluating regulatory developments relating to federal and state permitting processes and the impact on the Company's ability to continue to explore and develop the Pebble Project.
 - Evaluating the reasonableness of management's assessment of potential alternatives for the future permitting and development of the Pebble Project by having discussions with the Company's internal legal counsel and reviewing legal opinion provided by the Company's external counsel.
 - Read internal communications to management and the board of directors, external communications by management to analysts and investors, and other publicly available information to evaluate whether there was evidence of indicators of impairment that contradicted management's assessment.
- Evaluated the reasonableness of management's considerations of the excess of the Company's market capitalization compared to its asset carrying value in its assessment of impairment indicators.

Royalty agreements – Assessment of the accounting implications of the royalty agreement – Refer to Note 3 to the financial statements

Critical Audit Matter Description

On July 26, 2022, the Company announced that it had entered into an agreement with an external investor (the "Royalty Holder") to receive up to US\$60 million over the next two years, in return for the right to receive a portion of the future gold and silver production from the Company's Pebble Project for the life of the mine. As of December 31, 2022, the Company has received a non-refundable payment of US\$12 million (the "initial payment") from the Royalty Holder. The Royalty Holder made the initial payment in exchange for the right to receive 2% of the payable gold production and 6% of the payable silver production from the Pebble Project, in each case after accounting for a notional payment by the Royalty Holder of US\$1,500 per ounce of gold and US\$10 per ounce of silver, respectively, for the life of the mine. If, in the future, spot prices exceed US\$4,000 per ounce of gold or US\$50 per ounce of silver, then the Company will share 20% of the excess price for either metal with the Royalty Holder (the "Royalty Arrangement"). The Company recognized the initial payment as a sale of mineral property interest and the consideration received has been recorded as a recovery of mineral property costs.

Auditing management's judgments related to the accounting treatment of the Royalty Arrangement required a high degree of subjectivity. This resulted in an increased extent of audit effort, including the involvement of accounting specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the accounting of the Royalty Arrangement including the following, among others:

- Evaluated the effectiveness of controls over management's assessment of the accounting treatment of the Royalty Arrangement;
- With the assistance of accounting specialists, evaluated the accounting treatment of the Royalty Arrangement by:
 - Reviewing the executed agreement to determine whether all key facts and circumstances were properly incorporated into management's assessment;
 - Analyzing relevant accounting standards, including various aspects of IFRS, conceptual framework and guidance; and
 - Obtaining an understanding of the legal impacts of the Royalty Arrangement by having discussions with the Company's internal legal counsel.

/s/ Deloitte LLP

Chartered Professional Accountants
Vancouver, Canada
March 31, 2023

We have served as the Company's auditor since 2009.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of
Northern Dynasty Minerals Ltd.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Northern Dynasty Minerals Ltd. and subsidiaries (the "Company") as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2022, of the Company and our report dated March 31, 2023, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for

external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte LLP

Chartered Professional Accountants
Vancouver, Canada
March 31, 2023

Northern Dynasty Minerals Ltd.
Consolidated Statements of Financial Position
(Expressed in thousands of Canadian Dollars)

	Notes	December 31 2022	December 31 2021
ASSETS			
Non-current assets			
Restricted Cash	5(b)	\$ 852	\$ 785
Mineral property, plant and equipment	3	127,531	134,339
Total non-current assets		128,383	135,124
Current assets			
Amounts receivable and prepaid expenses	4	2,662	1,867
Cash and cash equivalents	5(a)	14,173	22,291
Total current assets		16,835	24,158
Total Assets		\$ 145,218	\$ 159,282
EQUITY			
Capital and reserves			
Share capital	6	\$ 700,278	\$ 700,278
Reserves	6	118,369	106,735
Deficit		(675,962)	(651,520)
Total equity		142,685	155,493
LIABILITIES			
Non-current liabilities			
Trade and other payables	8	463	1,365
Total non-current liabilities		463	1,365
Current liabilities			
Payables to related parties	7	237	376
Trade and other payables	8	1,833	2,048
Total current liabilities		2,070	2,424
Total liabilities		2,533	3,789
Total Equity and Liabilities		\$ 145,218	\$ 159,282

Nature and continuance of operations (note 1)
Commitments and contingencies (note 14)

The accompanying notes are an integral part of these consolidated financial statements.

These consolidated financial statements are signed on the Company's behalf by:

/s/ Ronald W. Thiessen

Ronald W. Thiessen
Director

/s/ Christian Milau

Christian Milau
Director

Northern Dynasty Minerals Ltd.

Consolidated Statements of Comprehensive Loss

(Expressed in thousands of Canadian Dollars, except for share information)

	Notes	Year ended December 31	
		2022	2021
Expenses			
Exploration and evaluation expenses	9, 10	\$ 9,269	\$ 12,435
General and administrative expenses	9, 10	9,026	9,991
Legal, accounting and audit		4,010	5,941
Share-based compensation	6(c),(d)	2,301	2,858
Loss from operating activities		24,606	31,225
Foreign exchange (income) loss		(55)	456
Interest income		(279)	(176)
Finance expense		67	67
Other income		(3)	(16)
(Gain) loss on disposal of plant and equipment		(1)	2
Gain on modification of lease		-	(16)
Net loss before tax		\$ 24,335	\$ 31,542
Income tax expense		107	-
Net loss		\$ 24,442	\$ 31,542
Other comprehensive (income) loss			
Items that may be subsequently reclassified to net loss			
Foreign exchange translation difference	6(e)	(9,333)	903
Other comprehensive (income) loss		\$ (9,333)	\$ 903
Total comprehensive loss		\$ 15,109	\$ 32,445
Basic and diluted loss per share	11	\$ 0.05	\$ 0.06

The accompanying notes are an integral part of these consolidated financial statements.

Northern Dynasty Minerals Ltd.

Consolidated Statements of Cash Flows

(Expressed in thousands of Canadian Dollars)

	Notes	Year ended December 31	
		2022	2021
Operating activities			
Net loss		\$ (24,442)	\$ (31,542)
<u>Non-cash or non operating items</u>			
Depreciation	3	259	329
Gain on modification of lease		-	(16)
Interest income		(279)	(176)
(Gain) loss on disposal of plant and equipment		(1)	2
Share-based compensation		2,301	2,858
Unrealized exchange loss		31	44
<u>Changes in working capital items</u>			
Amounts receivable and prepaid expenses		(565)	(17)
Trade and other payables		(1,120)	(3,483)
Payables to related parties		(141)	(474)
Net cash used in operating activities		(23,957)	(32,475)
Investing activities			
Acquisition of plant and equipment		(31)	-
Disposal of plant and equipment		1	-
Proceeds from royalty arrangement on mineral property interest	3	15,463	-
Interest received on cash and cash equivalents		238	164
Net cash from investing activities		15,671	164
Financing activities			
Proceeds from issuance of shares		-	872
Transaction costs on issuances of shares		-	(48)
Proceeds from the exercise of share purchase options and warrants	6(b),(c)	-	11,950
Early lease termination payment		-	(31)
Payments of principal portion of lease liabilities		(129)	(200)
Transaction costs on the At-the-Market Offering		-	(352)
Net cash (used in) from financing activities		(129)	12,191
Net decrease in cash and cash equivalents		(8,415)	(20,120)
Effect of exchange rate fluctuations on cash and cash equivalents		297	(49)
Cash and cash equivalents - beginning balance		22,291	42,460
Cash and cash equivalents - ending balance	5(a)	\$ 14,173	\$ 22,291

The accompanying notes are an integral part of these consolidated financial statements.

Northern Dynasty Minerals Ltd.
Consolidated Statements of Changes in Equity

(Expressed in thousands of Canadian Dollars, except for share information)

	Notes	Share capital		Reserves					Deficit	Total equity
		Number of shares (note 6(a))	Amount	Equity - settled share-based compensation reserve	Foreign currency translation reserve (note 6(e))	Investment revaluation reserve	Share Purchase Warrants (note 6(b))			
Balance at January 1, 2021		509,046,631	\$ 683,039	\$ 77,018	\$ 29,661	\$ (17)	\$ 2,583	\$ (619,978)	\$ 172,306	
Shares issued upon exercise of options per option plan	6(d)	5,084,000	2,592	-	-	-	-	-	2,592	
Shares issued upon exercise of warrants and options not issued per option plan	6(c)	14,435,952	9,358	-	-	-	-	-	9,358	
Fair value allocated to shares issued on exercise of options and warrants		-	4,465	(2,153)	-	-	(2,312)	-	-	
Shares issued, net of transactions costs		1,212,805	824	-	-	-	-	-	824	
Share-based compensation	6(c),(d)	-	-	2,858	-	-	-	-	2,858	
Net loss		-	-	-	-	-	-	(31,542)	(31,542)	
Other comprehensive loss net of tax		-	-	-	(903)	-	-	-	(903)	
Total comprehensive loss									(32,445)	
Balance at December 31, 2021		529,779,388	\$ 700,278	\$ 77,723	\$ 28,758	\$ (17)	\$ 271	\$ (651,520)	\$ 155,493	
Balance at January 1, 2022		529,779,388	\$ 700,278	\$ 77,723	\$ 28,758	\$ (17)	\$ 271	\$ (651,520)	\$ 155,493	
Share-based compensation	6(c),(d)	-	-	2,301	-	-	-	-	2,301	
Net loss		-	-	-	-	-	-	(24,442)	(24,442)	
Other comprehensive income net of tax		-	-	-	9,333	-	-	-	9,333	
Total comprehensive loss									(15,109)	
Balance at December 31, 2022		529,779,388	\$ 700,278	\$ 80,024	\$ 38,091	\$ (17)	\$ 271	\$ (675,962)	\$ 142,685	

The accompanying notes are an integral part of these consolidated financial statements.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

1. NATURE AND CONTINUANCE OF OPERATIONS

Northern Dynasty Minerals Ltd. (the "Company") is incorporated under the laws of the Province of British Columbia, Canada, and its principal business activity is the exploration of mineral properties. The Company is listed on the Toronto Stock Exchange ("TSX") under the symbol "NDM" and on the NYSE American Exchange ("NYSE American") under the symbol "NAK". The Company's corporate office is located at 1040 West Georgia Street, 14th floor, Vancouver, British Columbia.

The consolidated financial statements ("Financial Statements") of the Company as at and for the year ended December 31, 2022, include financial information for the Company and its subsidiaries (together referred to as the "Group" and individually as "Group entities"). The Company is the ultimate parent. The Group's core mineral property interest is the Pebble Copper-Gold-Molybdenum-Silver-Rhenium Project (the "Pebble Project") located in Alaska, United States of America ("USA" or "US"). All US dollar amounts when presented are denoted "US\$" and expressed in thousands, unless otherwise stated.

The Group is in the process of exploring and evaluating the Pebble Project and has not yet determined whether the Pebble Project contains mineral reserves that are economically recoverable. The Group's continuing operations and the underlying value and recoverability of the amounts shown for the Group's mineral property interests is entirely dependent upon the existence of economically recoverable mineral reserves; the ability of the Group to obtain financing to complete the exploration and development of the Pebble Project; the Group obtaining the necessary permits to mine; and future profitable production or proceeds from the disposition of the Pebble Project.

As of December 31, 2022, the Group had \$14,173 (2021 – \$22,291) in cash and cash equivalents for its operating requirements and working capital of \$14,765 (2021 – \$21,734). These Financial Statements have been prepared on the basis of a going concern, which assumes that the Group will be able to raise sufficient funds to continue its exploration and development activities and satisfy its obligations as they come due. During the years ended December 31, 2022 and 2021, the Group incurred a net loss of \$24,442 and \$31,542, respectively, and had a deficit of \$675,962 as of December 31, 2022. The Group 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 Record of Decision (the "ROD"), the Group's response to the US Environmental Protection Agency ("EPA")'s final determination (both discussed below) and class action litigation (note 14(a)). Although the Group was successful during the current year in raising US\$12,000 (\$15,463) from the disposal of a mineral property interest through a royalty arrangement (see note 3), there can be no assurances that the Group will be successful in obtaining additional financing when required. If the Group is unable to raise the necessary capital resources and generate sufficient cash flows to meet obligations as they come due, the Group may, at some point, consider reducing or curtailing its operations. As such, there is material uncertainty that raises substantial doubt about the Group's ability to continue as a going concern.

These Financial Statements do not reflect adjustments to the carrying values and classification of assets and liabilities that might be necessary should the Company be unable to continue as a going concern, and such adjustments could be material.

The Group, through the Pebble Limited Partnership ("Pebble Partnership"), initiated federal and state permitting for the Pebble Project under the National Environmental Protection Act ("NEPA") by filing documentation for a Clean Water Act ("CWA") 404 permit with the US Army Corps of Engineers ("USACE") in December 2017. The USACE published a draft Environmental Impact Statement ("EIS") in February 2019 and completed a 120-day public comment period thereon on July 2, 2019. In late July 2019, the EPA withdrew the determination initiated under Section 404(c) of the CWA in 2014 for the waters of Bristol Bay ("Proposed Determination"), which attempted to pre-emptively veto the Pebble Project before it received an objective, scientific regulatory review under NEPA. On July 24, 2020, the USACE published the final EIS. On November 25, 2020, the USACE issued a ROD rejecting the Pebble Partnership's permit application, finding concerns with the proposed compensatory

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

mitigation plan and determining the project would be contrary to the public interest. 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 CWA. On January 19, 2021, the Pebble Partnership submitted its request for appeal of the ROD with the USACE (the "RFA"). On February 24, 2021, the USACE notified the Pebble Partnership that the RFA is "complete and meets the criteria for appeal" and assigned a review officer ("RO") to oversee the administrative appeal process at that time and has since assigned a new RO. While federal regulations suggest the appeal should conclude within 90 days, and no case extend beyond one year, the USACE also indicated that due to the complexity of issues and volume of materials associated with the Pebble Project case, the review will take additional time. In June 2021, the USACE completed the 'administrative record' for the appeal and provided a copy to the Pebble Partnership, 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. An appeal conference was held in July 2022. The timing and outcome on the appeal remains uncertain.

On October 29, 2021, the court granted the EPA's motion for remand, and vacated the EPA's 2019 withdrawal of the Proposed Determination decision, thus reinstating the Proposed Determination. The court declined to impose a schedule on the EPA's proceedings on remand. On May 25, 2022, the EPA announced that it intended to advance its pre-emptive veto of the Pebble Project and issued a revised Proposed Determination which would establish a "defined area for prohibition" coextensive with the current mine plan footprint in which the EPA would prohibit the disposal of dredged or fill material for the Pebble Project. It would also establish a 309-square-mile "defined area for restriction". Public comments on the revised Proposed Determination closed on September 6, 2022. The Pebble Partnership submitted extensive comments on the Revised Proposed Determination, objecting to the EPA's preemptive veto of the Pebble Project and stating its concerns about legal and factual flaws therein.

On January 30, 2023, the EPA issued a Final Determination under Section 404(c) of the CWA, imposing limitations on the use of certain waters in the Bristol Bay watershed as disposal sites for certain discharges of dredged or fill material associated with development of a mine at the Pebble deposit. This Final Determination is the concluding step in the administrative process set forth in 40 C.F.R. Part 231, which governs the EPA's authority under Section 404(c) to veto permit decisions. The Administrative Procedure Act ("APA"), 5 USC §551 et seq., which governs judicial review of agency decisions, provides that individuals aggrieved by agency action may seek judicial review of any "final agency action." The EPA's administrative determination can be challenged by filing a lawsuit in U.S. federal district court seeking reversal of that decision.

The Company and the Pebble Partnership plan to seek judicial review of the Final Determination through a challenge in a U.S. federal district court.

2. SIGNIFICANT ACCOUNTING POLICIES

(a) *Statement of Compliance*

These Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and interpretations issued by the IFRS Interpretations Committee ("IFRIC's") that are effective for the Group's reporting for the year ended December 31, 2022. These Financial Statements were authorized for issue by the Board of Directors on March 24, 2023.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

(b) Basis of Preparation

These Financial Statements have been prepared on a historical cost basis using the accrual basis of accounting, except for cash flow information. The accounting policies set out below have been applied consistently to all periods presented in these Financial Statements unless otherwise stated.

(c) Basis of Consolidation

These Financial Statements incorporate the financial statements of the Company, the Company's subsidiaries, and entities controlled by the Company and its subsidiaries listed below:

Name of Subsidiary	Place of Incorporation	Principal Activity	Percent owned
3537137 Canada Inc. ¹	Canada	Holding Company. Wholly-owned subsidiary of the Company.	100%
Pebble Services Inc.	Nevada, USA	Management and services company. Wholly-owned subsidiary of the Company.	100%
Northern Dynasty Partnership	Alaska, USA	Holds 99.9% interest in the Pebble Partnership and 100% of Pebble Mines.	100% (indirect)
Pebble Limited Partnership ("Pebble Partnership")	Alaska, USA	Limited Partnership. Ownership and Exploration of the Pebble Project.	100% (indirect)
Pebble Mines Corp. ("Pebble Mines")	Delaware, USA	General Partner. Holds 0.1% interest in the Pebble Partnership.	100% (indirect)
Pebble West Claims Corporation ²	Alaska, USA	Holding Company. Subsidiary of the Pebble Partnership.	100% (indirect)
Pebble East Claims Corporation ²	Alaska, USA	Holding Company. Subsidiary of the Pebble Partnership.	100% (indirect)
Pebble Pipeline Corporation	Alaska, USA	Holding Company. Subsidiary of the Pebble Partnership.	100% (indirect)
Pebble Performance Dividend LLC	Alaska, USA	Holding Company. Subsidiary of the Pebble Partnership.	100% (indirect)
U5 Resources Inc.	Nevada, USA	Holding Company. Wholly-owned subsidiary of the Company.	100%
Cannon Point Resources Ltd.	British Columbia, Canada	Not active. Wholly-owned subsidiary of the Company.	100%
MGL Subco Ltd. ("MGL")	British Columbia, Canada	Not active. Wholly-owned subsidiary of the Company.	100%
Delta Minerals Inc. ("Delta")	British Columbia, Canada	Not active. Wholly-owned subsidiary of MGL.	100% (indirect)
Imperial Gold Corporation ("Imperial Gold")	British Columbia, Canada	Not active. Wholly-owned subsidiary of Delta.	100% (indirect)
Yuma Gold Inc.	Nevada, USA	Not active. Wholly-owned subsidiary of Imperial Gold.	100% (indirect)

Notes:

1. Holds a 20% interest in the Northern Dynasty Partnership. The Company holds the remaining 80% interest.
2. Both entities together hold 1,840 claims comprising the Pebble Project.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Company has power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee); exposure, or rights, to variable returns from its involvement with the investee; and the ability to use its power over the investee to affect its returns.

Intra-Group balances and transactions, including any unrealized income and expenses arising from intra-Group transactions, are eliminated in preparing the Financial Statements. Unrealized gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

(d) *Foreign Currencies*

The functional currency is the currency of the primary economic environment in which the entity operates and has been determined for each entity within the Group. The functional currency of U5 Resources Inc., Pebble Services Inc., Pebble Mines Corp., the Pebble Partnership and its subsidiaries, and Yuma Gold Inc. is the US dollar and for all other entities within the Group, the functional currency is the Canadian dollar. The functional currency determinations were conducted through an analysis of the factors for consideration identified in IAS 21, *The Effects of Changes in Foreign Exchange Rates*.

Transactions in currencies other than the functional currency are recorded at the rates of exchange prevailing on the dates of transactions. At the end of each reporting period, monetary assets and liabilities that are denominated in foreign currencies are translated at the rates prevailing at that date. Non-monetary assets and liabilities carried at fair value that are denominated in foreign currencies are translated at rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

The results and financial position of entities within the Group which have a functional currency that differs from that of the Group are translated into Canadian dollars as follows: (i) assets and liabilities for each statement of financial position are translated at the closing exchange rate at that date; (ii) income and expenses for each income statement are translated at average exchange rates for the period; and (iii) the resulting exchange differences are included in the foreign currency translation reserve within equity.

(e) *Financial Instruments*

On initial recognition, a financial asset is classified as measured at amortized cost; fair value through other comprehensive income ("FVTOCI") (debt / equity investment); or fair value through profit or loss ("FVTPL"). A financial asset (unless it is a trade receivable without a significant financing component that is initially measured at the transaction price) is initially measured at fair value plus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition.

The classification of financial assets is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics.

Classification of financial assets

Amortized cost

For a financial asset to be measured at amortized cost, it needs to meet both of the following conditions and not be designated as at FVTPL:

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The Group's financial assets at amortized cost consist of restricted cash, amounts receivable, and cash and cash equivalents.

Fair value through other comprehensive income ("FVTOCI")

For a debt investment to be measured at FVTOCI, it needs to meet both of the following conditions and not be designated as at FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Equity instruments at FVTOCI

On initial recognition, the Group may irrevocably elect to present subsequent changes in the instrument's fair value in other comprehensive income ("OCI") provided it is not held for trading. This election is made on an investment-by-investment basis.

Fair Value through profit or loss ("FVTPL")

All financial assets not classified as measured at amortised cost or FVTOCI are measured at FVTPL. This includes all derivative financial assets. On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at FVTOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

The following accounting policies apply to the subsequent measurement of financial assets:

Financial assets at FVTPL	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in profit or loss.
Financial assets at amortized cost	These assets are subsequently measured at amortised cost using the effective interest method. The amortized cost is reduced by impairment losses (see below). Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.
Debt investments at FVTOCI	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognised in profit or loss. Other net gains and losses are recognised in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
Equity investments at FVTOCI	These assets are subsequently measured at fair value. Dividends are recognised as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognised in OCI and are never reclassified to profit or loss.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

Financial assets are impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial assets, the estimated future cash flows of the investments have been impacted. For marketable securities classified as FVTOCI, a significant or prolonged decline in the fair value of the securities below their cost is considered to be objective evidence of impairment.

Financial liabilities

Non-derivative financial liabilities:

The Group only has non-derivative financial liabilities which consist of trade and other payables and payables to related parties.

All financial liabilities that are not held for trading or designated as at FVTPL are recognized initially at fair value net of any directly attributable transaction costs. Subsequent to initial recognition these financial liabilities are measured at amortized cost using the effective interest method.

(f) Exploration and Evaluation Expenditure

Exploration and evaluation expenditures include the costs of acquiring licenses, costs associated with exploration and evaluation activity, and the acquisition date fair value of exploration and evaluation assets acquired in a business combination or an asset acquisition. Exploration and evaluation expenditures are expensed as incurred except for expenditures associated with the acquisition of exploration and evaluation assets through a business combination or an asset acquisition. Costs incurred before the Group has obtained the legal rights to explore an area are expensed.

Acquisition costs, including general and administrative costs, are only capitalized to the extent that these costs can be related directly to operational activities in the relevant area of interest where it is considered likely to be recoverable by future exploitation or sale or where the activities have not reached a stage which permits a reasonable assessment of the existence of reserves.

Exploration and evaluation ("E&E") assets are assessed for impairment only when facts and circumstances suggest that the carrying amount of an E&E asset may exceed its recoverable amount or when the Group has sufficient information to reach a conclusion about technical feasibility and commercial viability.

Industry-specific indicators for an impairment review arise typically when one of the following circumstances applies:

- Substantive expenditure on further exploration and evaluation activities is neither budgeted nor planned;
- title to the asset is compromised;
- adverse changes in the taxation and regulatory environment;
- adverse changes in variations in commodity prices and markets; and
- variations in the exchange rate for the currency of operation.

Once the technical feasibility and commercial viability of the extraction of mineral resources in an area of interest are demonstrable, exploration and evaluation assets attributable to that area of interest are first tested for impairment and then reclassified to mining property and development assets within property, plant and equipment.

(g) Mineral property, plant and equipment

Mineral property, plant and equipment are carried at cost, less accumulated depreciation and accumulated impairment losses.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

The cost of mineral property, plant and equipment consists of the acquisition costs transferred from E&E assets, any costs directly attributable to bringing the asset to the location and condition necessary for its intended use, including costs to further delineate the ore body, development and construction costs, removal of overburden to initially expose the ore body, an initial estimate of the costs of dismantling, removing the item and restoring the site on which it is located and, if applicable, borrowing costs.

Mineral property acquisition and development costs are not currently depreciated as the Pebble Project is still in the development stage and no saleable minerals are being produced. Amounts received pursuant to the royalty arrangement (note 3), and which will be in set amounts, are recognized as sales of mineral property interests. No gain or loss is recognized until the consideration received is in excess of the carrying amount.

Recoverability of the carrying amount of any exploration and evaluation assets is dependent on successful development and commercial exploitation, or alternatively, sale of the respective assets such as through sales pursuant to the royalty arrangement as noted above.

The cost of an item of plant and equipment consists of the purchase price, any costs directly attributable to bringing the asset to the location and condition necessary for its intended use, and an initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Depreciation is provided at rates calculated to write off the cost of plant and equipment, less their estimated residual value, using the straight line method at various rates ranging from 10% to 50% per annum.

An item of equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on disposal of the asset, determined as the difference between the net disposal proceeds and the carrying amount of the asset, is recognized in profit or loss.

Where an item of equipment consists of major components with different useful lives, the components are accounted for as separate items of equipment. Expenditures incurred to replace a component of an item of equipment that is accounted for separately, including major inspection and overhaul expenditures, are capitalized. Residual values and estimated useful lives are reviewed at least annually.

(h) Impairment of Non-Financial Assets

At the end of each reporting period the carrying amounts of the Group's non-financial assets are reviewed to determine whether there is any indication that these assets are impaired. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss, if any. Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. The recoverable amount is the higher of fair value less costs of disposal and value in use. Fair value is determined as the amount that would be obtained from the sale of the asset in an arm's length transaction between knowledgeable and willing parties. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount and the impairment loss is recognized in profit or loss for the period.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount. This increase in the carrying amount is limited to the carrying amount that would have been determined had no impairment loss been recognized for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

The Group has not recorded any impairment charges in the years presented.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

(i) Leases

At inception of a contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Group has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less, and leases of low-value assets. For these leases, the Group recognizes the lease payments as an expense in loss on a straight-line basis over the term of the lease.

The Group recognizes a lease liability and a right-of-use asset ("ROU Asset") at the lease commencement date.

The lease liability is initially measured as the present value of future lease payments discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, using the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate. The incremental borrowing rate is the rate which the Group would have to pay to borrow, over a similar term and with a similar security, the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment.

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments, less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable by the Group under residual value guarantees;
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the Group expects to exercise an option to terminate the lease.

The lease liability is subsequently measured by:

- increasing the carrying amount to reflect interest on the lease liability;
- reducing the carrying amount to reflect the lease payments made; and
- remeasuring the carrying amount to reflect any reassessment or lease modifications.

The lease liability is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or if the Group changes its assessment of whether it will exercise a purchase, extension or termination option.

The ROU Asset is initially measured at cost, which comprises the following:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group; and
- an estimate of costs to be incurred by the Group in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories.

The ROU Asset is subsequently measured at cost, less any accumulated depreciation and any accumulated impairment losses, and adjusted for any remeasurement of the lease liability. It is depreciated from the commencement date to the earlier of the end of its useful life or the end of the lease term using either the straight-line or units-of-production method depending on which method more accurately reflects the expected pattern of consumption of the future economic benefits.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

Each lease payment is allocated between the lease liability and finance cost. The finance cost is charged to loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

On the balance sheet, the ROU Assets are presented in "*Mineral property, plant and equipment*" (note 3) and the lease liabilities are presented in "*Trade and other payables*" (note 8).

(j) *Share Capital, Special Warrants, Warrants and Subscriptions for Shares*

Common shares ("shares"), special warrants, warrants and subscriptions received for shares are classified as equity. Transaction costs directly attributable to the issue of these instruments are recognized as a deduction from equity, net of any tax effects. Where units comprising of shares and warrants are issued the proceeds and any transaction costs are apportioned between the shares and warrants according to their relative fair values.

Upon conversion of special warrants and warrants into shares and the issue of shares for subscriptions received, the carrying amount, net of a pro rata share of the transaction costs, is transferred to share capital.

(k) *Share-based Payment Transactions*

Equity-settled Share-based Option Plan

The Group operates an equity-settled share-based option plan for its employees and service providers (note 6(c)). The fair value of share purchase options granted is recognized as an employee or consultant expense with a corresponding increase in the *equity-settled share-based payments reserve* in equity (the "Equity Reserve"). An individual is classified as an employee when the individual is an employee for legal or tax purposes ("direct employee") or provides services similar to those performed by a direct employee.

The fair value is measured at grant date for each tranche, which is expensed on a straight-line basis over the vesting period, with a corresponding increase in the Equity Reserve. The fair value of share purchase options granted is measured using the Black-Scholes option pricing model, taking into account the terms and conditions upon which the share purchase options were granted and forfeiture rates as appropriate. At the end of each reporting period, the amount recognized as an expense is adjusted to reflect the actual number of share purchase options that are expected to vest.

Equity-settled share-based payment transactions with non-employees are measured at the fair value of the goods or services received. However, if the fair value cannot be estimated reliably, the share-based payment transaction is measured at the fair value of the equity instruments granted at the date the Group obtains the goods or the counterparty renders the service.

Deferred Share Unit ("DSU") Plan

The Group has a DSU plan for its non-executive directors (note 6(d)). The Group determines whether to account for DSUs as equity-settled or cash-settled based on who determines settlement and past practice. The fair value of DSUs granted is recognized as an employee expense with a corresponding increase in the Equity Reserve if deemed equity-settled or a liability if deemed cash-settled at grant date.

The fair value is estimated by multiplying the number of DSUs with the TSX quoted market price of the Company's common shares at grant date, and expensed over the vesting period as share-based compensation in loss until the DSUs are fully vested. If the DSUs are cash-settled, the expense and liability are adjusted each reporting period for changes in the TSX quoted market price of the Company's common shares.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

Restricted Share Unit ("RSU") Plan

The Group has a RSU plan for its employees, executive directors and eligible consultants of the Group. The Group determines whether to account for the RSUs as equity-settled or cash-settled based who determines settlement and past practice. The fair value of RSUs is recognized as an employee expense with a corresponding increase in the Equity Reserve if deemed equity-settled or a liability if deemed cash-settled at grant date.

The fair value is estimated by multiplying the number of RSUs with the TSX quoted market price of the Company's common shares at the grant date. It is then expensed over the vesting period with the credit recognized in equity in the Equity Reserve. If cash-settled, the expense and liability are adjusted each reporting period for changes in the TSX quoted market price of the Company's common shares.

No RSUs have been issued or are outstanding in the years presented.

(l) Income Taxes

Income tax on the profit or loss for the years presented consists of current and deferred tax. Income tax is recognized in profit or loss except to the extent that it relates to items recognized in other comprehensive income or loss or directly in equity, in which case it is recognized in other comprehensive income or loss or equity.

Current tax expense is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at year end, adjusted for amendments to tax payable with regard to previous years.

Deferred tax is provided using the balance sheet liability method, providing for unused tax loss carry forwards and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for: goodwill not deductible for tax purposes; the initial recognition of assets or liabilities that affect neither accounting nor taxable profit; and differences relating to investments in subsidiaries, associates, and joint ventures to the extent that they will probably not reverse in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realization or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period applicable to the period of expected realization or settlement.

A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be utilized.

Additional income taxes that arise from the distribution of dividends are recognized at the same time as the liability to pay the related dividend.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

(m) Restoration, Rehabilitation, and Environmental Obligations

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the exploration or development of a mineral property interest. Such costs arising from the decommissioning of plant and other site preparation work, discounted to their net present value, are provided for and capitalized at the start of each project to the carrying amount of the asset, along with a corresponding liability as soon as the obligation to incur such costs arises. The timing of the actual rehabilitation expenditure is

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

dependent on a number of factors such as the life and nature of the asset, the operating license conditions and, when applicable, the environment in which the mine operates.

Discount rates using a pre-tax rate that reflects the time value of money are used to calculate the net present value. These costs are charged against profit or loss over the economic life of the related asset, through amortization using either the unit-of-production or the straight line method. The corresponding liability is progressively increased as the effect of discounting unwinds, creating an expense recognized in loss.

Decommissioning costs are also adjusted for changes in estimates. Those adjustments are accounted for as a change in the corresponding capitalized cost, except where a reduction in costs is greater than the unamortized capitalized cost of the related assets, in which case the capitalized cost is reduced to nil and the remaining adjustment is recognized in profit or loss.

The operations of the Group have been, and may in the future be, affected from time to time in varying degree by changes in environmental regulations, including those for site restoration costs. Both the likelihood of new regulations and their overall effect upon the Group are not predictable.

The Group has no material restoration, rehabilitation and environmental obligations as the disturbance to date is not significant. The Group has posted two bonds with the Alaskan regulatory authorities as performance guarantees for any potential reclamation liability incurred as a condition for: (i) the issue of the Miscellaneous Land Use Permit at the Pebble Project (note 5(b)), and (ii) the granting of a pipeline right-of-way (note 14(c)).

(n) Loss per Share

The Group presents basic and diluted loss per share information for its common shares, calculated by dividing the loss attributable to common shareholders of the Company by the weighted average number of common shares and any fully prepaid special warrants outstanding during the year. Diluted loss per share does not adjust the loss attributable to common shareholders or the weighted average number of common shares outstanding when the effect is anti-dilutive.

(o) Segment Reporting

The Group operates in a single reportable operating segment – the acquisition, exploration and development of mineral properties. The Group's core asset, the Pebble Project, is located in Alaska, USA.

(p) Significant Accounting Estimates and Judgements

The preparation of these Financial Statements requires management to make certain estimates, judgements and assumptions that affect the reported amounts of assets and liabilities at the date of the Financial Statements and reported amounts of expenses during the reporting period. Actual outcomes could differ from these estimates. These Financial Statements include estimates, which, by their nature, are uncertain. The impacts of such estimates are pervasive throughout the Financial Statements, and may require accounting adjustments based on future occurrences. Revisions to accounting estimates are recognized in the period in which the estimate is revised and future periods if the revision affects both current and future periods. These estimates are based on historical experience, current and future economic conditions and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Sources of estimation uncertainty

Significant assumptions about the future and other sources of estimation uncertainty that management has made at the end of the reporting period, that could result in a material adjustment to the carrying amounts of assets and

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

liabilities, in the event that actual results differ from assumptions made, relate to, but are not limited to, the following:

1. The Group uses the Black-Scholes option pricing model to calculate an estimate of the fair value of share purchase options granted during the year. The fair value calculated is used to determine share-based compensation that is included in loss for the year. Inputs used in this model require subjective assumptions, including the expected price volatility from less than one year to five years. Changes in the subjective input assumptions can affect the fair value estimate.
2. Significant assumptions about the future and other sources of estimation uncertainty are made in determining the provision for any deferred income tax expense that is included in the loss for the year and the composition of any deferred income tax liabilities included in the Statement of Financial Position.

Critical accounting judgements

These include:

1. The Group used judgement in concluding that no impairment indicators exist in relation to the Pebble Project, notwithstanding the receipt of the ROD denial of the permit by the USACE for the Pebble Project and the final determination issued by the EPA that prohibits the disposal of dredged or fill material for the Pebble Project, both of which may be considered an indicator under IFRS 6, *Exploration for and Evaluation of Mineral Resources*, for testing for impairment. Key to the Group's judgement conclusion is that it has submitted an administrative appeal with the USACE, which has been accepted as complete and is currently running its course, and the Group is pursuing other options available to it. With respect to the issue of the final determination, the Group has legal avenues to pursue to contest this determination. Additionally, the Company's market capitalization at December 31, 2022, and the date the Financial Statements were authorized for issuance, exceeded the carrying value of the Pebble Project and the Group's net asset value.
2. The Group used judgement that going concern is an appropriate basis for the preparation of the Financial Statements, as the Group considered existing financial resources in determining that such financial resources are able to meet key corporate and Pebble Project expenditure requirements for at least the next twelve months (note 1).
3. The Group used judgement in assessing the appropriate accounting treatment for the transaction relating to a long-term royalty arrangement linked to production at the Pebble Project (note 3). The Group considered the substance of the agreement to determine whether the Group has disposed of an interest in the reserves and resources of the Pebble Project. This assessment considered the stage of development of the Pebble Project, the legal rights the counterparty has in the event of bankruptcy, as well as what the counterparty is entitled to and the associated risks and rewards attributable to them over the life of the mine at the Pebble Project. The Group also determined that the proceeds received was a recovery of mineral property costs with no gain or loss being recorded.
4. Pursuant to IAS 21, *The Effects of Changes in Foreign Exchange Rates* ("IAS 21"), in determining the functional currency of the parent and its subsidiaries, the Group used judgement in identifying the currency in which financing activities are denominated and the currency that mainly influences the cost of undertaking the business activities in each jurisdiction in which each entity operates.
5. The Group used judgement in terms of accounting for leases in accordance with IFRS 16. IFRS 16 applies a control model to the identification of leases and the determination of whether a contract contains a lease on the basis of whether the customer has the right to control the use of an identified asset for a fixed period of time. In determining the appropriate term for a lease, the Group considered the right of either the lessee or lessor to terminate the lease without permission from the other party with no more than an insignificant penalty as well as whether the Group is reasonably certain to exercise the extension options on the contract.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

(q) *Recent Accounting Pronouncements*

Certain new standards, interpretations, amendments and improvements to existing standards were issued by the IASB. The following was adopted by the Group on January 1, 2022:

- IAS 16, *Property Plant and Equipment* ("IAS 16"): Amendments to IAS 16 require the net proceeds from selling any items produced while bringing an item of property, plant and equipment to the location and condition necessary for it to be capable of operating in the manner intended by management together with the cost of producing these items, to be recognized in profit and loss. The adoption of these amendments did not impact the Financial Statements.

The following has not yet been adopted by the Group:

- IAS 1, *Presentation of Financial Statements* ("IAS 1") and IFRS Practice Statement 2, *Making Materiality Judgements - Disclosure of Accounting Policies* (the "Practice Statement"): In February 2021, the IASB issued amendments to IAS 1 and the Practice Statement to provide guidance on the application of materiality judgments to accounting policy disclosures. The amendments to IAS 1 replace the requirement to disclose 'significant' accounting policies with a requirement to disclose 'material' accounting policies. Guidance and illustrative examples are added in the Practice Statement to assist in the application of materiality concept when making judgments about accounting policy disclosures. The amendments are effective January 1, 2023, with early adoption permitted. Prospective application is required on adoption. The Company does not expect these amendments to have a material effect on its consolidated financial statements.
- IAS 1, *Classification of Debt with Covenants as Current or Non-current*: In October 2022, the IASB issued amendments to IAS 1 titled "*Non-current Liabilities with Covenants*". These amendments sought to improve the information that an entity provides when its right to defer settlement of a liability is subject to compliance with covenants within 12 months after the reporting period. These amendments to IAS 1 override but incorporate the previous amendments, *Classification of Debt as Current or Non-current*, issued in January 2020, which clarified that liabilities are classified as either current or non-current, depending on the rights that exist at the end of the reporting period. Liabilities should be classified as non-current if an entity has a substantive right to defer settlement for at least 12 months at the end of the reporting period. The amendments are effective January 1, 2024, with early adoption permitted. Retrospective application is required on adoption. The Group does not expect these amendments to have a material effect on its consolidated financial statements.
- IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors* ("IAS 8"): In February 2021, the IASB issued amendments to IAS 8 – *Definition of Accounting Estimates* to help entities to distinguish between accounting policies and accounting estimates. The amendments clarify that accounting estimates are "monetary amounts in financial statements that are subject to measurement uncertainty" and that a change in accounting estimate that results from new information or new developments is not the correction of an error. In addition, the effects of a change in an input or a measurement technique used to develop an accounting estimate are changes in accounting estimates if they do not result from the correction of prior period errors. The amendments are effective January 1, 2023. Earlier application is permitted. The Group does not expect these amendments to have a material effect on its consolidated financial statements.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

3. MINERAL PROPERTY, PLANT AND EQUIPMENT

The Group's exploration and evaluation assets are comprised of the following:

Year ended December 31, 2022	Mineral Property Interest ¹	Plant and Equipment ³	Total
Cost			
Beginning Balance	\$ 112,541	\$ 2,412	\$ 114,953
Addition	-	31	31
Disposal of plant and equipment	-	(8)	(8)
Disposal of mineral property interest ²	(15,463)	-	(15,463)
Ending balance	97,078	2,435	99,513
Accumulated depreciation			
Beginning Balance	-	(1,877)	(1,877)
Depreciation charge for the year ⁴	-	(260)	(260)
Derecognition on disposal of plant and equipment	-	8	8
Ending balance	-	(2,129)	(2,129)
Foreign currency translation difference			
Beginning Balance	21,079	184	21,263
Movement for the year	8,843	41	8,884
Ending balance	29,922	225	30,147
Net carrying value - December 31, 2022	\$ 127,000	\$ 531	\$ 127,531

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

Year ended December 31, 2021	Mineral Property Interest ¹	Plant and Equipment ³	Total
Cost			
Beginning Balance	\$ 112,541	\$ 3,018	\$ 115,559
Addition	-	277	277
Disposal ³	-	(29)	(29)
Derecognition of ROU assets ⁵	-	(617)	(617)
Modification of lease terms	-	(237)	(237)
Ending balance	112,541	2,412	114,953
Accumulated depreciation			
Beginning Balance	-	(2,148)	(2,148)
Depreciation charge for the year ⁴	-	(329)	(329)
Derecognition of ROU Assets ⁵	-	577	577
Derecognition on disposal ³	-	23	23
Ending balance	-	(1,877)	(1,877)
Foreign currency translation difference			
Beginning Balance	22,083	152	22,235
Movement from derecognition of ROU Assets	-	40	40
Movement for the year	(1,004)	(8)	(1,012)
Ending balance	21,079	184	21,263
Net carrying value - December 31, 2021	\$ 133,620	\$ 719	\$ 134,339

Notes to tables:

1. *Mineral Property Interest*

Comprises the Pebble Project, a contiguous block of 1,840 mineral claims covering approximately 274 square miles located in southwest Alaska, 17 miles (30 kilometers) from the villages of Iliamna and Newhalen, and approximately 200 miles (320 kilometers) southwest of the city of Anchorage.

2. *Disposal of Mineral Property Interest - Royalty Arrangement*

On July 26, 2022, the Group announced that it had entered into an agreement (the "Agreement") with an investor (the "Royalty Holder") to receive up to US\$60 million over the next two years, in return for the right to receive a portion of the future gold and silver production from the Pebble Project for the life of the mine (see further below). The Group received an initial non-refundable payment of US\$12 million from the Royalty Holder concurrently with the execution of the Agreement.

Per the terms of the Agreement, the Royalty Holder made the initial payment of US\$12 million in exchange for the right to receive 2% of the payable gold production and 6% of the payable silver production from the Pebble Project, in each case after accounting for a notional payment by the Royalty Holder of US\$1,500.00 per ounce of gold and US\$10.00 per ounce of silver, respectively, for the life of the mine. If, in the future, spot prices exceed US\$4,000.00 per ounce of gold or US\$50.00 per ounce of silver, then the Group will share in 20% of the excess price for either metal. Additionally, the Group will retain a portion of the metal produced for recovery rates in excess of 60% for gold and 65% for silver. Pursuant to the terms of the Agreement, the Group settles its obligations by delivery of physical gold and silver production from the Pebble Project.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

The Royalty Holder has the right but is under no obligation to invest additional non-refundable amounts, in US\$12 million increments, to an aggregate total of US\$60 million, within two years of the date of the Agreement, in return for the right to receive up to 10% of the payable gold and up to 30% of the payable silver (in each case, in the aggregate) on the same terms as the first tranche.

Based on the contractual terms of the Agreement, as well as the Group's specific facts and circumstances, the Group accounted for the first tranche of US\$12 million (\$15.5 million) as a partial sale of mineral property interest. The Agreement provides the Royalty Holder with rights similar to ownership of an undivided interest in the Pebble Project. The consideration received has been recorded as a recovery of mineral property costs and no gain or loss was recognized on the transaction.

3. *Plant and equipment includes Right-of-Use Assets ("ROU Assets")*

ROU Assets, which relate to the use of office space, office equipment and, yard storage are included under Plant and equipment. The following comprises ROU Assets:

Year ended December 31, 2022	Land and Buildings		Equipment	Total
Cost				
Beginning balance	\$	1,014	\$ 32	\$ 1,046
Addition		10	-	10
Ending balance		1,024	32	1,056
Accumulated depreciation				
Beginning balance		(370)	(20)	(390)
Depreciation charge for the year ⁴		(140)	(10)	(150)
Ending balance		(510)	(30)	(540)
Foreign currency translation difference				
Beginning balance		(36)	(1)	(37)
Movement for the year		38	-	38
Ending balance		2	(1)	1
Net carrying value - December 31, 2022	\$	516	\$ 1	\$ 517

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

Year ended December 31, 2021	Land and Buildings	Equipment	Total
Cost			
Beginning balance	\$ 1,591	\$ 53	\$ 1,644
Addition	277	-	277
Disposal	-	(21)	(21)
Derecognition ⁵	(617)	-	(617)
Modification of lease terms	(237)	-	(237)
Ending balance	1,014	32	1,046
Accumulated depreciation			
Beginning balance	(723)	(26)	(749)
Depreciation charge for the year ⁴	(224)	(11)	(235)
Derecognition ⁵	577	-	577
Derecognition on disposal	-	17	17
Ending balance	(370)	(20)	(390)
Foreign currency translation difference			
Beginning balance	(69)	(1)	(70)
Movement from derecognition	40	-	40
Movement for the year	(7)	-	(7)
Ending balance	(36)	(1)	(37)
Net carrying value - December 31, 2021	\$ 608	\$ 11	\$ 619

4. For the year ended December 31, 2022, ROU Asset depreciation of \$104 (2021 - \$192) is included in general and administrative expenses (note 9(b)). The remainder is included in exploration and evaluation expenses.
5. The cost and accumulated depreciation for ROU assets have been restated for the derecognition of office space that the Group vacated during the year ended December 31, 2021. There was no change to the net carrying value of ROU assets reported and there was no impact to the statement of comprehensive loss.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

4. AMOUNTS RECEIVABLE AND PREPAID EXPENSES

	December 31 2022	December 31 2021
Sales tax receivable	\$ 66	\$ 79
Deferred At-the-Market Offering costs ¹	-	352
Interest, refundable deposits and other receivables	64	85
Prepaid expenses ²	2,532	1,351
Total	\$ 2,662	\$ 1,867

Notes to table:

1. At December 31, 2021, these costs were still to be allocated to shares sold under the At-the-Market ("ATM") Agreement based on the dollar amount as a percentage of the total dollar amount available under the ATM Agreement. The Group expensed these costs on the basis that no further issuances occurred prior to the expiry of the base shelf prospectus that supported the ATM offering.
2. Includes prepaid insurance, which is amortized over the insurance term.

5. CASH AND CASH EQUIVALENTS AND RESTRICTED CASH

(a) Cash and cash equivalents

The Group's cash and cash equivalents at December 31, 2022 and December 31, 2021, consisted of cash on hand and was invested in business and savings accounts.

(b) Restricted cash

The Group has cash deposited with a United States financial institution that has been pledged as collateral to the surety provider for a US\$2,000 surety bond that was placed with the Alaskan regulatory authorities for a performance guarantee related to any potential reclamation liability as a condition of the Miscellaneous Land Use Permit granted to the Pebble Partnership for its ongoing activities on the Pebble Project. The cash deposit will be released once any reclamation work required has been performed and assessed by the Alaskan regulatory authorities. The cash is invested in a money market fund. For the year ended December 31, 2022, \$10 was recognized (2021 – nominal income), which was re-invested.

6. CAPITAL AND RESERVES

(a) Authorized Share Capital

At December 31, 2022 and 2021, authorized share capital consisted of an unlimited number of common shares ("Shares") with no par value. At December 31, 2022, 529,779,388 (2021 – 529,779,388) Shares were issued and fully paid.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

(b) Share Purchase Warrants and Options not Issued under the Group's Incentive Plan

The following reconciles outstanding warrants and non-employee options (options that were not issued under the Group's incentive plan (see below)), each exercisable to acquire one share, for the year ended December 31, 2022 and 2021 respectively:

Continuity	Cannon Point options ¹	warrants ²	Total
Balance January 1, 2021	211,500	17,713,265	17,924,765
Exercised	(117,500)	(14,318,452)	(14,435,952)
Expired	-	(3,394,813)	(3,394,813)
Balance December 31, 2021	94,000	-	94,000
Expired	(56,400)	-	(56,400)
Balance December 31, 2022	37,600	-	37,600

	Cannon Point options	Total
December 31, 2022		
Exercise price	\$ 0.29	\$ 0.29
Remaining life in years	1.94	1.94
December 31, 2021		
Exercise price	\$ 0.36	\$ 0.36
Remaining life in years	1.74	1.74

Notes to tables:

1. The Group issued options in exchange for those which were outstanding in Cannon Point Resources Ltd. ("Cannon Point") on the acquisition of the company in October 2015.
2. Warrants were issued pursuant to the June 2016 prospectus financing, July 2016 private placement and the 2019 non-revolving term loan credit facility agreement.

(c) Share Purchase Option Compensation Plan

The Group has a share purchase option plan approved by the Group's shareholders that allows the Board of Directors to grant share purchase options, subject to regulatory terms and approval, to its officers, directors, employees, and service providers. The share purchase option plan (the "2021 Rolling Option Plan") is based on the maximum number of eligible shares (including any issuances from the Group's RSU and DSU plans) equaling a rolling percentage of up to 8% of the Company's outstanding Shares, calculated from time to time. Pursuant to the 2021 Rolling Option Plan, if outstanding share purchase options ("options") are exercised and the number of issued and outstanding shares of the Company increases, then the options available to grant under the plan increase proportionately (assuming there are no issuances under the RSU and DSU plans). The exercise price of each option is set by the Board of Directors at the time of grant but cannot be less than the market price, being the 5-day volume weighted average trading price calculated the day before the grant. Options can have a maximum term of five years and typically terminate 90 days following the termination of the optionee's employment or engagement. In the case of death or retirement, any outstanding vested options will expire the earlier of the expiry date or one year from date of death or retirement. The vesting period for options is at the discretion of the Board of Directors at the time the options are granted.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

The following reconciles the Group's share purchase options ("options") issued and outstanding pursuant to the Group's incentive plan for the year ended December 31, 2022 and 2021:

Continuity of options	Number of options	Weighted average exercise price (\$/option)
Balance January 1, 2021	28,481,500	1.20
Exercised	(5,084,000)	0.51
Expired	(2,572,000)	0.61
Balance December 31, 2021	20,825,500	1.45
Expired	(4,386,000)	1.75
Granted ¹	11,254,000	0.41
Balance December 31, 2022	27,693,500	0.98

Note to table:

- The weighted average fair value for options granted during the year was estimated at \$0.29 per option, using the Black-Scholes option pricing model with the following weighted average assumptions: risk-free interest rate of 3.07%, expected life of 5 years, expected volatility of 99.02% (based on the historical and implied volatility of the Company's share price on the TSX), share price of \$0.39 on grant date and expected dividend yield of nil.

For the year ended December 31, 2022, the Group recognized share-based compensation ("SBC") of \$2,277 (2021 - \$2,846) for options in the statement of comprehensive loss.

The following table summarizes information on options outstanding as at the reported dates:

	December 31, 2022			December 31, 2021		
	Number of options outstanding	Number of options exercisable	Weighted Average Remaining contractual life (years)	Number of options outstanding	Number of options exercisable	Weighted Average Remaining contractual life (years)
Exercise prices (\$)						
0.41	11,254,000	5,627,000	4.63	-	-	-
0.76	3,300,000	3,300,000	0.61	3,300,000	3,300,000	1.61
0.99	6,368,500	6,368,500	1.74	6,368,500	6,368,500	2.74
1.75	-	-	-	4,386,000	4,386,000	0.57
2.01	6,696,000	6,696,000	2.55	6,696,000	6,696,000	3.55
2.34	75,000	75,000	0.58	75,000	75,000	1.58
Total	27,693,500	22,066,500		20,825,500	20,825,500	

The weighted average contractual life for options outstanding was 2.97 (December 31, 2021 - 2.36) years per option. The weighted average contractual life and exercise price for exercisable options as at December 31, 2022 was 2.55 (December 31, 2021 - 2.36) years and \$1.12 (December 31, 2021 - \$1.45) per option.

(d) *Deferred Share Units ("DSUs")*

The Group has a DSU plan approved by the Group's shareholders, which allows the Board, at its discretion, to award DSUs to non-executive directors for services rendered to the Group and also provides that non-executive

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

directors may elect to receive up to 100% of their annual compensation in DSUs. The aggregate number of DSUs outstanding pursuant to the DSU plan may not exceed 1% of the issued and outstanding shares from time to time provided the total does not result in the total shares issuable under all the Group's share-based compensation plans (i.e. including the Group's option and restricted share unit plans) exceeding 8% of the total number of issued outstanding shares. DSUs are payable when the non-executive director ceases to be a director including in the event of death. DSUs may be settled in shares issued from treasury, by the delivery to the former director of shares purchased by the Group in the open market, payment in cash, or any combination thereof, at the discretion of the Group.

The following reconciles DSUs outstanding for the year ended December 31, 2022 and 2021:

Continuity of DSUs	Number of DSUs	Weighted average fair value (\$/DSU)
Balance January 1, 2021	458,129	0.69
Granted	19,582	0.60
Balance December 31, 2021	477,711	0.69
Granted	61,575	0.39
Balance December 31, 2022	539,286	0.65

SBC of \$24 (2021 – \$12) was recognized on grant date in the statement of comprehensive loss, based on the aggregate market value of shares on grant date, with a corresponding increase in the equity-settled share payment reserve in equity.

(e) *Foreign Currency Translation Reserve*

Continuity

Balance January 1, 2021	\$ 29,661
Loss on translation of foreign subsidiaries	(903)
Balance December 31, 2021	28,758
Gain on translation of foreign subsidiaries	9,299
Balance December 31, 2022	\$ 38,057

The foreign currency translation reserve represents accumulated exchange differences arising on the translation, into the Group's presentation currency (the Canadian dollar), of the results of operations and net assets of the Group's subsidiaries with a US dollar functional currency.

7. RELATED PARTY BALANCES AND TRANSACTIONS

The components of transactions to related parties is as follows:

	December 31 2022	December 31 2021
Payables to related parties		
Key management personnel ("KMP")(a)	\$ 35	\$ 35
Hunter Dickinson Services Inc. ("HDSI")(b)	202	341
Total payables to related parties	\$ 237	\$ 376

Balances and transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation. Details between the Group and other related parties are disclosed below.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

(a) *Transactions and Balances with Key Management Personnel*

The aggregate value of transactions with KMP, being the Group's directors, including Chief Executive Officer ("CEO"), Chief Financial Officer ("CFO"), Company Secretary, Executive Vice President ("EVP"), Environment and Sustainability, Vice President ("VP"), Corporate Communications, VP, Engineering and VP, Public Affairs (until August 31, 2021), and Pebble Partnership ("PLP") senior management including the Interim PLP CEO and Chair of Pebble Mines Corp ("PMC Chair"), Executive VP ("EVP"), Public Affairs, Senior VP ("SVP"), Corporate Affairs, SVP Engineering (until February 28, 2021), VP, Permitting, and Chief of Staff (until February 19, 2021), was as follows for the year ended December 31, 2022 and 2021:

Transaction	2022	2021
Compensation		
Amounts paid and payable to HDSI for services of KMP employed by HDSI ¹	\$ 2,499	\$ 2,882
Amounts paid and payable to KMP ²	1,913	2,624
	4,412	5,506
Share-based compensation ³	1,441	1,854
Total compensation	\$ 5,853	\$ 7,360

Notes to table:

1. The Group's CEO, CFO, Board Chair and senior management, other than disclosed in note 2 below, are employed by the Group through HDSI (refer (b)).
2. Represents short-term employee benefits, including director's fees paid to the Group's independent directors, and salaries paid and payable to the PLP senior management noted above. The SVP Engineering was employed by the Group through a wholly-owned US subsidiary of HDSI ("HDUS") until the end of February 2021. The Group reimbursed HDUS for costs incurred.
3. SBC relates to options issued and/or vesting and DSUs granted during the respective periods (notes 6(b)-(d)).

Proceeds from Options Exercised

In the year ended December 31, 2022, no KMP options were exercised (2021 – 3,717,000 KMP options exercised at a weighted average exercise price of \$0.49 per option, and a weighted average market price on exercise of \$0.73 per option for proceeds to the Group of \$1,824).

(b) *Transactions and Balances with other Related Parties*

HDSI is a private company that provides geological, engineering, environmental, corporate development, financial, administrative and management services to the Group and its subsidiaries at annually set rates pursuant to a management services agreement. The annually set rates also include a component of overhead costs such as office rent, information technology services and general administrative support services. HDSI also incurs third party costs on behalf of the Group, which are reimbursed by the Group at cost. Several directors and other key management personnel of HDSI, who are close business associates, are also key management personnel of the Group.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

For the year ended December 31, 2022 and 2021, transactions with HDSI were as follows:

Transactions	2022	2021
Services rendered by HDSI:		
Technical ¹		
Engineering	\$ 372	\$ 735
Environmental	508	434
Socioeconomic	-	285
Other technical services	44	154
	924	1,608
General and administrative		
Management, consulting, corporate communications, secretarial, financial and administration	2,223	3,029
Shareholder communication	727	721
	2,950	3,750
Total for services rendered	3,874	5,358
Reimbursement of third party expenses		
Conferences and travel	124	49
Insurance	48	71
Office supplies and information technology ²	532	502
Total reimbursed	704	622
Total	\$ 4,578	\$ 5,980

Notes to table:

1. Included in exploration and evaluation expenses.
2. Includes payments made for the use of offices and shared space of \$151 (2021 - \$106). In April 2021, the Company signed an office use agreement effective May 1, 2021, for a five-year term ending April 29, 2026. As of December 31, 2022, the remaining undiscounted commitment was \$343.

Pursuant to an addendum to the management services agreement between HDSI and the Company, following a change of control, the Company is subject to termination payments if the management services agreement is terminated. The Company will be required to pay HDSI \$2,800 and an aggregate amount equal to six months of annual salaries payable to certain individual service providers under the management services agreement and their respective employment agreements with HDSI.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

8. TRADE AND OTHER PAYABLES

	December 31 2022	December 31 2021
Current liabilities		
Falling due within the year		
Trade	\$ 1,683	\$ 1,922
Lease liabilities ¹	150	126
Total	\$ 1,833	\$ 2,048
Non-current liabilities		
Trade ²	\$ -	\$ 804
Lease liabilities ¹	463	561
Total	\$ 463	\$ 1,365

Notes to table:

1. Lease liabilities relate to lease of offices, equipment and yard storage, which have remaining lease terms of 19 to 89 months and interest rates of 9.5% – 12% over the term of the leases. The following summarizes lease liabilities for the year ended December 31, 2022 and 2021:

Lease liabilities	2022	2021
Beginning balance	\$ 687	\$ 916
Interest expense	67	67
Effect of modification to lease term	-	(284)
Lease payments	(196)	(267)
Lease recognition	10	268
Lease settlement	-	(5)
Foreign currency translation difference	45	(8)
Ending balance	613	687
Current portion	150	126
Non-current portion	463	561
Total	\$ 613	\$ 687

The following table provides the schedule of undiscounted lease liabilities as at December 31, 2022:

	Total
Less than one year	\$ 204
One to five years	480
Later than 5 years	118
Total undiscounted lease liabilities	\$ 802

The Group had short-term lease commitments of less than a year relating to a property lease totaling \$50 as of January 1, 2022. During the year ended December 31, 2022, the Group incurred short-term lease commitments of \$157 (2021 – \$147), and expensed \$158 (2021 – \$190).

2. At December 31, 2021, related to fees due to legal counsel of US\$635 which is only payable on completion of a transaction that secures a partner for the Pebble Partnership. As the timing and outcome of such a

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

transaction remains uncertain, the Group has derecognized the payable in 2022 and has disclosed these fees as a contingent payable (note 14(g)).

9. EXPLORATION AND EVALUATION AND GENERAL AND ADMINISTRATIVE EXPENSES

(a) *Exploration and Evaluation Expenses ("E&E")*

For the year ended December 31, 2022 and 2021, E&E consisted of the following:

E&E	2022	2021
Engineering	\$ 1,390	\$ 3,860
Environmental	2,187	2,237
Property fees	1,194	1,150
Site activities	1,565	2,089
Socio-economic	2,242	2,403
Transportation	620	523
Other activities and travel	71	173
Total	\$ 9,269	\$ 12,435

(b) *General and Administrative Expenses ("G&A")*

For the year ended December 31, 2022 and 2021, G&A consisted of the following:

G&A	2022	2021
Conference and travel	\$ 248	\$ 131
Consulting	651	1,902
Depreciation of right-of-use assets	104	192
Insurance	2,422	1,502
Office costs, including information technology	769	815
Management and administration	3,130	3,891
Shareholder communication	1,276	1,309
Trust and filing	426	249
Total	\$ 9,026	\$ 9,991

10. EMPLOYMENT COSTS

For the year ended December 31, 2022 and 2021, the Group recorded the following:

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

	2022	2021
Exploration and evaluation		
Salaries and benefits	\$ 2,267	\$ 2,907
Amounts paid for services by HDSI personnel (note 7(b))	923	1,508
	3,190	4,415
General and administrative		
Salaries and benefits	1,407	1,418
Amounts paid for services by HDSI personnel (note 7(b))	2,433	2,764
	3,840	4,182
Share-based payments	2,301	2,858
	\$ 9,331	\$ 11,455

11. BASIC AND DILUTED LOSS PER SHARE

The calculation of basic and diluted loss per share for the year ended December 31, 2022 and 2021 was based on the following:

	2022	2021
Loss attributable to shareholders	\$ 24,442	\$ 31,542
Weighted average number of shares outstanding (000s)	529,779	521,459

For the year ended December 31, 2022 and 2021, basic and diluted loss per share does not include the effect of employee share purchase options outstanding (2022 – 27,693,500, 2021 – 20,825,500), non-employee share purchase options and warrants (2022 – 37,600, 2021 – 94,000) and DSUs (2022 – 539,286, 2021 – 477,711), as they were anti-dilutive.

12. INCOME TAX

	Year ended December 31	
Reconciliation of effective tax rate	2022	2021
Net loss	\$ (24,442)	\$ (31,542)
Total income tax expense	107	–
Loss excluding income tax	(24,335)	(31,542)
Income tax recovery using the Company's domestic tax rate	(6,570)	(8,516)
Non-deductible expenses and other	631	764
Change in tax rates	–	–
Deferred income tax assets not recognized	5,832	7,752
	\$ (107)	\$ –

The Company's domestic tax rate for the year was 27% (2021 – 27%).

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

	December 31 2022	December 31 2021
Deferred income tax assets (liabilities)		
Tax losses	\$ 2,167	\$ 2,451
Net deferred income tax assets	2,167	2,451
Resource property/investment in Pebble Partnership	(2,167)	(2,451)
Equipment	-	-
Net deferred income tax liability	\$ -	\$ -

The Group had the following temporary differences at December 31, 2022, in respect of which no deferred tax asset has been recognized:

Expiry	Tax losses	Resource pools	Other
Within one year	\$ -	\$ -	\$ -
One to five years	-	-	3,059
After five years	320,663	-	-
No expiry date	38,643	93,688	190
Total	\$ 359,306	\$ 93,688	\$ 3,249

The Group has net operating tax losses in the US totalling \$38.6 million that can be only utilized to a maximum of 80% of taxable income.

The Group has taxable temporary differences in relation to investments in foreign subsidiaries or branches of \$7.6 million (2021 - \$8.6 million) which has not been recognized because the Group controls the reversal of liabilities and it is expected it will not reverse in the foreseeable future.

13. FINANCIAL RISK MANAGEMENT

The Group is exposed in varying degrees to a variety of financial instrument related risks. The Board approves and monitors the risk management processes, inclusive of documented investment policies, counterparty limits, and controlling and reporting structures. The type of risk exposure and the way in which such exposure is managed is provided as follows:

(a) Credit Risk

Credit risk is the risk of potential loss to the Group if a counterparty to a financial instrument fails to meet its contractual obligations. The Group's credit risk is primarily attributable to its liquid financial assets, including cash and cash equivalents, restricted cash and amounts receivable. The Group limits the exposure to credit risk by only investing its cash and cash equivalents and restricted cash with high-credit quality financial institutions in business and saving accounts, guaranteed investment certificates, in government treasury bills, low risk corporate bonds and money market funds which are available on demand by the Group when required. Amounts receivable in the table below exclude receivable balances with government agencies (note 4). The Group's maximum exposure was as follows:

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

Exposure	December 31 2022	December 31 2021
Amounts receivable	\$ 64	\$ 85
Restricted cash	852	785
Cash and cash equivalents	14,173	22,291
Total exposure	\$ 15,089	\$ 23,161

(b) Liquidity Risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations when they become due. The Group ensures, as far as reasonably possible, it will have sufficient capital in order to meet short to medium term business requirements, after taking into account cash flows from operations and the Group's holdings of cash and cash equivalents and restricted cash, where applicable. However, the Group has noted material uncertainty that raises substantial doubt about the Group's ability to continue as a going concern notwithstanding the Group having positive working capital (note 1) as demands may exceed existing resources, and that it has been successful in the past in raising funds when needed. The Group's cash and cash equivalents at the reporting date were invested in business and savings accounts (note 5(a)).

The Group's financial liabilities are comprised of current trade and other payables (note 8) and payables to related parties (note 7), which are due for payment within 12 months from the reporting date, and non-current trade payables, which are due for payment more than 12 months from the reporting date. The carrying amounts of the Group's financial liabilities represent the Group's contractual obligations.

(c) Foreign Exchange Risk

The Company is subject to both currency transaction risk and currency translation risk: the Pebble Partnership, Pebble Services Inc. and U5 Resources Inc. have the US dollar as functional currency, and certain of the Company's corporate expenses are incurred in US dollars. The operating results and financial position of the Group are reported in Canadian dollars in these Financial Statements. As a result, the fluctuation of the US dollar in relation to the Canadian dollar will have an impact upon the losses incurred by the Group as well as the value of the Group's assets and the amount of shareholders' equity. The Group has not entered into any agreements or purchased any instruments to hedge possible currency risks.

The exposure of the Group's US dollar-denominated financial assets and liabilities to foreign exchange risk was as follows:

	December 31 2022	December 31 2021
Financial assets:		
Amounts receivable	\$ 108	\$ 168
Cash and cash equivalents and restricted cash	7,347	5,433
	7,455	5,601
Financial liabilities:		
Non-current trade payables	(463)	(1,365)
Current trade and other payables	(1,383)	(1,670)
Payables to related parties	(71)	(190)
	(1,917)	(3,225)
Net financial assets exposed to foreign currency risk	\$ 5,538	\$ 2,376

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

Based on the above net exposures and assuming that all other variables remain constant, a 10% change in the value of the Canadian dollar relative to the US dollar would result in a gain or loss of \$554 (2021 – \$238) in the reported period. This sensitivity analysis includes only outstanding foreign currency denominated monetary items.

(d) Interest Rate Risk

The Group is subject to interest rate cash flow risk with respect to its investments in cash and cash equivalents. The Group's policy is to invest cash at fixed rates of interest and cash reserves are to be maintained in cash and cash equivalents or short-term low risk investments in order to maintain liquidity, while achieving a satisfactory return for shareholders. Fluctuations in interest rates when cash and cash equivalents mature impact interest income earned.

Assuming that all other variables remain constant, a 100 basis points change representing a 1% increase or decrease in interest rates would have resulted in a decrease or increase in loss of \$182 (2021 – \$324).

(e) Capital Management

The Group's policy is to maintain a strong capital base to maintain investor and creditor confidence and to sustain future development of the business. The capital structure of the Group consists of equity, comprising share capital and reserves, net of accumulated deficit. There were no changes in the Group's approach to capital management during the period. The Group is not subject to any externally imposed capital requirements.

(f) Fair Value

The fair value of the Group's financial assets and liabilities approximates the carrying amount.

Financial instruments measured at fair value are classified into one of three levels in the fair value hierarchy according to the relative reliability of the inputs used to estimate the fair values. The three levels of the fair value hierarchy are:

- Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 – Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and
- Level 3 – Inputs that are not based on observable market data.

The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. Fair value measurements, which are determined by using valuation techniques, are classified in their entirety as either Level 2 or Level 3 based on the lowest level input that is significant to the measurement.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

14. COMMITMENTS AND CONTINGENCIES

(a) Legal Proceedings

Class Action Litigation following 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 (Brooklyn) 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 filed a motion to dismiss the complaint on behalf of all defendants, which the Court denied on January 25, 2023. The Company will continue to defend its interests in the litigation, which is expected to proceed into the discovery phase and forthcoming motion practice on whether a class should be certified.

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) its 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 April 20, 2022, the putative plaintiff filed and subsequently served an application to amend his pleadings to harmonize with the pleadings in the Woo case described below, add Mr. Woo as a plaintiff, and add new underwriter defendants. Also on April 20, 2022, the putative plaintiff filed and subsequently served an application for leave to commence a secondary market liability claim under s. 140.3 of the B.C. Securities Act, for an order certifying the action as a class action, and for related relief.

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

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

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. On March 30, 2022, the plaintiff made a motion to discontinue the claim without costs and the court granted the discontinuance in April 2022.

Given the nature of the claims, it is not currently possible for the Company to predict the outcome nor practical to determine their possible financial effect.

Grand Jury Subpoena

On February 5, 2021, the Company announced that the Pebble Partnership and its former CEO, have 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 apparently involving previously disclosed recordings of private conversations regarding the Pebble Project. The Company is not aware of any civil or criminal charges having been filed against any entity or individual in this matter. The Company also self-reported this matter to the US Securities and Exchange Commission ("SEC"), and there is a related informal 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.

Indemnification Obligations

The Company is subject to certain indemnification obligations to both present and former officers and directors, including the Pebble Partnership's former CEO, 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.

(b) Short-term Lease Commitments

As of December 31, 2022, the Group has a short-term lease commitment of \$55 (2021 – \$50) with a fixed monthly payment over the remaining term.

(c) Pipeline Right-of-Way Bond Commitment

The Group has a bond of US\$300 with the Alaskan regulatory authorities for a performance guarantee related to any potential reclamation liability as a condition for a pipeline right-of-way to a subsidiary of the Pebble Partnership, the Pebble Pipeline Corporation. The Group is liable to the surety provider for any funds drawn by the Alaskan regulatory authorities.

(d) Pebble Performance Dividend Commitment

The Group has a future commitment beginning at the outset of project construction at the Pebble Project to distribute cash generated from a 3% net profits royalty interest in the Pebble Project to adult residents of Bristol Bay villages that have subscribed as participants, with a guaranteed minimum aggregate annual payment of US\$3,000 each year the Pebble mine operates.

(e) Sponsorship Commitment

The Group entered into a sponsorship agreement in December 2022 for an aggregate commitment of US\$85 and includes the production of a research paper due in March 2023 and participation in a conference in the same period.

Northern Dynasty Minerals Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in thousands of Canadian Dollars, unless otherwise stated, except per share, option, warrant or DSU)

(f) *Office Use Commitment*

The Company has an office use agreement with HDSI (note 7(b)) ending April 29, 2026. At December 31, 2022 the total remaining undiscounted commitment was \$343. This commitment is a flow through cost at market rates. The following table summarizes the commitment schedule:

	Total
Less than one year	\$ 99
One to five years	244
Total	\$ 343

(g) *Contingent Legal Fees Payable*

The Group has legal fees totalling US\$635 payable to certain legal counsel on completion of a transaction that secures a partner for the Pebble Partnership.



MANAGEMENT'S DISCUSSION AND ANALYSIS

YEAR ENDED DECEMBER 31, 2022

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

Table of Contents

1.1	DATE	3
1.2	OVERVIEW	8
	PLANS FOR 2023	10
1.2.1	PEBBLE PROJECT	11
	1.2.1.1 PROJECT BACKGROUND AND STATUS.....	11
	1.2.1.2 PROJECT DESCRIPTION	11
	1.2.1.3 CWA PERMITTING PROCESS	12
	1.2.1.4 EPA PROPOSED AND FINAL DETERMINATIONS	14
	1.2.1.5 TECHNICAL PROGRAMS	16
	1.2.1.6 SOCIOECONOMIC	16
1.2.2	LEGAL MATTERS	17
1.2.3	FINANCING	20
1.2.4	MARKET TRENDS	20
1.3	SELECTED ANNUAL INFORMATION	22
1.4	SUMMARY AND DISCUSSION OF QUARTERLY RESULTS	23
1.5	RESULTS OF OPERATIONS	24
	1.5.1 RESULTS OF OPERATIONS – THREE MONTHS AND YEAR ENDED DECEMBER 31, 2022 VERSUS 2021	24
	1.5.2 FINANCIAL POSITION AS AT DECEMBER 31, 2022 VERSUS DECEMBER 31, 2021	25
	1.5.3 PLAN OF OPERATIONS.....	25
1.6	LIQUIDITY	28
1.7	CAPITAL RESOURCES.....	29
1.8	OFF-BALANCE SHEET ARRANGEMENTS	29
1.9	TRANSACTIONS WITH RELATED PARTIES	29
1.10	FOURTH QUARTER	30
1.11	PROPOSED TRANSACTIONS	30
1.12	CRITICAL ACCOUNTING ESTIMATES.....	30
1.13	CHANGES IN ACCOUNTING POLICIES INCLUDING INITIAL ADOPTION	30
1.14	FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS	31
1.15	OTHER MD&A REQUIREMENTS	32
	1.15.1 DISCLOSURE OF OUTSTANDING SHARE DATA	33
	1.15.2 DISCLOSURE CONTROLS AND PROCEDURES	33
	1.15.3 MANAGEMENT’S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING ("ICFR").....	33
	1.15.4 LIMITATIONS OF CONTROLS AND PROCEDURES	34
	1.15.5 RISK FACTORS	34
	1.15.6 QUALIFIED PERSONS	43
	1.15.7 U.S. SECURITIES MATTERS	43

**Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022**

1.1 Date

This Management's Discussion and Analysis ("MD&A") should be read in conjunction with the audited consolidated financial statements (the "Financial Statements") of Northern Dynasty Minerals Ltd. ("Northern Dynasty" or the "Company") for the year ended December 31, 2022, as publicly filed under the Company's profile on SEDAR at www.sedar.com.

The Company reports in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IASB") and interpretations of the IFRS Interpretations Committee (together, "IFRS"). The following disclosure and associated Financial Statements are presented in accordance with IFRS. This MD&A is prepared as of March 31, 2023.

All dollar amounts herein are expressed in Canadian dollars, unless otherwise specified.

Glossary

Abbreviations commonly used in this MD&A:	
2020 Mine Plan	The mine plan under the updated Project Description, as described in the final environmental impact statement for the Pebble Project <i>see Pebble EIS below</i>
2023 Technical Report	The NI 43-101 technical report entitled, <i>2023 Technical Report on the Pebble Project, Southwest Alaska, USA</i> , Effective Date: February 24, 2023, by J. David Gaunt, P.Geo., James Lang, P.Geo., Eric Titley, P.Geo., Hassan Ghaffari, P.Eng., Stephen Hodgson, P.Eng.
CWA	Clean Water Act
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
Final Determination	The final determination of the Regional Administrator of EPA Region 10 issued on January 30, 2023
NEPA	The United States National Environmental Policy Act
Original Proposed Determination	The original proposed determination of the EPA under Section 404(c) of the CWA in respect of the Pebble Project published in July 2014
Pebble Partnership	The Pebble Limited Partnership, an Alaskan registered limited partnership wholly owned by the Company
Pebble Deposit	The copper, gold, molybdenum, silver and rhenium mineral deposit located in southwest Alaska on the mining claims and leasehold interests of the Pebble Partnership
Pebble Project	The development of a mine producing copper, gold, molybdenum, silver and rhenium minerals from the Pebble Deposit
Project Description	The production plan and corresponding project configuration for the development of a mine at the Pebble Project, as presented in the June 2020 Revised Permit Application
Proposed Project	The development of the Pebble Project in accordance with the Project Description
Revised Proposed Determination	The revised proposed determination of the EPA under Section 404(c) of the CWA in respect of the Pebble Project published in May 2022
ROD	The Record of Decision issued by the USACE on November 20, 2020 denying the permit application of the Pebble Partnership under Section 404 of the CWA
Royalty Agreement	The royalty agreement dated July 26, 2022 between the Pebble Partnership, together with certain other wholly-owned subsidiaries of the Pebble Partnership, and the royalty holder (refer 1.2.3)
Royalty Holder	The holder of a royalty granted under the Royalty Agreement

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

Abbreviations commonly used in this MD&A:	
SEC	The United States Securities and Exchange Commission.
USACE	U.S. Army Corps of Engineers

Forward Looking Statements

This MD&A contains certain forward-looking information and forward-looking statements within the meaning of applicable Canadian securities laws and forward-looking statements within the meaning of the United States *Private Securities Litigation Reform Act of 1995*. Forward-looking statements describe our future plans, strategies, expectations and objectives, and are generally, but not always, identifiable by use of the words "may", "will", "should", "continue", "expect", "anticipate", "estimate", "believe", "intend", "plan" or "project" or the negative of these words or other variations on these words or comparable terminology.

Forward-looking statements contained or incorporated by reference into this MD&A include, without limitation, statements regarding:

- our expectations regarding the potential for securing the necessary permitting of 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 ROD of 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, including under the CWA, the NEPA, and relevant legislation;
- our ability to successfully challenge the EPA's Final Determination;
- 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 the Company;
- our plan of operations, including our plans to carry out and finance exploration and development activities;
- our ability to raise capital for the exploration, permitting 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 United States federal, state and regional economies;
- that any additional prepayment investments will be made in connection with our gold and silver production Royalty Agreement (as defined below) for the Pebble Project;
- the uncertainties with respect to the effects of COVID-19;
- uncertainties related to the conflict in Ukraine; and
- factors relating to our investment decisions.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

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:

- that 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 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;
- that we will be successful in challenging the EPA's Final Determination under the CWA;
- 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, silver and rhenium will not significantly decline or stay depressed for a lengthy period of time;
- that our 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 that 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 we face and the 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 is taking longer than anticipated and is uncertain;
- we may be unsuccessful in challenging the EPA's Final Determination under the CWA;
- our inability to ultimately obtain permitting for a mine at the Pebble Project;
- our 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 U.S. 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 SEC;

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

- 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;
- the Royalty Holder under our gold and silver production Royalty Agreement may not increase its investment;
- 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 technical uncertainties of the Pebble Project and the lack of established 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 copper, gold, molybdenum, silver and rhenium prices and share prices of mining companies;
- uncertainty related to the conflict in Ukraine;
- the impact of inflation on project costs and budgets for 2023 and beyond;
- stock market volatility resulting from rising interest rates and the impact on our ability to complete equity financings;
- 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 and any challenge of the EPA's Final Determination;
- the possible inability to insure our operations against all risks;
- the highly competitive nature of the mining business;
- the potential equity dilution to current shareholders due to future equity financings or from the exercise of outstanding share purchase options and warrants to purchase the Company's common shares; and
- that we have never paid dividends and will not do so in the foreseeable future.

While the effort was made to list the primary risk factors, this list should not be considered exhaustive of the factors that may affect any of our 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 [1.15.5 Risk Factors](#) and the risk factors and related discussions in the Company's annual information form for the year ended December 31, 2022 (the "**2022 AIF**").

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

Our forward-looking statements and risk factors are based on the reasonable beliefs, expectations and opinions of management on the date of this MD&A. 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.

For more information on the Company, investors should review the Company's 2022 AIF and other continuous disclosure filings that are available on SEDAR at www.sedar.com, and the Company's Annual Report on Form 40-F filed with the SEC available at www.sec.gov.

Cautionary Note to Investors Concerning Estimates of Measured, Indicated and Inferred Resources

The following section uses the terms "Measured Resources", "Indicated Resources" and "Inferred Resources". The Company advises investors that these terms are recognized and required by Canadian regulations under National Instrument 43-101, *Standards of Disclosure for Mineral Properties* ("**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 *U.S. Securities Exchange Act of 1934* ("**The SEC Modernization Rules**"). The SEC Modernization Rules include the adoption of 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 the mineral deposits in these categories will ever be converted into reserves.

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.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

1.2 Overview

Northern Dynasty is a mineral exploration company which, through its wholly-owned Alaskan registered limited partnership, the Pebble Limited Partnership (the "**Pebble Partnership**"), holds a 100% interest in mining claims that host the Pebble Copper-Gold-Molybdenum-Silver-Rhenium deposit, the basis of the Pebble Project (or "**Pebble**") in southwest Alaska, USA ("**U.S.**"). The Company's business in Alaska is operated through the Pebble Partnership.

The Pebble Project is an initiative to develop one of the world's most important mineral resources. The current estimate of the Pebble Mineral Resources¹ at a 0.30% copper equivalent cut-off grade comprises 6.5 billion tonnes in the combined **Measured and Indicated** categories at a grade of 0.40% copper, 0.34 g/t gold, 240 ppm molybdenum, 1.7 g/t silver and 0.41 ppm rhenium; and 4.5 billion tonnes in the **Inferred** category at a grade of 0.25% copper, 0.25 g/t gold, 226 ppm molybdenum, 1.2 g/t silver and 0.36 ppm rhenium.

Pebble's significant resource has the potential to provide significant quantities of copper, a commodity used extensively in green power and electrification technologies, including EVs. Pebble also contains a number of other important metals, including a globally significant resource of rhenium, which is used in jet engines and related military applications and as a catalyst in industrial applications for the production of such things as high octane, lead-free gasoline.

A July 2022 study by S&P Global, entitled '*The Future of Copper: Will the looming supply gap short-circuit the energy transition?*' highlights the critical connection between electrification goals and the development of new resources of copper, like Pebble. The report was authored in response to the growing concern expressed by global authorities and governments that there are insufficient resources of copper to support the goal of Net-Zero Emissions by 2050, and concludes that "unless massive new supply [of copper] comes online in a timely way, the goal of Net-Zero Emissions by 2050 will be short-circuited and remain out of reach."² The report and the information on the S&P Global website regarding the report are not incorporated into this MD&A.

¹ David Gaunt, P.Geol., a qualified person as defined under 43-101, who is not independent of Northern Dynasty, is responsible for the mineral resource estimate, effective date August 18, 2020.

The Measured and Indicated Resources include 527 Mt of Measured grading 0.65% CuEq (0.33% Cu, 0.35 g/t Au, 178 ppm Mo, 1.7 g/t Ag and 0.32 ppm Re) and 5,929 Mt of Indicated grading 0.77% CuEq (0.41% Cu, 0.34 g/t Au, 246 ppm Mo, 1.7 g/t Ag and 0.41 ppm Re).

Copper equivalent ("**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). Contained metal calculations are based on 100% recoveries. A 0.30% CuEq cut-off is considered to be appropriate for porphyry deposit open pit mining operations in the Americas.

The mineral resource estimate is constrained by a conceptual pit shell that was developed using a Lerchs-Grossman algorithm and is based in the following parameters: 42 degree pit slope; metal prices and recoveries of US\$1,540.00/oz and 61% Au, US\$3.63/lb and 91% Cu, US\$20.00/oz and 67% Ag and 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. All mineral resource estimates, cut-offs and metallurgical recoveries are subject to change as a consequence of more detailed analyses that would be required in pre-feasibility and feasibility studies.

For further information on analytical, QAQC and data verification, and the estimate, refer to the Company's 2022 AIF and the 2023 Technical Report on the Pebble Project, effective date February 24, 2023, by David Gaunt, P.Geol., James Lang, P.Geol., Eric Titley, P.Geol., Stephen Hodgson, P.Eng., and Hassan Ghaffari, P.Eng., ("**2023 Technical Report**") as filed under the Company's profile at www.sedar.com and www.sec.gov.

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 mineralisation and its classification as a mineral resource.

² <https://ihsmarket.com/info/0722/futureofcopper.html>

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

Recent global events have demonstrated the fragility and insecurity of the global supply chain, and further underscored the need for the U.S. and other countries to achieve security over important commodities that are part of the energy transition. The Company believes the Pebble Project would help the U.S. to advance its stated goal of mineral security.

A CWA 404 Permit Application for the Pebble Project was submitted to the USACE by the Pebble Partnership in December 2017 and the federal permitting process was initiated in January 2018, led by the USACE. From that time to the ROD announcement by the USACE in November 2020, most of the activities of the Company, through the Pebble Partnership, were focused on support of this process and included ongoing technical studies, responses to requests for information, and stakeholder engagement and consultation. While this work continued post-receipt of the ROD, the focus through 2021, 2022, and is ongoing in 2023, has shifted to Pebble Partnership's appeal of the negative ROD by the USACE. 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 informed the Pebble Partnership that a new Review Officer ("RO") had been appointed to lead the Pebble Project appeal. An appeal conference was held in July 2022. The timing for the final decision on the appeal remains uncertain. Refer to the discussions below under [1.2.1.3, CWA Permitting Process](#) and [1.2.1.4, EPA Proposed and Final Determinations](#), for more details on the status of the Company's permitting process, including the appeal of the ROD and the description of the EPA's Final Determination.

In December 22, 2022, the Conservation Fund and Bristol Bay Heritage Land Trust³ announced three conservation easements over 44,000 acres in Southwest Alaska. The land, owned by the Pedro Bay Corp., is located off the northeastern shores of Lake Iliamna, in an area where an access road from Cook Inlet to the Pebble mineral deposit had been proposed. This 'northern transportation route' or 'Alternative 3', is one of several proposed access roads that were reviewed during the Pebble EIS and was identified as the Least Environmentally Damaging Alternative ("LEDPA") during that process. The Pebble Partnership is evaluating the impact of this action.

The Company has updated its technical disclosure on the Pebble Project through the filing of the 2023 Technical Report on SEDAR. The 2023 Technical Report reflects recent events material to the Pebble Project, including the Final Determination. Information derived from the 2023 Technical Report is summarized under "Item 5.B – Description of Business – Technical Summary" in the Company's 2022 Annual Information Form which is filed on SEDAR. The 2023 Technical Report supersedes the Preliminary Economic Assessment Technical Report, effective date October 1, 2022 (the "2022 PEA"), which superseded the Preliminary Economic Assessment Technical Report, effective date September 9, 2021 (the "2021 PEA"), each of which has been filed on SEDAR and is no longer considered to be current. Accordingly, investors should not regard the results of the 2021 PEA or 2022 PEA as current or rely on these results.

Other Activities

In 2022, the Company through the Pebble Partnership completed a monitoring and maintenance program at the Pebble site, and the cleanup of a logistical storage area on the property that had been damaged by a wildfire - part of the broader wildfire activity that occurred in Alaska during the summer of 2022. Input, as required, was provided on the ongoing appeal of the ROD and a detailed response to the Revised Proposed Determination was developed and submitted. The Company also continued to maintain an active corporate presence in Alaska and Washington, D.C., to engage and consult with project stakeholders. Corporate activities were directed toward corporate reporting, investor relations and discussions directed toward securing a partner with which to advance the overall development of the project.

³www.adn.com/business-economy/2022/12/27/in-barrier-to-pebble-mine-alaska-native-corporation-and-groups-set-aside-land-for-conservation/

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

From 2001, when Northern Dynasty's involvement with the Pebble Project began, to December 31, 2022, a total of \$1 billion (US\$900 million) has been invested to advance the project.⁴

Plans For 2023

The Company plans to proceed with the preparation of a fully independent Preliminary Economic Assessment ("2023 PEA"). The Company anticipates that the 2023 PEA will:

- be generally based on the project description set out in the 2021 PEA and the 2022 PEA;
- make express reference to both the current status of the appeal by the Pebble Partnership of the Record of Decision of the USACE and the issuance of the Final Determination by the EPA and Pebble Partnership's determination to challenge;
- include an independent resource estimate for the Pebble Project;
- include updated current estimates of the capital and operation costs for the Pebble Project from those reflected in the 2021 PEA and the 2022 PEA; and
- include the results of the economic analysis of the Pebble Project.

The Pebble Partnership staff will conduct a program of ongoing site maintenance, including a limited program of drill hole closures, and continue to maintain an active corporate presence in Alaska and Washington, D.C. to engage and consult with project stakeholders.

Corporate activities will focus on advancing the appeal of the ROD and challenging the Final Determination. Other activities will include raising capital, as necessary, to support the appeal and judicial review as well as corporate reporting, investor relations and discussions directed toward securing a partner with which to advance the overall development of the project.

Corporate

As at December 31, 2022, the Company had \$14.2 million in cash and cash equivalents and working capital (current assets less current liabilities) of \$14.8 million.

The Company has prioritized the allocation of its available financial resources to meet key corporate and Pebble Project expenditure requirements in the near term, including the funding of the appeal of the ROD and other matters addressed in [1.5.3 Plan of Operations](#). The Company will require additional funds to meet all its business objectives. Pursuant to the Royalty Agreement, the Company may receive four additional tranches of US\$12 million each should the Royalty Holder exercise its right to purchase additional rights to future gold and silver production from the Pebble Project. However, there is no assurance that this will occur. The Company plans to conduct other financings, as necessary through any or a combination of debt and equity and/or contributions from possible new Pebble Project participants; however, there can be no assurance that it will be

⁴ Of this, approximately \$595 million (US\$573 million) was provided by a wholly-owned subsidiary of Anglo American plc, which participated in the Pebble Partnership from 2007 to 2013, and the remainder was financed by Northern Dynasty. A major part of the 2007-2013 expenditures were on exploration, resource estimation, environmental data collection and technical studies, with a significant portion spent on engineering of possible mine development models, as well as 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 and exploration information, remain important information available to the Company to advance the project.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

successful in obtaining additional financing. If the Company is unable to raise the necessary capital resources to meet obligations as they come due, the Company will at some point have to reduce or curtail its operations.

The Company announced on February 21, 2023 that Siri C. Genik joined the Company's Board of Directors.

Effective March 24, 2023, Isabel Satra was appointed as a director.

1.2.1 Pebble Project

The Pebble Project is located in southwest Alaska, approximately 17 miles from the villages of Iliamna and Newhalen, and approximately 200 miles southwest of the city of Anchorage. Situated in an area of rolling hills approximately 1,000 feet above sea-level and 125 miles from Bristol Bay, the site conditions are generally favorable for the mine site and infrastructure development.

1.2.1.1 Project Background and Status

The Pebble deposit was discovered in 1989 by a prior operator, which by 1997 had developed an initial outline of the deposit.

Northern Dynasty has been involved in the Pebble Project since 2001. Exploration since that time has led to significant expansion of the mineral resources in the Pebble deposit, including a substantial volume of higher-grade mineralization in its eastern part. The deposit also remains open to further expansion at depth and to the east. Several other occurrences of copper, gold and molybdenum have also been identified along the extensive northeast-trending mineralized system that underlies the property. The potential of these earlier-stage prospects has not yet been fully explored.

Comprehensive deposit delineation, environmental, socioeconomic and engineering studies of the Pebble deposit began in 2004. A Preliminary Assessment of the Pebble Project completed in 2011 provided initial insights into the size and scale of project that the Pebble resource might support. The Pebble Partnership continued to undertake detailed engineering, environmental and socioeconomic studies over the next two years.

1.2.1.2 Project Description

Northern Dynasty, through Pebble Partnership, continued to advance engineering studies to refine the mine design and to support the EIS process. The results of this work were reported in updates to the Project Description.

During the permitting process, a number of transportation infrastructure routes and alternatives were assessed, and the USACE determined that the northern corridor route was the most appropriate LEDPA alternative. It is the Pebble Partnership's intent to undertake the actions necessary to acquire the rights to build and operate the most appropriate transportation and infrastructure corridor to allow the development of the State's and Pebble Partnership's mineral rights. Information on Right-of-Way agreements is provided in [1.2.1.6 Socioeconomic](#).

The final Pebble EIS analyzes the potential impacts of four action development alternatives, and a "No Action" alternative. The development option selected by USACE as the draft LEDPA is described in the June 2020 Project Description. It includes a proposed open-pit mining operation and associated ore processing facilities in southwest Alaska, an 82-mile road, pipeline and utilities corridor to a permanent, year-round port facility on Cook Inlet, a lightering location in Iniskin Bay, a 164-mile natural gas pipeline from existing energy infrastructure on the Kenai Peninsula to the Pebble mine site, a 270 MW natural gas-fired power plant at the mine site and smaller power generation facility at the port site.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

Over 20 years of mining, the Pebble Project as proposed will extract approximately 70 million tons of mineralized material annually at the extremely low strip ratio of 0.12:1. A conventional blast-haul-crush and froth flotation milling process with nameplate capacity of 180,000 tons per day will be employed to produce, on average, 613,000 tons of copper-gold concentrate each year (containing 318 million lb Cu, 362,000 oz Au and 1.8 million oz Ag) and 15,000 tons of molybdenum concentrate (containing 14 million lb Mo). The current mine plan proposal encompasses the important environmental safeguards previously described, including:

- a smaller footprint, consolidating major site infrastructure in a single drainage.
- a more conservative Tailings Storage Facility ("TSF") design, including enhanced buttresses, flatter slope angles and an improved factor of safety;
- separation of potentially acid generating ("PAG") tailings from non-PAG bulk tailings for storage in a fully-lined TSF;
- co-storage of PAG waste rock within the PAG TSF and transfer of the PAG tailings and waste rock to the open pit at closure;
- no permanent waste rock piles; and
- no secondary gold recovery plant.

The proposed project seeks to develop a portion of the currently estimated Pebble mineral resources. This does not preclude development of additional resources in other phases of the project in the future, although any subsequent phases of development would require extensive regulatory and permitting review by federal, state and local regulatory agencies, including a further comprehensive EIS review process under NEPA. During the NEPA process, the Pebble Partnership received a Request for Information ("RFI") from USACE for a description of a concept for an expanded Project. The Pebble Partnership prepared the description in response to the RFI and this response is included in the EIS Administrative Record.

1.2.1.3 CWA Permitting Process

In the latter part of 2017, a project design was developed for the Pebble Project. The CWA 404 permit application was submitted to the USACE on December 22, 2017, initiating federal review for the Pebble Project under NEPA. Significant milestones in this permitting process are summarized below:

- In January 2018, the Pebble Partnership received notice from USACE that the CWA Act 404 permitting documentation was accepted and that an EIS would be required to comply with its NEPA review of the Pebble Project;
- On February 5, 2018, USACE announced the appointment of AECOM, a leading global engineering firm, as third-party contractor for the USACE EIS process;
- On March 19, 2018, USACE published guidelines and timelines for completing CWA permitting, and the associated USACE EIS process;
- Between April and August 2018, the Pebble Project was advanced through the Scoping Phase of the EIS process administered by the USACE, which included a 90-day public comment period. The Scoping Document was released on August 31, 2018;
- On February 20, 2019, USACE posted the draft EIS on its website, then initiated a public comment process on the draft EIS, which was completed on July 2, 2019;
- In February 2020, a preliminary version of the final EIS was distributed for comment and review to cooperating agencies and to tribes participating in the process;
- In March 2020, USACE announced it had decided on a Northern Transportation Route option as the draft LEDPA for accessing the proposed Pebble mine site, subsequent to which the Pebble Partnership revised its Proposed Project Description to align with the USACE selection. The Northern Transportation Route

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

includes adjustments to the port site (location at Diamond Point with off-shore lightering station) and a road and pipeline route (located further to the north with no lake crossings or ferry terminals);

- In May 2020, the EPA issued a letter confirming the EPA's decision not to pursue so-called 3(b) elevation under the CWA 404(q) guidelines; and
- On July 24, 2020, the USACE posted the final Pebble EIS on its website.

Publication of the final Pebble EIS in July 2020 followed 2½ years of intensive review by the USACE and eight federal cooperating agencies (including the US Environmental Protection Agency and US Fish & Wildlife Service), three state cooperating agencies (including Alaska Department of Natural Resources and Alaska Department of Environmental Conservation), the Lake & Peninsula Borough and federally recognized tribes. 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.

After consultation with the USACE, a compensatory Mitigation Plan was submitted to the USACE on November 4, 2020. Further details can be found in the Company's 2022 Annual Information Form.

On November 25, 2020, the USACE issued the ROD. The ROD rejected the compensatory mitigation plan as "noncompliant" and determined the Pebble 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 CWA.

The Pebble Partnership submitted a request for appeal of the ROD (the "RFA") to the USACE Pacific Ocean Division on January 19, 2021. The RFA reflects the Pebble Partnership's position that the USACE's ROD and permitting decision are contrary to law, unprecedented in Alaska, and fundamentally unsupported by the administrative record, including the Pebble Project 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 Pebble Partnership's compensatory mitigation plan is contrary to 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.

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.

In a letter dated February 24, 2021, the USACE confirmed the Pebble Partnership's RFA is "complete and meets the criteria for appeal." The timing for the final decision remains uncertain. 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.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

1.2.1.4 EPA Proposed and Final Determinations

In February 2014, the EPA announced a pre-emptive regulatory action under Section 404(c) of the CWA to consider restriction or a prohibition of mining activities associated with the Pebble Deposit, referred to as the Original Proposed Determination. From 2014-2017, Northern Dynasty and the Pebble Partnership focused on a multi-dimensional strategy, including legal and other initiatives to ward off the Original Proposed Determination. These efforts were successful, resulting in the joint settlement agreement announced on May 12, 2017, enabling the Pebble Project to move forward with state and federal permitting. As part of the joint settlement agreement, the EPA agreed to initiate a process that led to the withdrawal of the Original Proposed Determination in July 2019.

On September 9, 2021, the EPA announced it planned to re-initiate its Revised Proposed Determination process of making a CWA Section 404(c) determination for the waters of Bristol Bay, which would set aside the 2019 withdrawal of the Original Proposed Determination that was based on a 2017 settlement agreement between the EPA and Pebble Partnership. The Company believes the results of the Pebble EIS support the 2019 withdrawal. As part of its review process, the EPA issued a letter dated January 27, 2022, to the Pebble Partnership advising as to the EPA's belief that the discharge of dredged or fill associated with mining of the Pebble Project could result in unacceptable adverse effects on important fishery areas and of its intent to issue a Revised Proposed Determination. The EPA's letter was also addressed to the USACE and the State of Alaska Department of Natural Resources. The EPA invited the Pebble Partnership, the USACE, the State of Alaska Department of Natural Resources to submit information "to demonstrate that no unacceptable adverse effects to aquatic resources" would result from the Pebble Project. The Pebble Partnership responded to the EPA on March 28, 2022, contesting both the factual claim by the EPA as to the impact on aquatic resources and the legal basis on which the EPA has proposed to act.

The State of Alaska also responded to the EPA's letter by letter dated March 28, 2022. The State of Alaska advised the EPA of its position that the issuance of a Section 404(c) veto would contravene the Alaska Statehood Act, the Cook Inlet Land Exchange Act and potentially the "takings clause" of the United States Constitution.

On May 25, 2022, the EPA announced that it intended to advance its pre-emptive veto of the Pebble Project and issued a revised Proposed Determination. The Revised Proposed Determination would establish a "defined area for prohibition" coextensive with the current mine plan footprint in which the EPA would prohibit the disposal of dredged or fill material for the Pebble Project. The Revised Proposed Determination would also establish a 309-square-mile "defined area for restriction."

On January 30, 2023, the EPA issued the Final Determination under Section 404(c) of the CWA, imposing limitations on the use of certain waters in the Bristol Bay watershed as disposal sites for certain discharges of dredged or fill material associated with development of a mine at the Pebble deposit. This Final Determination is the concluding step in the administrative process set forth in 40 C.F.R. Part 231, which governs EPA's authority under Section 404(c) to veto permit decisions. The Administrative Procedure Act ("APA"), 5 USC §551 et seq., which governs judicial review of agency decisions, provides that individuals aggrieved by agency action may seek judicial review of any "final agency action." The EPA's administrative determination can be challenged by filing a lawsuit in U.S. federal district court seeking reversal of that decision.

The Final Determination includes the determinations of the EPA that:

- the discharges of dredged or fill material for the construction and routine operation of the mine identified in the 2020 Mine Plan at the Pebble deposit will have unacceptable adverse effects on anadromous fishery areas in the South Fork Koktuli River (**SFK**) and North Fork Koktuli River (**NFK**) watersheds;
- discharges of dredged or fill material associated with developing the Pebble deposit anywhere in the mine site area within the SFK and NFK watersheds that would result in the same or greater levels of loss or streamflow changes as the 2020 Mine Plan also will have unacceptable adverse effects on anadromous fishery areas in these watersheds, because such discharges would involve the same aquatic resources characterized as part of the evaluation of the 2020 Mine Plan; and

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

- discharges of dredged or fill material for the construction and routine operation of a mine at the Pebble deposit anywhere in the SFK, NFK, and Upper Talarik Creek ("UTC") watersheds will have unacceptable adverse effects on anadromous fishery areas if the effects of such discharges are similar or greater in nature and magnitude to the adverse effects of the 2020 Mine Plan.

Based on these determinations, the Final Determination:

- prohibits the specification of waters of the United States within the Defined Area of Prohibition, as defined in the Final Determination, as disposal sites for the discharge of dredged or fill material for the construction and routine operation of the 2020 Mine Plan. This includes future proposals to construct and operate a mine to develop the Pebble deposit that result in any of the same aquatic resource loss or streamflow changes as the 2020 Mine Plan. Moreover, dredged or fill material need not originate within the boundary of the Pebble deposit to be associated with the developing the Pebble deposit and, thus, subject to the prohibition. For purposes of the prohibition, the "2020 Mine Plan" is (i) the mine plan described in the Pebble Partnership's June 8, 2020 CWA Section 404 permit application and the FEIS; and (ii) future proposals to construct and operate a mine to develop the Pebble deposit with discharges of dredged or fill material into waters of the United States within the Defined Area for Prohibition that would result in the same or greater levels of loss or streamflow changes as the mine plan described in the Pebble Partnership's June 8, 2020 CWA Section 404 permit application. The Defined Area for Prohibition covers approximately 24.7 square miles (63.9 km²) and includes the area covered by the mine footprint of the 2020 Mine Plan; and
- restricts the use of waters of the United States within the Defined Area for Restriction, as defined in the Final Determination, for specification as disposal sites for the discharge of dredged or fill material associated with future proposals to construct and operate a mine to develop the Pebble deposit that would either individually or cumulatively result in adverse effects similar or greater in nature and magnitude to the adverse effects of the 2020 Mine Plan. The Defined Area for Restriction encompasses certain headwaters for the SFK, NFK and UTC watersheds and covers an area of approximately 309 square miles (800 km²).

The Company and the Pebble Partnership plan to seek judicial review of the Final Determination in an appropriate U.S. federal district court. The Company anticipates that the Pebble Partnership will continue to assert the following arguments, among others, in any judicial proceedings:

- the EPA's Final Determination is premature and not authorized by the CWA and, accordingly, is contrary to law and precedent;
- the EPA erred when it did not exhaust the Section 404(q) elevation procedures prior to initiating its Section 404(c) procedures as the EPA's authority under Section 404(c) is narrowly prescribed by the CWA and is only to be used as a last resort;
- the EPA's decision to restrict development of 309-square-miles of land is legally and technically unsupportable;
- the EPA has not demonstrated that the development of the Pebble deposit will have unacceptable adverse effects under Section 404(c);
- the EPA has not demonstrated any impacts to Bristol Bay fisheries that would justify the extreme measures in the Final Determination and, further, the Final Determination contradicts the conclusion in the FEIS that the Pebble Project was "not expected to have a measurable impact on fish populations";
- the EPA's Final Determination violates the rights of the State of Alaska established under the Alaska Statehood Act, and related laws, and would undermine the State's legally protected interests in the development of lands it acquired and intended for mineral development; and
- the EPA must consider the benefits of the Pebble Project in light of the critical need for minerals essential to the renewable energy transition, as well as the environmental and social costs that would result from not developing the project.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

There is no assurance that any judicial review would be successful in overturning the Final Determination or that the Pebble Partnership's appeal of the ROD will be successful. If not withdrawn or overturned, the Final Determination would prevent the Company from developing the Pebble deposit as set out in the 2020 Mine Plan or in any other mine plan that the EPA would consider as resulting in "adverse effects similar or greater in nature and magnitude to the adverse effects of the 2020 Mine Plan."

The Pebble Partnership would likely not be alone in challenging the EPA's Final Determination, as Alaska Governor Mike Dunleavy has publicly indicated that the State will pursue legal action against the EPA to challenge the Final Determination as indicated in a January 31, 2023 news release. Excerpts include: "EPA's veto sets a dangerous precedent. Alarming, it lays the foundation to stop any development project, mining or non-mining, in any area of Alaska with wetlands and fish bearing streams," said Alaska Governor Mike Dunleavy. "...The veto disregards the Alaska Statehood Act, violates the Clean Water Act, and departs from basic scientific methodology. Of particular concern is EPA's failure to demonstrate why the Army Corps of Engineers was wrong when it reviewed the same scientific data but arrived at the opposite conclusion-that the proposed mine plan "would not be expected to have a measurable effect on fish numbers or result in long-term changes to the health of the commercial fisheries in Bristol Bay."⁵

1.2.1.5 Technical Programs

The 2022 site program was initiated in May, and completed by the end of June. The Company's' logistical storage site, used to store equipment, was damaged as part of the wildfire activity during the summer of 2022. During the prior quarter, a team was mobilized to clean up the storage site, which was completed in Q3 2022.

1.2.1.6 Socioeconomic

Community Engagement

Pebble Project technical programs are supported by stakeholder engagement activities undertaken by the Pebble Partnership 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 regulatory 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 have included:

- workforce and business development initiatives intended to enhance economic opportunities for regional residents and Alaska Native corporations;

⁵ <https://gov.alaska.gov/epas-preemptive-veto-sets-dangerous-precedent/>

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

- 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, and conservation organizations, among others.

Through these various stakeholder initiatives, the Company 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. This program of engagement and consultation also includes discussions to secure stakeholder agreements to support the project's development.

Right-of-Way Agreements and Other Community Initiatives

The Pebble Partnership has finalized Right-of-Way ("**ROW**") agreements with Alaska Native village corporations and other landowners with land holdings along proposed transportation and infrastructure routes for the Pebble Project. The ROW agreements secure access to portions of several proposed transportation and infrastructure routes to the Pebble Project site for construction and operation of the proposed mine and represents a significant milestone in the developing relationship between Pebble and the Alaska Native people of the region. Transportation and other infrastructure for a mine at Pebble is expected to benefit Alaska Native village corporations, their shareholders and villages through toll payments and user fees, contracting opportunities, and improved access to lower cost power, equipment and supplies, as well as enhanced economic activity in the region.

On June 16, 2020, the Company announced the Pebble Partnership has established the Pebble Performance Dividend LLC ("**PPD LLC**") to provide a local revenue sharing program with the objective of ensuring that full-time residents of communities in southwest Alaska benefit directly from the future operation of the proposed Pebble Project. The intention is for PPD LLC to distribute cash generated from a 3% net profits royalty interest in the Pebble Project to adult residents of Bristol Bay villages that have subscribed as participants, with a guaranteed minimum aggregate annual payment of US\$3 million each year the Pebble mine operates, beginning at the outset of project construction.

A Memorandum of Understanding ("**MOU**") between the Pebble Partnership and APC was announced on July 6, 2020. The Alaska Peninsula Corporation ("**APC**") is an Alaska Native village corporation with extensive land holdings proximal to the Pebble site. The MOU envisages that APC will lead the development of a consortium of Alaska Native village corporations with land holdings along the Northern Transportation Route. It is contemplated that the consortium would provide road maintenance, truck transport, port operations and other logistical services to the Pebble Project should the development of the mine proceed. The MOU is consistent with the Company's strategy of ensuring the development of the Pebble Project will benefit local Alaska communities and people. The MOU is not a binding final contract. Any final contracts with APC or other Alaska Native village corporations will require further negotiation of commercial terms and negotiation of definitive contracts. There is no assurance that these contracts will be concluded or that the Alaska Native village corporations will support the Pebble Project.

1.2.2 Legal Matters

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

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

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".

Committee on Transportation and Infrastructure of the United States House of Representatives

On November 19, 2020, the Pebble Partnership received a letter from the Committee on Transportation and Infrastructure of the United States House of Representatives, 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 produced 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 October 22, 2022, the Committee's then-Majority Staff released a report concerning the Pebble Project, alleging false testimony to the Committee and indicating that a referral has been made to the U.S. Attorney General's Office. The Staff Report was issued without providing the Company any opportunity to respond to the allegations contained in the Staff Report prior to its release. Nor did the Committee publicly request or conduct any interviews of Northern Dynasty or Pebble employees after its November 19, 2020, correspondence. The Pebble Partnership, in a press release, responded "[w]e want to be absolutely clear, however, that to the extent the report contains any suggestion that we tried to mislead regulators in any way, it is categorically wrong and misinformed of the realities of the Pebble permitting process." The Company also stated "[w]e look forward to laying out the essential context missing from the report." Pebble Partnership CEO, John Shively, further responded to the Staff Report in a letter dated December 22, 2022, stating that the Staff Report was "issued in violation of Committee rules and without any meaningful consideration of the objective facts." No formal response to the letter has been received from the Committee.

Grand Jury Subpoena

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 responded to 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 following the USACE'S Record of Decision

On December 4 and 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,

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

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 filed a motion to dismiss the complaint on behalf of all defendants, which the Court denied on January 25, 2023. The Company will continue to defend its interests in the litigation, which is expected to proceed into the discovery phase and forthcoming motion practice on whether a class should be certified.

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 April 20, 2022, the putative plaintiff filed and subsequently served an application to amend his pleadings to harmonize with the pleadings in the Woo case described below, add Mr. Woo as a plaintiff, and add new underwriter defendants. Also on April 20, 2022, the putative plaintiff filed and subsequently served an application for leave to commence a secondary market liability claim under s. 140.3 of the B.C. Securities Act, for an order certifying the action as a class action, and for related relief.

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. On March 30, 2022, the plaintiff made a motion to discontinue the claim without costs and the court granted the discontinuance in April 2022.

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

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

obligations will be subject to limitations prescribed by law and the articles of the Company, and may also be subject to contractual limitations.

1.2.3 Financing

Royalty Agreement for Proceeds of up to US\$60 Million on Non-Core Metals

In July 2022, Northern Dynasty announced that the Pebble Partnership, together with certain other wholly-owned subsidiaries of the Pebble Partnership, had entered into the Royalty Agreement with the Royalty Holder to receive up to US\$60 million over the next two years, in return for the right to receive a portion of the future gold and silver production from the Pebble Project for the life of the mine. The Company received an initial non-refundable payment of US\$12 million from the Royalty Holder concurrently with execution of the Royalty Agreement, and granted the option to the Royalty Holder to increase its investment to US\$60 million, in aggregate. The Company retained the right to 100% of the copper production from the Pebble Project.

Pursuant to the terms of the Royalty Agreement, the Royalty Holder made the initial non-refundable payment of US\$12 million in exchange for the right to receive 2% of the payable gold production and 6% of the payable silver production from the Pebble Project, in each case after accounting for a notional payment by the Royalty Holder of US\$1,500 per ounce of gold and US\$10 per ounce of silver, respectively, for the life of the mine. If, in the future, spot prices exceed US\$4,000 per ounce of gold or US\$50 per ounce of silver, then the Company will share in 20% of the excess price for either metal. Additionally, the Company will retain a portion of the metal produced for recovery rates in excess of 60% for gold and 65% for silver, and so is incentivized to continually improve operations over the life of the mine. Within two years of the date of the Royalty Agreement, the Royalty Holder has the right to invest additional funds, in US\$12 million increments, for the right to receive additional 2% increments of gold production and 6% of silver production to an aggregate total of US\$60 million, in return for the right to receive an aggregate of 10% of the payable gold and 30% of the payable silver (in each case, in the aggregate) on the same terms as the first tranche of the investment. The Royalty Holder is under no obligation to invest additional amounts to increase its interest in the gold and silver production from the Pebble Project.

The Pebble Partnership has also granted to the Royalty Holder a right of first refusal in respect of the sale of any gold or silver production from the Pebble Project pursuant to a streaming, royalty or other similar transaction in exchange for an upfront payment. The Royalty holder has granted to the Pebble Partnership a right of first refusal should it propose to sell any of its rights under the Royalty Agreement.

Subject to certain conditions, the Royalty Agreement does not restrict the Company's ability to form partnerships to assist in the development of the Proposed Project, for example (but not restricted to) other mining companies or Alaska Native Corporations.

1.2.4 Market Trends

Copper prices were variable in early 2018, trended downward from June to August, then increased through to the end of the year and into 2019. Prices decreased in April/May of 2019, and variable to increasing until late January 2020 when they dropped sharply, losing the gains made in late 2019. In 2020, prices dropped sharply in response to changing economic conditions related to COVID-19 but rebounded in May and trended upward during the third quarter, dropped slightly in October, then increased by the end of the year. In 2021, prices were variable to increasing to May, dropped in June, and then were stable until October when they again became variable. Copper prices increased in early 2022, decreased from late April to July, then stabilized somewhat through January 2023. Prices have increased in early 2023, with a slight decrease in March. The price for copper closed on March 30, 2023, at US\$4.10/lb.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

Gold prices rebounded in January 2018 from late 2017, then were relatively stable for several months, before decreasing in Q3 2018. Prices increased in the latter part of 2018 and through most of 2019 before stabilizing from September to December 2019 and into 2020. Prices dropped sharply in March 2020, then resumed the upward trend in response to uncertainty about global economic conditions related to COVID-19. Prices reached record highs in late July and early August 2020, then decreased before stabilizing for the remainder of the year. Prices were variable for most of 2021, and then increased from October to early 2022. Prices were variable to decreasing from March to November 2022. Prices increased from December 2022 to February 2023, then dropped slightly before increasing again in March. The price for gold closed on March 30, 2023, at US\$1,966/oz.

Molybdenum prices continued on an upward trend, increasing for most of 2018, and were steady from September 2018 and through much of 2019. Prices largely decreased from October 2019 to August 2020, then increased and continued to do so until dropping slightly in July 2021. Prices were relatively stable to increasing in 2022, and increased to mid-March 2023 but have decreased since that time. The price for molybdenum closed on March 30, 2023, at US\$24.25/lb.

Silver prices recovered in January 2018 after a decline in late 2017, but were variable the rest of 2018 and for most of 2019, stabilizing in November and December; the annual average price increased in 2019. After an increase in early January 2020, the price for silver fell to US\$12.00/oz in March, then silver prices began to increase in response to uncertainty about global economic conditions related to COVID-19, reaching over US\$27.00/oz in mid-August, decreased for a short time, and then increased for the remainder of the year; the average annual price increased in 2020. Prices were variable in 2021 and 2022. The average annual price increased 2021 but decreased in 2022. Silver prices largely increased from November 2022 to February 2023, then decreased before increasing in March. The price for silver closed on March 30, 2023, at US\$23.70/oz.

Average annual prices of copper, gold, molybdenum and silver for the past five years as well as the average prices so far in 2023 are shown in the table below:

Year	Average metal price ^{1,2}			
	Copper US\$/lb	Gold US\$/oz	Molybdenum US\$/lb	Silver US\$/oz
2018	2.96	1,269	11.94	15.71
2019	2.72	1,393	11.36	16.21
2020	2.80	1,769	8.68	20.54
2021	4.27	1,799	15.94	25.14
2022	3.99	1,800	18.73	21.74
2023 (to March 30)	4.05	1,888	NA	22.52

1. Source for copper, gold and silver is Argus Media at www.metalprices.com.
LME Official Cash Price for copper.
LBMA PM price for gold.
London PM fix for silver.
2. Source for molybdenum prices is Platts.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

1.3 Selected Annual Information

The following selected annual information is from the Financial Statements, which have been prepared in accordance with IFRS. In the table below, unless otherwise stated, all monetary amounts are expressed in thousands of dollars except per share amounts.

	Fiscal year 2022	Fiscal year 2021	Fiscal year 2020
Total assets	\$ 145,218	\$ 159,282	\$ 180,374
Total non-current liabilities	463	1,365	657
Total current liabilities	2,070	2,424	7,411
Exploration and evaluation expenses	9,269	12,435	39,219
General and administrative expenses	9,026	9,991	11,545
Legal, accounting and audit	4,010	5,941	2,438
Share-based compensation	2,301	2,858	9,342
Other items ¹	(271)	317	1,328
Loss before tax for the year	\$ 24,335	\$ 31,542	\$ 63,872
Basic and diluted loss per common share	\$ 0.05	\$ 0.06	\$ 0.13
Weighted average number of common shares outstanding (000s)	529,779	521,459	473,668

Notes

- Other items include interest income, finance expense, foreign exchange gains or losses and other income.

Discussion on period-to-period variances:

- The decrease in total assets in 2022 vs 2021 was due primarily to the decrease in cash and equivalents and mineral property, plant and equipment. With the latter the Company accounted for the first tranche of US\$12 million received on the execution of the Royalty Agreement as a partial sale of mineral property interest. The decrease in total assets in 2021 vs 2020 was due mainly to the decrease in cash and equivalents due in part to the Company undertaking less financing activities.
- Non-current liabilities decreased in 2022 vs 2021 due to the decrease in lease liabilities and the derecognition of the contingent payable for legal fees (see below). The increase in non-current liabilities in 2021 vs 2020 was due to the Company including fees due to legal counsel of approximately \$0.8 million (US\$0.6 million) which are payable on completion of a partnering transaction. These legal fees were included in current liabilities in 2020. Current liabilities decreased in 2022 vs 2021 due to a decrease in trade payables. Current liabilities decreased in 2021 vs 2020 as the latter included the final installment of US\$2.6 million in legal success fees which was paid in 2021 and 2021 expenditures were reduced.
- Exploration and evaluation expenses ("**E&E**") decreased in each year presented. In 2020, the Company was supporting the EIS process, which wound down with the receipt of the final EIS and the ROD. In 2021, Company submitted an administrative appeal of the ROD completed the 2021 PEA. In 2022, while awaiting the decision on the ROD appeal, the Company completed an update of its 2021 PEA to evaluate the impacts of the Royalty Agreement (the 2022 PEA).
- General and administrative expenses ("**G&A**") have fluctuated over the period due to the level of corporate and financing activities undertaken and have decreased in each year presented.
- Legal, accounting and audit expenses have fluctuated in response to the ongoing class action lawsuits, and the grand jury investigation in Alaska. In 2022, fees decreased from 2021, offset by fees incurred in response to the Revised Proposed Determination. Additionally, the derecognition of the contingent payable relating to legal fees reduced expenses by \$0.8 million. Legal expenses increased in 2021 vs 2020

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

as the Company incurred legal fees for the preparation and response to the grand jury investigation in 2021 in addition to fees relating to class action lawsuits (refer Section [1.2.2 Legal Matters](#)).

1.4 Summary and Discussion of Quarterly Results

All monetary amounts are expressed in thousands of dollars except per share amounts and where otherwise indicated. Minor differences are due to rounding.

Excerpts from Statements of Comprehensive Loss	Dec 31 2022	Sep 30 2022	Jun 30 2022	Mar 31 2022	Dec 31 2021	Sep 30 2021	Jun 30 2021	Mar 31 2021
Expenses								
Exploration and evaluation	\$ 2,947	\$ 1,839	\$ 2,182	\$ 2,301	\$ 2,897	\$ 2,907	\$ 3,345	\$ 3,286
General and administrative	2,284	2,132	2,517	2,093	2,644	2,405	2,480	2,462
Legal, accounting and audit	698	1,707	1,521	84	(1,386)	3,124	1,916	2,287
Share-based compensation	415	1,874	6	6	6	244	1,286	1,322
Other items ¹	(74)	(137)	(38)	(22)	(28)	(14)	197	162
Loss for the quarter ²	\$ 6,270	\$ 7,415	\$ 6,188	\$ 4,462	\$ 4,133	\$ 8,666	\$ 9,224	\$ 9,519
Basic and diluted loss per common share	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.02	\$ 0.02	\$ 0.02
Weighted average number of common shares (000s)	529,779	529,779	529,779	529,779	529,751	528,470	516,077	511,259

- Other items include interest income, finance expense, exchange gains or losses, gain or loss on revaluation of warrants, gain on lease term modification, (gain) loss on disposal of property, plant and equipment, and other income.
- Loss before tax

Discussion of Quarterly Trends

Exploration and evaluation expenses ("E&E") has fluctuated depending on activities undertaken. In Q1 2021, the Company focused on the review of the USACE's ROD and the submission of an administrative appeal thereof. In Q2 to Q4 2021, the Company completed engineering work to finalize the 2021 PEA for the Pebble Project and also completed a summer field program. In Q1 2022, the Company focused on the review and issue of the study on the economic contribution assessment of the proposed Pebble Project, as well as advancing the summer field program. In Q2 2022, the Company completed its summer field program and in Q3 2022 the Company completed its wildfire cleanup program. In Q4 2022, the Company completed an updated PEA to evaluate the impact of the Royalty Agreement. E&E also includes costs for Native community engagement, site leases, land access agreements and annual claim fees.

General and administrative expenses ("G&A") trended lower in 2022 than 2021 as the Company incurred less consultation expenses.

Legal, accounting and audit expenses have fluctuated in response to legal fees incurred in relation to class action lawsuits, the preparation for and response to the grand jury investigation in Alaska, and response to the Revised Proposed Determination. In Q4 2022, the derecognition of a contingent payable relating to legal fees reduced legal expenses by \$0.8 million. In Q4 2021 and Q1 2022, the Company received insurance proceeds for certain of the costs incurred relating to class action lawsuits and the grand jury investigation, which offset fees paid.

Share-based compensation expense ("SBC") has fluctuated due to timing (affects the estimate of fair value determined) of share purchase option ("option") grants, the quantum of option grants and the vesting periods associated with these option grants. The Company granted 11,254,000 options in Q3 2022 which was the first grant since 2020.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

1.5 Results of Operations

The following financial data has been prepared from the Financial Statements, and is expressed in *thousands* of Canadian dollars unless otherwise stated.

The Company's operations and business are not driven by seasonal trends, but rather are driven towards the achievement of project milestones relating to the Pebble Project such as the achievement of various technical, environmental, socio-economic and legal objectives, including obtaining the necessary permits, the completion of pre-feasibility and final feasibility studies, preparation of engineering designs, as well as receipt of financings to fund these objectives along with mine construction.

1.5.1 Results of Operations – Three Months and Year ended December 31, 2022 versus 2021

For the three months ended December 31, 2022, the Company recorded a \$2.2 million increase in net loss as loss from operating activities increased by \$3.0 million primarily due to a \$2.1 million increase in legal, accounting and audit expenses.

For the year, the Company recorded a \$7.1 million decrease in net loss as loss from operating activities decreased by \$6.6 million primarily as a result of a \$3.2 million decrease in E&E and a \$1.9 million decrease in legal, accounting and audit expenses.

Exploration and evaluation expenses

The breakdown of E&E (in thousands of dollars) for the periods as compared to 2021 is as follows:

E&E	Three months		Year	
	2022	2021	2022	2021
Engineering	\$ 195	\$ 476	\$ 1,390	\$ 3,860
Environmental	439	404	2,187	2,237
Property fees	1,188	1,144	1,194	1,150
Site activities	350	328	1,565	2,089
Socio-economic	736	504	2,242	2,403
Transportation	21	12	620	523
Other activities and travel	18	29	71	173
Total	\$ 2,947	\$ 2,897	\$ 9,269	\$ 12,435

E&E was generally on par with the prior year quarter. The decrease in engineering costs was offset by an increase in socio-economic costs. For the year ended, E&E decreased by \$3.2 million due to decreases in engineering, site activities and socio-economic costs. Engineering costs in 2021 were higher due to the Company completing and filing the 2021 PEA.

General and administrative expenses

The following table (in thousands of dollars) provides a breakdown of G&A, and also includes legal, accounting and audit expenses incurred, in the period as compared to 2021:

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

G&A	Three months		Year	
	2022	2021	2022	2021
Conference and travel	\$ 59	\$ 38	\$ 248	\$ 131
Consulting	194	786	651	1,902
Depreciation of right-of-use assets	27	26	104	192
Insurance	734	523	2,422	1,502
Office costs, including information technology	184	188	769	815
Management and administration	792	878	3,130	3,891
Shareholder communication	236	194	1,276	1,309
Trust and filing	58	11	426	249
Total G&A	2,284	2,644	9,026	9,991
Legal, accounting and audit	698	(1,386)	4,010	5,941
	\$ 2,982	\$ 1,258	\$ 13,036	\$ 15,932

G&A decreased by over \$0.3 million in the three months as compared to 2021 and decreased by over \$0.9 million compared to last year. In the three months, the decrease resulted primarily from less consulting costs but was offset by the increased insurance amortization. For the year, the decrease was again due primarily to less consulting fees but also to less management and administration costs paid. However, this was offset by an increase in insurance amortization, conference and travel costs, and trust and filing costs the latter due largely to expensing of deferred costs.

Legal, accounting and audit expenses increased by \$2.1 million in the quarter. In Q4 2021 the Company received insurance proceeds for certain legal costs incurred which reduced legal costs. For the year, legal, accounting and audit expenses decreased by \$1.9 million as the Company incurred less legal fees relating to the grand jury investigation and class action lawsuits.

Other

The Company recorded an increase in SBC of \$0.4 million in the quarter and a decrease of \$0.5 million for the year. SBC fluctuates due to the timing of when options, RSUs and DSUs are granted, as well as the quantum thereof, and the vesting periods associated with these grants.

1.5.2 Financial position as at December 31, 2022 versus December 31, 2021

The total assets of the Company decreased by \$14 million due to a \$6.8 million decrease in the carrying value of the Company's mineral property, plant and equipment and a decrease of \$8.1 million in cash and cash equivalents. The decrease in the former was due to the Company accounting for the first tranche of US\$12 million received on the execution of the Royalty Agreement as a partial sale of mineral property interest.

1.5.3 Plan of Operations

Our business objectives for 2023 subject to available financial resources, are to:

- continue with the appeal of the ROD by the USACE;
- challenge the EPA's Final Determination;
- continue with engineering, environmental, permitting and evaluation work on the Pebble Project as required;
- maintain an active corporate presence in Alaska to advance relationships with political and regulatory offices of government (both in Alaska and Washington, D.C.), Alaska Native partners and broader stakeholder relationships;

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

- advance efforts toward a successful appeal of the RFA, and reversal of EPA's Final Determination;
- maintain the Pebble Project and Pebble claims in good standing;
- continue to seek potential partner(s) with greater financial resources to further advance the Pebble Project; and
- continue general and administrative activities in connection with the advancement of the Pebble Project.

The key milestones in the development of the Company's business is presently the successful completion of an appeal of the ROD.

The USACE's ROD has had a material impact on the Company's previously disclosed plan of operations. Accordingly, the Company has altered its intended business activities and milestones to be completed over the next 12 months to focus on the appeal of the ROD. In addition, the Company will evaluate available options to challenge the EPA's Final Determination. The Company's present business objectives and milestones are anticipated to generally include the following activities over the next 12 months being January 1 to December 31, 2023:

Milestone/Business Objective	Business Activity within Next 12 Months	Timeframe for Completion ¹	Anticipated Budget during Next 12 Months
Continue with engineering, environmental, permitting and evaluation work on the Pebble Project as required	Work includes ongoing site maintenance to remain in compliance with permitting and demobilization of field equipment as required, additional engineering and evaluation of the Pebble Project	Ongoing through next twelve months	US\$2,497,000
Maintain an active corporate presence in Alaska	Continue to build relationships with: <ul style="list-style-type: none"> • both federal and Alaska state governments and agencies; • Native Corporations and communities, an example being the establishment of the Pebble Performance Dividend, which is intended to provide a direct benefit to the people of Bristol Bay; • Right-of-Way Payments to various Native Corporations 	Ongoing through next twelve months	US\$4,222,000,
Pebble claims maintenance	Continue to maintain the Pebble claims in good standing.	Ongoing through next twelve months	US\$1,360,000
Pebble partnering process ¹	Ongoing discussions and possible negotiations to secure a project partner(s) with the financial resources to advance development of the Pebble project. Management will continue to seek suitable partner(s) with the objective to maximize shareholder value through 2023. ²	Ongoing through next twelve months	US\$1,000,000

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

Milestone/Business Objective	Business Activity within Next 12 Months	Timeframe for Completion ¹	Anticipated Budget during Next 12 Months
General corporate purposes, including appeal of the ROD by the USACE on Pebble, challenge to EPA's Final Determination; defence of Class Action Lawsuits, settlement of historical liabilities, handling of grand jury investigation	Pursue successful appeal of the ROD, challenge of EPA's Final Determination and defense of legal proceedings	Ongoing through next twelve months	US\$6,796,000

Notes

1. Due to the COVID-19 pandemic, some due diligence activities that a partner may usually undertake such as site visits have been slower than anticipated.
2. There is no assurance that these discussions or possible negotiations will result in any binding agreement with any partner for the development of the Pebble Project. See [1.15.5 Risk Factors](#).

The Company's actual plan of operations and expenditures for the next twelve months may vary depending on future developments and at the discretion of the Company's board of directors and management.

The Company will require additional financing beyond its current cash and working capital in order to carry out these further business activities. The Company believes that its ability to obtain additional financing has been and will continue to be negatively impacted by the Record of Decision and its ability to successfully appeal the ROD and challenge the EPA's Final Determination. The Company does not have an arrangement in place for any future financing or raising of funds other than through the Royalty Agreement, whereby the Company can sell a further interest in gold and silver production from the Pebble Project at the Royalty Holder's option. (see [1.6 Liquidity](#)) As such, there is no assurance that the Company will be able to raise the required additional financing when required. In addition, the Company cautions that while a successful appeal of the ROD will reduce one of the significant risk factors faced by the Pebble Project, significant risk factors will remain for the development of the Pebble Project, as described in [1.15.5 Risk Factors](#).

In the event that appeal of the ROD is unsuccessful, the Company will be required to re-assess its options for advancing the development of the Pebble Project. These options may include a re-assessment of the scope of the Pebble Project and the submission of a revised permit application. While the Company is unable to assess the full impact of any adverse appellate result of the ROD at this time, the Company anticipates that such a negative result on appeal of the ROD will have a negative impact on the Company's ability to obtain additional financing, and will most likely limit the Company's financing options to further issuances of the Company's equity securities.

The Company may also attempt to reduce the amount of additional financing required by entering into a potential joint venture or other partnership arrangement for advancement of the Pebble Project. The Company is continuing to evaluate the availability of long-term project financing options among mining companies, private equity firms and others, utilizing conventional asset level financing, debt, royalty and alternative financing options. There is no assurance that Northern Dynasty will be able to partner the Pebble Project or secure additional financing when required. In July 2022, the Company was able to bolster its treasury with the receipt of the first tranche of US\$12 million on the execution of the Royalty Agreement (discussed above under "[Royalty agreement secured for proceeds of up to US\\$60 million on non-core metals](#)").

To the extent that Northern Dynasty is unable to raise additional financing, it will have to curtail its operational activities, which will ultimately delay advancement of the Pebble Project.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

Northern Dynasty's inability to successfully appeal the ROD may ultimately mean that it will be unable to proceed with the development of the Pebble Project as currently envisioned or at all. Similarly, the inability to successfully challenge the EPA's Final Determination may also ultimately mean that the Company will be unable to proceed with the development of the Pebble Project as currently envisioned or at all.

1.6 Liquidity

The Company's major sources of funding have been the issuance of equity securities for cash, primarily through private placements and prospectus offerings to sophisticated investors and institutions, and proceeds pursuant to the exercise of options and warrants. The Company's access to financing is always uncertain. There can be no assurance of continued access to equity funding.

As at December 31, 2022, the Company had cash and cash equivalents of \$14.2 million, a decrease of \$8.1 million from December 31, 2021. The Company employed \$23.9 million in its operating activities in the year ended December 31, 2022. The Company has prioritized the allocation of its available financial resources to meet key corporate and Pebble Project expenditure requirements in the near term, being the next 12 months, as outlined above under [1.5.3 Plan of Operations](#). Pursuant to the Royalty Agreement, the Company may, at the option of the Royalty Holder, receive additional tranches of US\$12 million each, up to US\$48 million, until July 2024 (refer Section 1.2.3. Financing - [Royalty Agreement for Proceeds of up to US\\$60 Million on Non-Core Metals](#)). The Company does not have any arrangements in place for additional funding. There can be no assurances that the Company will be successful in obtaining additional financing when required. If the Company is unable to raise the necessary capital resources to meet obligations as they come due, the Company will have to reduce or curtail its operations at some point.

At December 31, 2022 and 2021, the Company had a working capital of \$14.8 million and \$21.7 million respectively. The Company has no lease or any other long-term obligations other than those disclosed below:

The following commitments and payables (expressed in *thousands*) existed at December 31, 2022:

	Payments due by period as of the reporting date			
	Total	≤ 1 year	1-5 years	> 5 years
Trade and other payables ¹	\$ 1,683	\$ 1,683	\$ –	\$ –
Payables to related parties	237	237	–	–
Lease commitments ²	802	204	480	118
Other commitments ³	513	269	244	–
Total	\$ 3,235	\$ 2,393	\$ 724	\$ 118

Notes to table

1. Excludes current and non-current lease liabilities which are disclosed separately (refer note 2 below).
2. Relates to the undiscounted lease payments to be made by the Company over the remaining lease terms.
3. Includes payments due on a short term lease and payments for the use of offices and shared space from a related party.
4. US dollar amounts have been converted at the closing rate on December 31, 2022, of \$1.3554 per US dollar.

The Company has no "Purchase Obligations", defined as any agreement to purchase goods or services that is enforceable and legally binding on the Company that specifies all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. The Company is responsible for maintenance payments on the Pebble Project claims and payment of annual toll payments and fees pursuant to the right of way agreements (see [Right-of-Way Agreements](#) under Section [1.2.1.1 Project Background and Status](#)). In addition, the Company has payments relating to routine site and office leases, which is included in the table above.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

1.7 Capital Resources

The Company's capital resources consist of its cash reserves, which include its cash and equivalents. As at December 31, 2022, other than noted in [1.6 Liquidity](#), the Company has no other long-term debt and no commitments for material capital expenditures.

The Company has no lines of credit or other sources of financing.

1.8 Off-Balance Sheet Arrangements

As at December 31, 2022, the Company had no off-balance sheet arrangements.

1.9 Transactions with Related Parties

Transactions with Hunter Dickinson Services Inc. ("HDSI")

Hunter Dickinson Inc. ("**HDI**") and its wholly owned subsidiary, HDSI are private companies established by a group of mining professionals engaged in advancing and developing mineral properties for a number of private and publicly-listed exploration companies, one of which is the Company.

Current directors of the Company, namely Robert Dickinson and Ron Thiessen, Board Chair and Chief Executive Officer ("**CEO**"), respectively, are active members of the HDI Board of Directors. Mark Peters, the Company's Chief Financial Officer ("**CFO**"), is also the CFO of HDSI. Other key management personnel of the Company – Adam Chodos, Stephen Hodgson⁶, Bruce Jenkins, Trevor Thomas and Mike Westerlund – are active members of HDI's senior management team.

The business purpose of the related party relationship

HDSI provides technical, geological, corporate communications, regulatory compliance, administrative and management services to the Company, on an as-needed and as-requested basis from the Company.

HDSI also incurs third party costs on behalf of the Company. Such third party costs include, for example, directors and officers insurance, travel, conferences, and technology services.

As a result of this relationship with HDSI, the Company has ready access to a range of diverse and specialized expertise on a regular basis, without having to engage or hire full-time experts. The Company benefits from the economies of scale created by HDSI.

The measurement basis used

The Company procures services from HDSI pursuant to an agreement (the "**Services Agreement**") dated July 2, 2010, whereby HDSI agreed to provide technical, geological, corporate communications, administrative and management services to the Company. A copy of the Services Agreement is publicly available under the Company's profile at www.sedar.com.

Services from HDSI are provided on a non-exclusive basis as required and as requested by the Company. The Company is not obligated to acquire any minimum amount of services from HDSI. The fees for services is

⁶ Stephen Hodgson has been providing services to the Company under the Services Agreement, including acting as the Vice President, Engineering for the Company since 2005. In July 2018, he was transferred to a subsidiary of HDSI, Hunter Dickinson Servicepay (US) Inc., and provided services to the Pebble Partnership as Senior Vice President, Engineering & Project Director until the end of February 2021 when he was transferred back to HDSI, and continues to provide services to the Company under the Services Agreement, including acting as the Vice President, Engineering for the Company.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

determined based on an agreed upon charge-out rate for each employee performing the service and the time spent by the employee. The charge-out rate also includes overhead costs such as office rent, information technology services and administrative support. Such charge-out rates are agreed and set annually in advance.

Third party expenses are billed at cost, without any markup.

Ongoing contractual or other commitments resulting from the related party relationship

Other than noted below, there are no ongoing contractual or other commitments resulting from the Company's transactions with HDSI, other than the payment for services already rendered and billed. The agreement may be terminated upon 60 days' notice from either party.

In an addendum to the Services Agreement between HDSI and the Company, dated October 10, 2015, following a change of control, the Company is subject to termination payments if the Services Agreement is terminated. The Company will be required to pay HDSI \$2.8 million, and an aggregate amount equal to six months of annual salaries payable to certain individual service providers under the Services Agreement and their respective employment agreements with HDSI.

The Company has an office use agreement with HDSI, whereby HDSI is providing two offices and a non-fixed space, on as needed basis, for a five-year term, which commenced May 1, 2021, and ends April 29, 2026. Pursuant to this agreement, the Company has a remaining undiscounted commitment at December 31, 2022 of \$0.3 million, which has been disclosed in the table under section [1.6 Liquidity](#). The commitment is a flow through cost at market rates.

Transactions during the Reporting Period and Balances with HDSI at the end of the Reporting Period

Disclosure as to transactions with HDSI and any amounts due to or from HDSI is provided in Note 7 in the notes to the Financial Statements which accompany this MD&A and which are available under the Company's profile at www.sedar.com.

Key Management Personnel

The required disclosure for the remuneration of the Company's key management personnel is provided in Note 7 in the notes to the Financial Statements which accompany this MD&A and which are available under the Company's profile at www.sedar.com.

1.10 Fourth Quarter

Discussed in Section [1.5.1 Results of Operations – Three months and Year ended December 31, 2022 versus 2021](#)

1.11 Proposed Transactions

There are no proposed asset or business acquisitions or dispositions, other than those in the ordinary course, before the Board of Directors for consideration.

1.12 Critical Accounting Estimates

The required disclosure is provided in Note 2 in the notes to the Financial Statements which accompany this MD&A and which are available under the Company's profile at www.sedar.com.

1.13 Changes in Accounting Policies including Initial Adoption

The required disclosure is provided in Note 2 in the notes to the Financial Statements which accompany this MD&A and which are available under the Company's profile at www.sedar.com.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

1.14 Financial Instruments and Other Instruments

The Company is exposed in varying degrees to a variety of financial instrument related risks. The Board approves and monitors the risk management processes, inclusive of documented investment policies, counterparty limits, and controlling and reporting structures. The type of risk exposure and the way in which such exposure is managed is provided as follows:

Credit Risk

Credit risk is the risk of potential loss to the Company if a counterparty to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to its liquid financial assets, including cash and cash equivalents and restricted cash and amounts receivable. The Company limits the exposure to credit risk by only investing with high-credit quality financial institutions in business and saving accounts, guaranteed investment certificates, government treasury bills, low risk corporate bonds and money market funds, which are available on demand by the Company as and when required or mature in timeframes appropriate to the needs of the Company. There has been no change in the Company's objectives and policies for managing this risk except for changes in the carrying amounts of financial assets exposed to credit risk, and there was no significant change to the Company's exposure to credit risk during the year ended December 31, 2022. Amounts receivable include receivable balances with government agencies, prepaid expenses and refundable deposits. Management has concluded that there is no objective evidence of impairment to the Company's amounts receivable.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations when they become due. There has been no change in the Company's objectives and policies for managing this risk. The Company's liquidity position is discussed further in Section [1.6 Liquidity](#).

Foreign Exchange Risk

The Company is subject to both currency transaction risk and currency translation risk: the Pebble Partnership, Pebble Services Inc. and U5 Resources Inc., have the US dollar as functional currency; and certain of the Company's corporate expenses are incurred in US dollars. The fluctuation of the US dollar in relation to the Canadian dollar has an impact upon the losses incurred by the Company as well as the value of the Company's assets as the Company's functional and presentation currency is the Canadian dollar. The Company has not entered into any agreements or purchased any instruments to hedge possible currency risks at this time.

There has been no change in the Company's objectives and policies for managing this risk, except for the changes in the carrying amounts of the financial assets and liabilities exposed to foreign exchange risk. The Company's exposure to foreign exchange risk is as follows:

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

US dollar denominated financial assets and liabilities (in thousands of Canadian Dollars)	December 31 2022	December 31 2021
Financial assets:		
Amounts receivable	\$ 108	\$ 168
Cash and cash equivalents and restricted cash	7,347	5,433
	7,455	5,601
Financial liabilities:		
Non-current trade payables	(463)	(1,365)
Current trade and other payables	(1,383)	(1,670)
Payables to related parties	(71)	(190)
	(1,917)	(3,225)
Net financial assets exposed to foreign currency risk	\$ 5,538	\$ 2,376

Based on the above net exposures and assuming that all other variables remain constant, a 10% change in the value of the Canadian dollar relative to the US dollar would result in a gain or loss of \$554 (2021 – \$238) in the reported period. This sensitivity analysis includes only outstanding foreign currency denominated monetary items.

Interest rate risk

The Company is subject to interest rate risk with respect to its investments in cash and cash equivalents. There has been no change in the Company's objectives and policies for managing this risk and no significant change to the Company's exposure to interest rate risk during the year ended December 31, 2022.

Commodity price risk

While the value of the Company's Pebble Project is related to the prices of copper, gold, molybdenum, silver and rhenium and the outlook for these minerals, the Company currently does not have any operating mines and hence does not have any hedging or other commodity based risks in respect of its operational activities.

Copper, gold, molybdenum, silver and rhenium prices have fluctuated widely historically and are affected by numerous factors outside of the Company's control, including, but not limited to, industrial and retail demand, central bank lending, forward sales by producers and speculators, levels of worldwide production, short-term changes in supply and demand because of speculative hedging activities, and certain other factors related specifically to gold.

Capital Management

The Company's policy is to maintain a strong capital base to maintain investor and creditor confidence and to sustain future development of the business. The capital structure of the Company currently consists of equity, comprising share capital and reserves, net of accumulated deficit. There were no changes in the Company's approach to capital management during the period. The Company is not subject to any externally imposed capital requirements.

1.15 Other MD&A Requirements

Additional information relating to the Company, including the Company's 2022 AIF, is available under the Company's profile on SEDAR at www.sedar.com.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

1.15.1 Disclosure of Outstanding Share Data

The capital structure of the Company as of the date of this MD&A is as follows:

	Number
Common shares issued and outstanding	529,779,388
Share options pursuant to the Company's incentive plan	27,693,500
Deferred share units	559,615
Non-incentive plan options ¹	37,600

Note to table:

1. These were issued on the acquisition of Cannon Point in October 2015 and expire in December 2024.

1.15.2 Disclosure Controls and Procedures

The Company's management, with the participation of its CEO and CFO have evaluated the effectiveness of the Company's disclosure controls and procedures. Based on that evaluation, the Company's CEO and CFO have concluded that, as of the end of the period covered by this report, the Company's disclosure controls and procedures were effective to provide reasonable assurance that the information required to be disclosed by the Company in reports it files is recorded, processed, summarized and reported, within the appropriate time periods and is accumulated and communicated to management, including the CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

1.15.3 Management's Report on Internal Control over Financial Reporting ("ICFR")

The Company's management, including the CEO and the CFO, is responsible for establishing and maintaining adequate ICFR. ICFR is a process designed by, or under the supervision of, the CEO and CFO and effected by the Company's Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with IFRS. The Company's ICFR includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the consolidated financial statements.

The Company's management assessed the effectiveness of the Company's ICFR as of December 31, 2022. In making the assessment, it used the criteria set forth in the *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on their assessment, management has concluded that, as of December 31, 2022, the Company's ICFR was effective based on those criteria.

There has been no change during the three months and for the full year in the design of the Company's ICFR that has materially affected, or is reasonably likely to materially affect, the Company's ICFR.

The Company's ICFR as of December 31, 2022, has been audited by Deloitte LLP, Independent Registered Public Accounting Firm, who also audited the Company's consolidated financial statements for the year ended December 31, 2022. Deloitte LLP, as stated in their report that immediately precedes the Company's audited

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

consolidated financial statements for the year ended December 31, 2022, expressed an unqualified opinion on the effectiveness of the Company's ICFR.

1.15.4 Limitations of Controls and Procedures

The Company's management, including its CEO and CFO, believe that any system of disclosure controls and procedures or ICFR, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Furthermore, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been prevented or detected. These inherent limitations include the realities that judgments in decision-making can be faulty and breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Accordingly, because of the inherent limitations in a cost effective control system, misstatements due to error or fraud may occur and not be detected.

1.15.5 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 challenging the EPA's Final Determination 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 CWA. This environmental permit is required for Northern Dynasty to proceed with the development of the Pebble Project. While the Pebble Partnership is appealing the ROD, there is no assurance that the appeal of the ROD will be successful. Even if the appeal is successful, there is no assurance that a positive ROD will ultimately be obtained by the Pebble Partnership or that the required environmental permit will be obtained. An inability to successfully appeal the ROD will mean that Northern Dynasty cannot proceed with the 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" finding 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 Northern Dynasty will ever be able to proceed with the development of the Pebble Project and that investors will be able to recover their investment in the Company.

In addition, the EPA re-initiated the CWA Section 404(c) process, and has issued a Final Determination for the waters of Bristol Bay. The Final Determination has established the Defined Area for Prohibition coextensive with the current mine plan footprint in which the EPA prohibits the disposal of dredged or fill material for the Pebble Project and has also established the Defined Area for Restriction. Such Final Determination will 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 unless the Final Determination is also challenged and withdrawn. There is no assurance that any challenge by the Company to the EPA's Final Determination will be successful. The inability to successfully challenge the EPA's Final Determination may ultimately mean that the

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

Company will be unable to proceed with the development of the Pebble Project as currently envisioned or at all.

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. The EPA has undertaken regulatory action through the issuance of the Final Determination to restrict development of the Pebble Project and there is no assurance that the Final Determination will be successfully challenged or withdrawn in future. In addition, there is no assurance that the EPA will not seek to undertake future regulatory action to impede or restrict the Pebble Project even if the Final Determination is successfully challenged. In addition, there are prominent and well-organized opponents of the Pebble Project and the Company may be unable, even if it presents 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. The uncertainty of the USACE appeal process and the EPA Final Determination process casts doubt as to whether we will ever be able to obtain these permits for the Pebble Project as currently planned or within the timeline envisioned. Should the appeal be successful, and the Final Determination successfully challenged, of which there is no assurance, 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 Pebble Project is Not Evaluated by Any Preliminary or Final Feasibility Study

The development of the Pebble Project has not been evaluated by any preliminary or final feasibility study. Accordingly, even if the ROD is overturned and the Final Determination successfully challenged, there are substantial risks that we will not be able to proceed with the development of the Pebble Project, that the Pebble Project cannot be economically mined or that shareholders will not be able to recover their investment in the Company.

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

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

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 above under [1.2.2 Legal Matters](#). 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 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 U.S. 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 and the Final Determination have 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. In addition, the EPA's Final Determination may adversely impact Northern Dynasty's ability to complete future financings. Appealing the ROD in any future litigation and challenging the EPA's Final Determination will require a substantial amount of our current cash and financial resources. 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 and to fully fund the appeal of the ROD and the challenge of the Final Determination. Northern Dynasty does not have any assurance that it will be able to achieve this financing. If Northern Dynasty is unsuccessful in its appeal of the ROD or challenge of the EPA's Final Determination, 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. The Company's inability to secure this additional required financing will negatively impact the ability of shareholders to recover their investment in the Company.

Risks 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 the COVID-19 impacts our operations will depend on future developments, which are

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

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, and have been, employed by opposition groups to delay or frustrate development at Pebble, including political and public advocacy, electoral strategies, media and public outreach campaigns, attempting to purchase intervening land rights, 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 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".

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 43-101. These resource estimates are classified as "measured resources", "indicated resources" and "inferred resources". Northern Dynasty advises United States investors that although 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 43-101 would be the same had Northern

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

Dynasty prepared the resource estimates under the standards adopted under the SEC Modernization Rules. Investors are cautioned not to assume that any part or all of mineral deposits classified as "measured resources" or "indicated resources" will ever be converted into "mineral reserves. 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" cannot 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 mineralisation 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 Northern Dynasty will be able to enter into an arrangement with a partner for the development of the Pebble Project, and the negative impact of the ROD and the investigations regarding the Pebble Project may negatively impact the Company's ability to enter into any arrangement. To the extent that Northern Dynasty 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, of which there is no assurance.

Negative Operating Cash Flow and Financing Requirements.

The Company currently has a negative operating cash flow and anticipates that it will continue to do so for the foreseeable future due to the fact that it does not have revenues from mining or any other activities. As a result the Company's plans for development of the Pebble Project, operating cash flow will continue to be negative until the Company receives revenue from production at the Pebble Project to offset expenses incurred, of which there is no assurance. 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. The Company has historically relied on equity financings to finance its operations but there is no assurance that future equity financings will be available to the Company. Further, any additional equity financing may result in substantial dilution to existing shareholders. 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. Further there is no assurance that the Royalty Holder under the Royalty Agreement will exercise its right to purchase any additional rights to future gold and silver production from the Pebble Project, or that the Company will enter into additional streaming or royalty agreement financing arrangements for the Pebble Project.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

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 never declared or paid any dividends on its common shares. Northern Dynasty intends, for the foreseeable future, to retain its future earnings, if any, to finance its exploration activities and its operations. 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 Condensed Consolidated Interim Financial Statements have been Prepared Assuming Northern Dynasty will continue on a Going Concern Basis.

Northern Dynasty prepared its Financial Statements on the basis that Northern Dynasty will continue as a going concern. At December 31, 2022, the Company had working capital of \$14.8 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. Refer also to discussion in [1.6 Liquidity](#).

As the Pebble Project is Northern Dynasty's only Mineral Property Interest, any 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 is, through the Pebble Partnership, 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.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

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

Russian military forces invaded Ukraine in February 2022. 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.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

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.

Northern Dynasty and the Pebble Partnership 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 discussed in [1.2.2. Legal Matters](#) 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 of 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 Such 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 result in an increase in 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 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.

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

If Northern Dynasty Loses the Services of the 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 HDSI (refer [1.9 Transactions with Related Parties](#)). 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 Northern Dynasty is unable to raise the necessary capital resources, it may at some point have to reduce or curtail its operations, which would have a material adverse effect on its ability to pursue the permitting and development of the Pebble Project.

While we may attempt to reduce the amount of additional financing required by entering into a potential joint venture or other partnership arrangement for advancement of the Pebble Project, there is no assurance that we may be able to conclude any such agreements. In addition, any joint venture or other form of partnership arrangement for the Pebble Project is anticipated to result in a dilution in our ownership interest in the Pebble Project.

There is also no assurance that we will be successful in securing any long-term project financing utilizing conventional asset level financing, debt, royalty and alternative financing options, such as stream financing. Any project debt financing that we may obtain in the future will require future repayments of principal and interest from cash flows generated by the Pebble Project. Likewise, any potential sale of royalty interests in minerals produced from the Pebble Project would require future payments of royalties from cash flows generated by the Pebble Project. If we enter into any streaming arrangements for the Pebble Project, it is anticipated that we would be required to sell minerals produced from the Pebble Project at preferential rates as consideration for up-front funding provided by the party providing the stream financing. As a result, any of these financing options are anticipated to impact on the cash flows from the Pebble Project that would be

Northern Dynasty Minerals Ltd.
Management's Discussion and Analysis
Year Ended December 31, 2022

available to the Company should the Pebble Project proceed to development. Our board of directors has not made any determination as to whether to proceed with any of the above forms of financing and there is no assurance that these financing options will be available to advance development of the Pebble Project.

1.15.6 Qualified Persons

Stephen Hodgson, P.Eng., and David Gaunt, P.Geo., qualified persons who are not independent of Northern Dynasty, have reviewed and approved the scientific and technical information in this MD&A.

1.15.7 U.S. Securities Matters

The Company is a "foreign issuer" under the U.S. 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, and to provide disclosure on our mineral properties, including the Pebble project, in accordance with NI 43-101 disclosure standards and CIM Definition Standards. For this reason, information contained in this MD&A in respect of the Pebble project may not be comparable to similar information made public by United States companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.