

**MANAGEMENT'S DISCUSSION AND ANALYSIS
– QUARTERLY HIGHLIGHTS
FOR THE THREE MONTHS ENDED SEPTEMBER 30, 2017**

The following interim management's discussion and analysis – quarterly highlights ("**Interim MD&A**") of Niobay Metals Inc. ("**NioBay**" or the "**Company**") for the three months ended September 30, 2017 provides material information about the Company's business activities during the interim period and updates disclosure previously provided in the Company's management's discussion and analysis of financial condition and results of operations for the year ended December 31, 2016 ("**Annual MD&A**").

This Interim MD&A should be read in conjunction with the Company's unaudited condensed interim consolidated financial statements and related notes for the three and nine months ended September 30, 2017 (the "**Interim Financial Statements**"), the Company's audited consolidated financial statements for the years ended December 31, 2016 and 2015 (the "**Annual Financial Statements**"), and the Company's Annual MD&A, including the section describing risks and uncertainties.

The effective date of this Interim MD&A is November 16, 2017.

All financial results presented in this Interim MD&A are expressed in Canadian dollars unless otherwise indicated.

NATURE OF OPERATIONS

NioBay is a mineral resource company. The business of the Company consists of acquiring, exploring and evaluating mining properties. NioBay has not yet determined whether its properties contain economically viable mineral deposits. The Company's principal asset is a 100% interest in the James Bay mining lease, a niobium project located in northeastern Ontario (the "James Bay Niobium Project").

In addition to the James Bay Niobium Project, NioBay holds (1) an option to acquire an interest of up to 65% in the La Peltrie gold project in northern Quebec, (2) a 46.9% direct participation in certain mineral titles located close to Chibougamau, Quebec, under a joint venture agreement with SOQUEM, a subsidiary of Investissement Québec, and (3) a 72.5% interest in the Crevier niobium and tantalum project, located in Quebec.

As of the date of this Interim MD&A, the Company has 32,985,127 common shares issued and outstanding. The Company's common shares are listed on the TSX Venture Exchange ("TSXV") under the symbol NBY.

JAMES BAY NIOBIUM PROJECT

The Company's application for an exploration permit on the James Bay Niobium Project, filed with the Ministry of Northern Development and Mines of Ontario ("MNDM") in October 2016, remains on temporary hold. The Company continues to reach out to all concerned stakeholders in the area of the James Bay Niobium Project while the MNDM is pursuing efforts to engage with the Moose Cree First Nation ("MCFN") to address any concerns they may have about the proposed drilling campaign. The Company has not yet held formal discussions with the leadership of MCFN on the exploration program and the project in general.

Mineral Resource Estimate

On November 16, 2017, the Company announced an initial Mineral Resource estimate for its James Bay Niobium Project prepared in accordance with Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101"). The Mineral Resource estimate was prepared by Roscoe Postle Associates Inc. ("RPA") following a successful re-logging and re-sampling program of representative historical diamond drill holes conducted by NioBay. The effective date of the estimate is November 8, 2017 and the supporting NI 43-101 technical report will be filed on SEDAR by December 31, 2017.

Highlights of the NI 43-101 Mineral Resource estimate:

Classification	Tonnes (Mt)	Grade (%Nb ₂ O ₅)	Contained Nb ₂ O ₅ (Mkg)
Indicated	23.1	0.53	123
Inferred	23.0	0.51	118

Notes:

1. CIM (2014) Definitions Standards were followed for Mineral Resources.
2. Mineral Resources are reported at a cut-off grade of 0.3% Nb₂O₅ based on an underground mining operating cost of C\$70/tonne and a metallurgical recovery of 70%.
3. Mineral Resources are estimated using a long-term niobium price of US\$40 per kg and a US\$/C\$ exchange rate of 1:1.2.
4. A tonnage factor of 12.2 ft³/ton (2.93 g/cm³) was used.
5. A minimum mining width of approximately 25 ft (7.6m) was used to build the resource wireframes.
6. Resources situated in a 150 ft (45.7m) thick crown pillar have been excluded.
7. The RPA Qualified Persons for the estimate are Dorota El Rassi, P.Eng. and Paul Chamois, P.Geo.

The Mineral Resource estimate is supported by the results from the recent re-logging and re-sampling of 12 representative historical diamond drill holes, by preliminary metallurgical testing performed by SGS Lakefield on a composite sample and by all of the historical data Niobay recovered from the previous operator: drill logs, assay certificates, surveyed collar coordinates, interpreted geological surface and level plans, interpreted vertical sections, location of the exploration shaft and 1st level, and metallurgical tests.

The data used to estimate the Mineral Resource include 79 diamond drill holes totaling 13,230 m located within the resource model area. The data include 2,517 assays, of which 56 have a value of zero for Nb₂O₅. The estimate was prepared using a block model constrained with 3-D wireframes of the mineralized zone. The niobium oxide grades were interpolated using ordinary kriging and three passes.

LA PELTRIE GOLD PROJECT

On September 5, 2017, the Company entered into an option agreement with Midland Exploration Inc. (“Midland”) to acquire up to a 65% interest in the La Peltrie gold property (“La Peltrie Project”). The La Peltrie Project consists of 520 claims totaling approximately 287 square kilometers and covers, over 25 kilometers, a series of NW-SE-trending subsidiary faults to the south of the regional Lower Detour Fault. This project with strong gold potential is wholly owned by Midland and is located approximately 25 kilometers southeast of Zone 58N, a high-grade gold zone in the Lower Detour area held by Detour Gold Corp. and about 25 kilometers northwest of the former Selbaie mine.

The option is valid for a period of six years. To earn a 50% interest in the La Peltrie Project, the Company has issued to Midland on September 18, 2017 (following receipt of TSXV approval), a total of 200,000 common shares valued at \$30,000, and will have to pay, in cash or in common shares, \$50,000, \$70,000 and \$70,000 on or before respectively August 31, 2019, 2020 and 2021. The Company will also have to spend \$3,000,000 in exploration expenditures by August 31, 2021 including a firm commitment of \$500,000 to be spent on the project by December 31, 2017. Following the initial earn-in of a 50% interest, Niobay will be entitled to earn an additional 15% interest in the project by completing a preliminary economic assessment by August 1, 2023.

In October 2017, Midland, as operator of the exploration activities, completed a total of seven (7) drill holes totalling approximately 1,875 metres on the La Peltrie Project. The drilling program was mainly designed to test new structural, geological, and geophysical targets identified following compilation work and OreVision[®] and IP geophysical surveys conducted in 2016 and 2017 by Midland. Results of the drilling will be released once they become available.

SOQUEM JOINT VENTURE

In January 2008, the Company had entered into a joint venture agreement with SOQUEM, for certain mineral titles located in Québec, including the Clairly and Lac Shortt/Lesperance properties.

The Clairly property is located 120 km north from the Chibougamau mining camp and 40 km south of the former Troilus mine. The property includes 56 mining claims covering a surface area of 2,818 hectares. The minerals of interest are copper and zinc.

The Lake Shortt/Lesperance properties are located about 135 km south-west from the Chibougamau mining camp and 15 km north-east from the Bachelor Lake concentrator. The Lac Shortt property includes 98 mining claims covering a surface area of 4,798 hectares. The Lesperance property holds 36 mining claims covering a surface area of 1,978 hectares. The mineral of interest is gold.

During the three months ended September 30, 2017, SOQUEM, as operator of the projects, began compiling and interpreting historical geophysics and litho-geochemical data collected in previous exploration campaigns on both the Clairly and Lac Shortt/Lesperance properties, under an approved budget of approximately \$200,000, with the Company's share amounting to approximately \$130,000.

Outlook

The Company's focus remains the development of the James Bay Niobium Project. The Company continues to hold discussions with the local community and the MNDM, and will maintain its efforts to engage with the leadership of the MCFN.

Following the drilling program completed in October 2017 on the La Peltrie Project, discussions will be held with the project partner to determine follow-up programs, once all results are obtained. Results of the interpretation of the historical data at the Clairly and Lac Shortt/Lesperance projects are also expected shortly. The Crevier Project remains on care and maintenance.

SUMMARY OF OPERATING RESULTS

The Company incurred a net loss of \$99,315 (nil per share) during the three months ended September 30, 2017 compared to a net loss of \$230,226 (\$0.01 per share) during the comparative period in 2016. The loss during the current period included \$113,995 in management and administration expenses and an unrealized loss on foreign exchange of \$10,221, partially offset by a non-cash income related to flow-through shares of \$23,925. The comparative period consisted mainly in management and administration expenses of \$204,191 and other exploration expenses of \$25,700.

Management and administration expenses for the three months ended September 30, 2017 are lower by \$90,196 compared to the same period in 2016. During the comparative period, expenses included an amount of \$50,000 as debt forgiveness to the Company's former CFO and higher investor relations and travel expenses (\$49,116) related mostly to the August 2016 private placement of \$1,795,000.

LIQUIDITY AND FINANCIAL POSITION

At September 30, 2017, the Company's cash position amounted to \$1,346,657 compared to \$2,281,637 at December 31, 2016. The Company's cash position at September 30, 2017 includes unspent flow-through funds of \$721,240, which the Company is committed to spending by December 31, 2017 on eligible flow-through expenditures.

Management estimates that it will require additional funds to meet all of its planned exploration and evaluation activities and to provide for management and administration expenses for at least the next 12 months. Since the Company does not generate cash flows, it will need to raise funds which could be met in the future through the issuance of debt or equity instruments or a combination of strategic partnerships or joint venture arrangements.

While management has been successful in securing financing in the past, there can be no guarantee that it will be able to do so in the future or that these sources of funding or initiatives will be available to the Company or that they will be available on terms which are acceptable to the Company. If management is unable to obtain new funding, the Company may be required to reduce the scope of, or eliminate future exploration and evaluation activities, any of which could have a negative impact on the business, financial condition and results of operation of the Company.

Operating activities

For the nine months ended September 30, 2017, cash outflows related to operating activities amounted to \$660,821 compared to \$349,938 in 2016. During the 2016 comparative period, the Company had received a payment of \$96,878 (US\$75,000) in accordance with a Heads of Agreement entered in September 2015 regarding the Ikungu and Ikungu East projects in Tanzania.

Financing activities

During the nine months ended September 30, 2017, 100,000 compensation share purchase warrants were exercised for cash proceeds of \$30,000. In August 2016, the Company completed a non-brokered private placement through the issuance of 7,180,000 common shares at a price of \$0.25 per share for proceeds of \$1,795,000. Share issue expenses of \$156,006 included mostly legal, consulting and regulatory expenses.

Investing activities

For the nine months ended September 30, 2017, the Company invested a total of \$379,006 at the James Bay Niobium Project, including consulting fees of \$329,483, of which \$103,746 related to geology, \$145,239

to metallurgy, and \$80,498 to relations with concerned stakeholders. Other expenses included mostly travel expenses and fees related to the mining lease. The Company also invested a total of \$58,000 at the La Peltrie Project, including \$30,000 representing the value of the shares issued to Midland on signing the option agreement, and \$62,500 at the projects under a joint venture with SOQUEM. During the comparative period in 2016, the Company had invested a total of \$518,491, including \$350,000 representing the value of the shares issued on the acquisition of the James Bay Niobium Project, \$134,931 for other acquisition-related and exploration expenses of the James Bay Niobium Project, \$5,210 at the Crevier property and \$28,350 at the Ikungu and Ikungu East projects in Tanzania. During the 2016 comparative period, the Company had also disposed of an investment of \$250,000.

RELATED PARTY TRANSACTIONS

The remuneration awarded to key management personnel, including directors, the president and CEO and the CFO, during the three and nine months ended September 30, 2017 totaled \$65,000 and \$202,201, respectively (\$33,223 and \$212,065, respectively during the comparative periods in 2016).

A company controlled by the CEO of the Company invoiced nil and \$26,400, respectively during the three and nine months ended September 30, 2017 for the services of a market analyst (\$12,100 and \$29,525 in 2016), and invoiced nil in 2017 for the rental of office space (\$8,500 and \$25,000 in 2016).

QUALIFIED PERSON

Claude Dufresne, P.Eng., a Qualified Person under NI 43-101, has reviewed and approved all of the technical information in this Interim MD&A. Mr. Dufresne is the Company's president and CEO.

CAUTIONARY STATEMENT

This Interim MD&A contains certain forward-looking statements as defined in applicable Canadian securities laws (referred to herein as "forward-looking statements"). Specifically, this Interim MD&A includes forward-looking statements regarding the resource estimate, the potential extension of the mineralization, exploration results, completion of work programs, assessments, studies, future financial results and future financings. There is no certainty that the required permits for the exploration and development of the James Bay Niobium Project will be issued or that Niobay will have the required funds to conduct the required drilling program and studies. Forward-looking statements involve a number of risks and uncertainties, and there can be no assurance that such statements will prove to be accurate. Therefore, actual results and future events could differ materially from those anticipated in such statements.

Risks and uncertainties that could cause results or future events to differ materially from current expectations expressed or implied by the forward-looking statements include, but are not limited to, variations in the quality and quantity of minerals that may be located, the Company's inability to obtain any necessary permits, consents or authorizations required for its planned activities, the Company's inability to raise the necessary capital to fully implement its programs and objectives, the Company's inability to spend all of the flow-through funds raised in December 2016 in eligible flow-through expenditures by December 31, 2017, changes and volatility of metal prices and equity markets, uncertainties involved in interpreting geological data and estimating mineral resources, changes or delays in exploration plans, the results of exploration programs, the timing and results of consultations with aboriginal groups, increases in costs, changes in environmental legislation and regulation, general economic conditions and mining industry risks, as well as other risk factors discussed in this Interim MD&A. All forward-looking statements in this Interim MD&A are qualified by this cautionary statement. Accordingly, readers should not place undue reliance on forward-looking statements. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements whether as a result of new information or future events or otherwise, except as may be required by law.

ADDITIONAL INFORMATION AND CONTINUOUS DISCLOSURE

The Company regularly discloses additional information through press releases and financial statements available on the Company's website at www.niobaymetals.com and on SEDAR at www.sedar.com.