WL SEIS Exhibit 8



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April 5, 2018

HAND DELIVERED Commissioner Tom Landwehr Minnesota Department of Natural Resources 500 Lafayette Road St. Paul, MN 55155-4040

Minnesota Department of Natural Resources Division of Lands and Minerals 500 Lafayette Road, Box. 45 St. Paul, MN 55155-4025

RE: In re the Matter of the Minnesota Department of Natural Resources' Consideration of a draft Permit to Mine for the PolyMet NorthMet Copper-Nickel Mine Project

Comments on Petitions for Contested Case Hearing based on PolyMet March 2018 Technical Report NI 43-101F1 and related materials.

Dear Commissioner Landwehr:

The following comments are submitted on behalf of WaterLegacy pertaining to the Petitions for Contested Case Hearing on the PolyMet NorthMet draft Permit to Mine submitted by WaterLegacy on February 27, 2018 and by the Minnesota Center for Environmental Advocacy (MCEA) on February 28, 2018.<sup>1</sup>

Our comments address questions and concerns raised by the March 26, 2018 NI 43-101F1 Technical Report on the NorthMet Deposit filed by PolyMet Mining Corp. (PolyMet March 2018 Technical Report),<sup>2</sup> along with related documents also filed on SEDAR, the official site for Canadian public securities information, by PolyMet and Glencore in March 2018,<sup>3</sup> and provided by PolyMet and by Glencore to news media<sup>4</sup> and investors<sup>5</sup> to explain recent developments related to financial feasibility and the status of the PolyMet NorthMet copper-nickel mine project (PolyMet Project).

<sup>&</sup>lt;sup>1</sup> These Comments, along with Exhibits and a Table of Exhibits, are enclosed on a recordable disc.

 <sup>&</sup>lt;sup>2</sup> PolyMet Mining NorthMet Project Form NI 43-101F1 Technical Report, March 26, 2018 and filed on SEDAR (<u>www.sedar.com</u>) on March 27, 2018 (PolyMet March 2018 Technical Report), Exhibit 1.
 <sup>3</sup> PolyMet Mining Annual Information Form, filed on SEDAR, March 28, 2018 (PolyMet March 2018 Annual

 <sup>&</sup>lt;sup>3</sup> PolyMet Mining Annual Information Form, filed on SEDAR, March 28, 2018 (PolyMet March 2018 Annual Information Form), Exhibit 2; PolyMet Mining Management Discussion and Analysis, filed on SEDAR, March 28, 2018 (PolyMet March 2018 MD&A), Exhibit 3; PolyMet Mining Consolidated Financial Statements, filed on SEDAR, March 28, 2018 (PolyMet March 2018 Consolidated Financial Statements), Exhibit 4; Glencore Early Warning Report Form 62-103F1, filed on SEDAR, March 28, 2018 (Glencore March 2018 Early Warning Report), attached as Exhibit 5.
 <sup>4</sup> PolyMet Mining News Release, *PolyMet reaffirms economic and technical viability of NorthMet Project*, filed on

 <sup>&</sup>lt;sup>4</sup> PolyMet Mining News Release, *PolyMet reaffirms economic and technical viability of NorthMet Project*, filed on SEDAR, March 27, 2018 (PolyMet News Release 2018 Technical Report), Exhibit 6; Glencore News Release, Glencore restructures loans to PolyMet and acquires common share purchase warrants, filed on SEDAR, March 28, 2018 (Glencore News Release March 2018), Exhibit 7.
 <sup>5</sup> PolyMet Mining, Investor Presentation for NorthMet Project, March 28, 2018 (PolyMet March 2018 Investor)

<sup>&</sup>lt;sup>5</sup> PolyMet Mining, Investor Presentation for NorthMet Project, March 28, 2018 (PolyMet March 2018 Investor Presentation), Exhibit 8.

At the time when the draft Permit to Mine was released for public comment by the Minnesota Department of Natural Resources (DNR) and during the public comment period, PolyMet Mining Corp. (PolyMet) had yet to file an updated feasibility report pertaining to the NorthMet copper-nickel project or to present its results to the public. WaterLegacy believes that information in PolyMet's March 2018 Technical Report, related SEDAR filings, and statements made to the press and to investors regarding financial feasibility and the status and relationships pertaining to PolyMet and the PolyMet project raise material questions of fact that should be addressed in a contested case hearing and that need to be resolved before a permit to mine could be issued pertaining to the PolyMet Project. These questions can be summarized as follows:

- 1. Is the financial feasibility of the PolyMet NorthMet project uncertain, jeopardizing PolyMet's capacity to provide financial assurance and long-term compliance with water quality standards?
- 2. Do PolyMet's new statements about the expansion capacity of the tailings basin and alternative storage locations raise additional concerns regarding the stability and siting of the proposed NorthMet flotation tailings storage facility?
- 3. Does new information pertaining to PolyMet's strategic partnership with Glencore, as well as regarding the financial feasibility and attractiveness of the PolyMet NorthMet project to outside investors, require that Glencore be included on any PolyMet permit to mine?

WaterLegacy requests that these disputed questions of fact be addressed in the contested case hearing requested by our organization and by the MCEA on behalf of itself and other groups. The following discussion demonstrates that each of these questions is material and significant, and supports denial of PolyMet's draft Permit to Mine.

# 1. The financial feasibility of the PolyMet NorthMet project is uncertain, placing PolyMet's capacity to provide financial assurance and comply with water quality standards post-closure in jeopardy.

PolyMet's March 2018 Technical Report states that its financial analysis, "demonstrates that the NorthMet Project is technically viable and has the potential to generate positive economic returns based on the assumptions and conditions set out in this Report."<sup>6</sup> This is not an unqualified endorsement.

First, the PolyMet 2018 Technical Report projects a rate of return on investment which is approximately one-third of the after tax rate of return projected in 2012.

The 2018 Technical Report defines "Phase I" as the Project proposed in environmental review and in PolyMet's application for a Permit to Mine (PTM), excluding hydrometallurgical

<sup>&</sup>lt;sup>6</sup> PolyMet March 2018 Technical Report, *supra*, p. 251.

# WL SEIS Exhibit 8

WaterLegacy Comments on Petitions for Contested Case Hearing on Permit to Mine April 5, 2018 Page 3

processing. PolyMet now estimates that Phase I would have capital costs of \$945 million and an after tax internal rate of return (IRR) of 9.6%.<sup>7</sup> The complete Project for which permits have been sought, including the autoclave processing - Phase I and Phase II – would have a capital cost of \$1,204 million and an IRR of 10.3%.<sup>8</sup>

PolyMet's 2012 Technical Report estimated the total capital cost of the project as \$516 million, including both Phase I and Phase II.<sup>9</sup> In 2012, PolyMet projected an after tax internal rate of return of 30.6%.<sup>10</sup> It is axiomatic that increases in capital cost since 2012, along with decreases in the projected rate of return, would make investment in the project less attractive to investors.

Second, the 2018 Technical Report also acknowledges, "Financial returns for the Project are highly sensitive to changes in metal prices."<sup>11</sup> The Report models this price sensitivity, demonstrating that for Phase I (no autoclave) a 10% reduction in estimated metals prices would result in an after tax rate of return of 5.5%, nearly a 43% drop in the projected (9.6%) rate of return. For both Phase I and Phase II (PTM application Project) combined, a 10% reduction in estimated metals prices would result in an after tax rate of return of 6.5%, nearly a 47% drop in the projected (10.3%) rate of return for the PolyMet Project.<sup>12</sup>

PolyMet's price assumptions for copper and nickel, which represent almost 80% of project revenue, were \$3.22/lb for copper and \$7.95/lb for nickel.<sup>13</sup> Pricing for all metals that will be produced by the PolyMet NorthMet project will be based on the London Metal Exchange  $(LME).^{14}$ 

The LME suggests that the price assumptions for PolyMet's financial analysis may be too high, particularly for nickel. On April 2, 2018, the LME copper prices for a three-month contract were at \$3.03/lb,<sup>15</sup> approximately 9% less than the PolyMet Report's assumptions. The nickel prices on the LME for a three-month contract were at \$6.03/lb,<sup>16</sup> approximately 24% less than PolyMet's assumptions. Based on the sensitivity analysis in the 2018 Technical Report, these divergences between assumptions and current LME prices could substantially undermine the potential of the PolyMet Project to generate a positive return for investors.

Next, although the Technical Report states that costs for financial assurance "have been accounted for in the overall project economics,"<sup>17</sup> the PolyMet financial analysis may have minimized costs for financial assurance and for long-term active water quality treatment.

 <sup>&</sup>lt;sup>7</sup> *Id.*, pp. 20, 226 (Table 22-2).
 <sup>8</sup> *Id.*, pp. 21, 226 (Table 22-2).
 <sup>9</sup> PolyMet Mining NorthMet Project Form NI 43-101 Technical Report filed on SEDAR October 12, 2012 (PolyMet 2012 Technical Report), p. 22-5, autop. 8, Report excerpts attached as Exhibit 9. The 2011 project revision removed a second autoclave and additional metals processing.

<sup>&</sup>lt;sup>10</sup> Id., p. 1-24, autop. 2.
<sup>11</sup> PolyMet March 2018 Technical Report, *supra*, p. 26.
<sup>12</sup> Id., p. 227 (Tables 22-4 and 22-5).
<sup>13</sup> Id., pp. 25, 32.
<sup>14</sup> Id., p. 191. This is a condition of PolyMet's offtake agreement with Glencore to purchase all PolyMet products. <sup>15</sup> London Metal Exchange, <u>https://www.lme.com</u>, consulted on Apr. 2, 2018. Copper bids were at \$6719/metric tonne (2202.6 pounds).

*Id.*, Nickel bids were at \$13,280/metric tonne (2202.6 pounds).

<sup>&</sup>lt;sup>17</sup> PolyMet March 2018 Technical Report, *supra*, p. 196.

The Technical Report is peculiarly opaque as to what costs have been assumed for PolyMet NorthMet financial assurance.<sup>18</sup> The little information supplied fails to demonstrate that financial assurance would be appropriately funded. The only place in the Technical Report listing costs that might reflect financial assurance is Table 22-9.<sup>19</sup> Table 22-9 lists G&A, Royalties & Reclamation as a single line item beginning in the first construction year at \$10 million and ranging between about \$20 million to \$34 million during mine operations years.<sup>20</sup> Elsewhere the Report discloses that General and Administration costs average \$5 million per year while the mine is operating,<sup>21</sup> but Royalties are not estimated and cannot be disaggregated from Reclamation costs.

After Mine Year 20, the model suggests that both G&A and Royalties will cease, and Reclamation is estimated between \$10 and \$12 million for three years. By four years after mine closure, Reclamation costs have declined to under \$4 million and, after Mine Year 24, the Report does not supply any cost figures for Reclamation.<sup>22</sup>

The Technical Report provides too little information to determine the degree of deficit in its Financial Model of financial assurance. However, the sketchy data provided suggests that PolyMet's model of financial feasibility would not ensure that cash, an irrevocable letter of credit and bonds are sufficient to cover the liabilities outlined by the DNR in Draft Permit to Mine Conditions.<sup>23</sup>

PolyMet's 2018 Report also suggests that long-term water quality treatment is neither assumed nor financed in predicting that the PolyMet Project is feasible. The Report states, "For purposes of the 2018 Technical Report, PolyMet has assumed that the Minnesota water quality standards governing sulfate in wild rice water will be revised, as required by law, after the NorthMet Project is in operations.<sup>24</sup> Although the Report includes a reverse osmosis membrane system in describing the wastewater treatment system,<sup>25</sup> the Closure Plan the Report describes does not include long-term mechanical water quality treatment. It describes "water management," "water management infrastructure reclamation" and includes "plans to transition from mechanical to non-mechanical water treatment."<sup>26</sup>

Finally, PolyMet's reliance on the potential expansion of the PolyMet NorthMet mine project in its communications to the news media and to potential investors calls into question the economic feasibility of the project for which permits have been sought.

<sup>&</sup>lt;sup>18</sup> In contrast, the PolyMet March 2018 Technical Report provides detailed predictions of capital costs, indirect construction costs, labor costs, power use costs, costs for reagents and consumables, costs for parts and supplies, and even lab assay costs; *see Id.*, pp. 202, 207-211, 215-216, 219-222.

PolyMet March 2018 Technical Report, supra, p. 230, Table 22-9.

<sup>&</sup>lt;sup>20</sup> *Id*.

<sup>&</sup>lt;sup>21</sup> Id., p. 212 (Table 21-7).
<sup>22</sup> Id., p. 230, Table 22-9.
<sup>23</sup> See DNR's Draft Special Conditions for the PolyMet Permit to Mine ("DNR draft PTM Conditions"), Appendix
<sup>24</sup> See DNR's Draft Special Conditions for the PolyMet Permit to Mine are available online at https://files.dnr.state.mn.us/lands minerals/northmet/permit to mine/permit to mine draft special conditions.pdf <sup>24</sup> PolyMet March 2018 Technical Report, *supra*, p. 197.
 <sup>25</sup> *Id.*, p. 188.
 <sup>26</sup> *Id.*, p. 196.

PolyMet's 2012 Technical Report described a stand-alone project that would process 32,000 tons per day and a total of 224 million tons of ore over 20 years.<sup>27</sup> Expansion was mentioned in a single sentence, "A sustained higher metal price regime has the potential to allow expansion of the existing pit phases."28

In its March 2018 Technical Report, PolyMet, for the first time detailed expansion scenarios. In addition to the 32,000 tons per day for 20 years, 225 million total tons of ore Project reflected in environmental review and PolyMet's permit applications, the Report promoted two expansion scenarios. A throughput of 59,000 short tons per day (STPD) of ore, processing 293 tons of ore over only a 15-year mine life would result in "improved" financial indicators and an after tax rate of return of 18.5%.<sup>29</sup> The Report also stated that throughput of 118,000 tons per day, processing 730 million tons over a 19-year mine life "improves economics over the 32,000 STPD case," resulting in an after tax rate of return of 23.6%. This 118,000 tons per day expanded project would require a capital expenditure of \$2,243 million.<sup>30</sup>

PolyMet's news release emphasized, "The 59,000 tpd and 118,000 tpd upside cases suggest . . IRRs that range from 18 percent to 24 percent." PolyMet's President was quoted. "We felt it was it was important to quantify at a preliminary level what the potential economics of the entire NorthMet resources could be."<sup>31</sup> Communications to investors touted three Production Scenarios: the 32,000 tpd Project for which permits have been sought, and the 59,000 tpd and 118,000 tpd "opportunity" and "expansion" cases, both of which include unproven reserves and neither of which have been subject to environmental or engineering analysis.<sup>32</sup>

In short, as compared with 2012, what PolyMet proposed in its March 2018 Technical Report and promoted to investors is that, despite the lack of evidence such a plan would be supportable, if the Company more than tripled the volume of ore mined and more than quadrupled the project's capital costs, the PolyMet NorthMet project might achieve a rate of return about threequarters of that previously projected.

Each of the factors in the preceding section - the decline in projected rate of return for the PolyMet project, the project's sensitivity to likely inflated metals prices, the failure to demonstrate that financial modeling includes financial assurance and long-term water quality treatment, and the promotion of speculative "opportunities" to misdirect attention from changes in potential economics – suggest that a contested case hearing must evaluate fundamental and disputed financial questions.

Is the PolyMet Project, with the scope and expenses defined in environmental review and the Draft Permit to Mine, financially feasible? Does PolyMet's modeling for potential profitability adequately account for financial assurance and long-term active water quality treatment? Finally,

<sup>&</sup>lt;sup>27</sup> PolyMet 2012 Technical Report, *supra*, pp. 16-12, 17-1, 17-9, 17-16, 22-6, autop. 4-7, 9.

 <sup>&</sup>lt;sup>28</sup> Id., p. 15-3, autop. 3.
 <sup>29</sup> PolyMet March 2018 Technical Report, *supra*, p. 244.

 $<sup>^{30}</sup>$  Id.

<sup>&</sup>lt;sup>31</sup> PolyMet News Release 2018 Technical Report, supra, p. 3.

<sup>&</sup>lt;sup>32</sup> PolyMet March 2018 Investor Presentation, *supra*, pp. 11, 21.

if PolyMet is using speculative expansion scenarios to promote the NorthMet project to outside investors, has the Project become an attractive investment only to PolyMet's "strategic partner," multinational commodity trading and mining company Glencore?<sup>33</sup>

#### 2. PolyMet's new information regarding the flotation tailings storage facility raise additional concerns about the stability and siting of the proposed NorthMet flotation tailings storage facility.

The expansion scenarios promoted in PolyMet's March 2018 Technical Report and communications to investors raise a number of engineering and environmental concerns. The petitions to the DNR for a contested case hearing on the PolyMet Permit to Mine have specifically emphasized disputed material facts pertaining to the siting and stability of the proposed NorthMet tailings facility. WaterLegacy believes that new information provided in PolyMet's SEDAR filings and presentation present additional factual questions about the PolyMet NorthMet tailings storage facility.

PolyMet's presentation to investors, in addition to promoting expansion of its proposed Project, described as an "existing asset" the fact that the LTVSMC plant site has a "tailings basin with over 300Mt (300 million tons) capacity."<sup>34</sup> This may sound like a large capacity, but the PolyMet Permit to Mine application states that the ore beneficiation for the 225 million tons of ore in the proposed base case PolyMet Project would generate an estimated cumulative total of 225 million tons of flotation tailings.<sup>35</sup>

For any expansion of ore processing, storage of flotation tailings would need to be addressed. PolyMet's March 2018 Technical Report provides two answers to this potential problem. For the first expansion scenario, to process 293 million tons of ore within 15 years, the Report proposes, "Additional capital would be required to build out the existing FTB to accommodate the tails volumes anticipated for the 59,000 STPD scenario."<sup>36</sup>

And for the second expansion scenario, to process 730 million tons over 19 year, the Technical Report states,

PolyMet has evaluated placing tailings from the 118,000 STPD flotation circuit by gravity to two existing taconite mine pits near the Erie plant. This is a less costly alternative than building out the existing FTB large enough to contain the additional volume anticipated under this scenario.<sup>3</sup>

<sup>&</sup>lt;sup>33</sup> PolyMet's initial agreements were with Glencore AG, a wholly-owned subsidy of Glencore plc, the commodity <sup>34</sup> PolyMet March 2018 Investor Presentation, *supra*, p. 7.
 <sup>35</sup> PolyMet's Permit to Mine Application for the NorthMet Project December 2017 (PolyMet PTM Application) pp.

<sup>174, 266.</sup> The PolyMet PTM Application is available online at

https://files.dnr.state.mn.us/lands minerals/northmet/permit to mine/revised permit to mine application and app endices.pdf.

<sup>&</sup>lt;sup>36</sup> PolyMet March 2018 Technical Report, *supra*, p. 243. <sup>37</sup> *Id*.

Both approaches to tailings storage identified in the Technical Report require further scrutiny in a contested case hearing. If PolyMet is planning to build out the existing tailings facility to process 293 million tons of ore with a 59,000 tons per day throughput, rather than 225 million tons of ore with a 32,000 tons per day throughput, each of the concerns raised by WaterLegacy, by other petitioners, by consultants to DNR, and by DNR engineers regarding factors of safety and flotation tailings dam stability must be reevaluated.

In addition, as WaterLegacy and other petitioners have long suggested, the PolyMet record lacks any information justifying rejection of other sites for the deposition of flotation tailings. The March 2018 Technical Report, for the first time, acknowledges that PolyMet has evaluated placing a very large volume of flotation tailings from its potential copper-nickel mine project in existing taconite mine pits near the Erie plant. Costs for this alternative have been calculated, and would be less than a major build out of the existing tailings facility to accommodate a major project expansion.

The DNR, cooperating agencies, petitioners and members of the public must now have the opportunity to review and inquire about PolyMet's evaluation of this in-pit tailings disposal alternative. Although we don't yet know if disposal of tailings in existing taconite mine pits near the Erie plant might have other adverse impacts, this alternative would appear to use a brownfield site, reduce impacts on wetlands, and eliminate the potential for catastrophic failure of flotation tailings dams.

Given the new information supplied in PolyMet's March 2018 Technical Report about another storage alternative, it would seem reckless to proceed with permitting of the wet slurry and earthen dam flotation tailings storage facility proposed in the PolyMet draft Permit to Mine.

#### 3. The increasingly intertwined relationship between PolyMet and Glencore supports including Glencore on any proposed Permit to Mine.

In addition to providing new information on the profitability of the proposed PolyMet Project and its reduced attractiveness to outside investors, documents filed with SEDAR in March 2018 demonstrate that Glencore and PolyMet have become so intertwined that both entities should be included on any proposed Permit to Mine for the PolyMet NorthMet project.

Minnesota Statutes state that "no person shall engage in or carry out a mining operation for metallic minerals within the state unless the person has first obtained a permit to mine from the commissioner."<sup>38</sup> Minnesota's nonferrous mining rules further provide, "For the purpose of this subpart, a person must possess capital and provide financial and operational decision making necessary to conduct the mining operation.<sup>39</sup> In addition, "When two or more persons are or will be engaged in a mining operation, all persons shall join in the application, and the permit to mine shall be issued jointly."<sup>40</sup> A "person" under this section means a "firm, partnership,

 <sup>&</sup>lt;sup>38</sup> Minn. Stat. 93.481 (2017).
 <sup>39</sup> Minn. R. 6132.0300, subp. 1.
 <sup>40</sup> Minn. R. 6132.0300, subp. 2.

# WL SEIS Exhibit 8

WaterLegacy Comments on Petitions for Contested Case Hearing on Permit to Mine April 5, 2018 Page 8

corporation, joint venture or other legal entity."<sup>41</sup> An applicant for a permit to mine for nonferrous metals must disclose its parent companies, owners, principal stockholders, partners, and joint venturers.<sup>42</sup> New information summarized below suggests that, absent Glencore, PolyMet lacks the capital to conduct the NorthMet mining operation, and that Glencore and PolyMet are jointly engaged in the financial and operational decision-making for the Project.

The only Minnesota case specifically discussing the placement of a foreign parent corporation on a permit held that the Minnesota Pollution Control Agency (MPCA) could not name a parent corporation to a permit without providing evidence either of long-term pollution problems or the specific financial structures of the mining entities. *In the Matter of Hibbing Taconite Co.*<sup>43</sup> the MPCA had declined to conduct a contested case hearing requested by the parent corporations, and its only findings supporting the naming of parent corporations as co-permittees were generic statements as to financial conditions in the mining industry, rather than findings pertaining to the Hibbing facility or any specific corporate structure.<sup>44</sup> The Minnesota Court of Appeals held that a contested case was required to evaluate specific facts regarding long-term pollution problems and the long-term financial viability of the Hibbing Taconite Company.<sup>45</sup> The Court explained,

While it is true that the parent corporation is not technically the managing board of its subsidiary corporation, it could still come under the definition of "person" if the corporation and its subsidiary were found to be so intertwined as to be one entity. See Victoria Elevator Co. v. Meriden Grain Co., Inc., 283 N.W.2d 509 (Minn. 1979). However, such a finding depends upon certain facts which are not included in the administrative record, but which could be developed in a contested case hearing.<sup>46</sup>

WaterLegacy believes that the relationship between PolyMet and Glencore, as shown in documents recently filed with SEDAR, demonstrates that PolyMet and its parent corporation, Glencore,<sup>47</sup> are sufficiently intertwined to support, if not require that Glencore be included on any Permit to Mine.

Although such words are not dispositive of a relationship, the terms used by and on behalf of PolyMet to describe Glencore are indicative of how closely the entities are intertwined. PolyMet's Consolidated Financial Statements refer to Glencore as a "related party."<sup>48</sup> PolyMet's recent news release described the relationship with Glencore as one with a "strategic partner,"49 and its presentation to investors emphasized the "Glencore Strategic Alliance."<sup>50</sup> PolyMet's March 2018 Annual Information Form refers to a "strategic partnership" between PolyMet and Glencore.<sup>51</sup>

<sup>&</sup>lt;sup>41</sup> Minn. R. 6132.0100, subp. 25. <sup>42</sup> Minn. R. 6132.1100, subp. 4.

<sup>&</sup>lt;sup>43</sup> In the Matter of Hibbing Taconite Co., 431 N.W. 2d 885 (Minn. Ct. App. 1988).

<sup>&</sup>lt;sup>44</sup> *Id.* at 888. <sup>45</sup> *Id.* at 892.

<sup>&</sup>lt;sup>46</sup> *Id.*, at 893.

<sup>&</sup>lt;sup>47</sup> Aquiror Glencore plc is described as the "Parent" in the Glencore March 2018 Early Warning Report, *supra*, p. 1.

 <sup>&</sup>lt;sup>48</sup> PolyMet March 2018 Consolidated Financial Statements, *supra*, p. 23.
 <sup>49</sup> PolyMet News Release 2018 Technical Report, *supra*, p. 5.
 <sup>50</sup> PolyMet March 2018 Investor Presentation, *supra*, p. 21; *see also* pp. 4, 12.

<sup>&</sup>lt;sup>51</sup> PolyMet's March 2018 Annual Information Form, *supra*, p. 4.

In its December 2017 application for a Permit to Mine, PolyMet disclosed that Glencore owned 29.1% of PolyMet's common shares and would own 35.1% of the shares if all options and warrants were exercised.<sup>52</sup> PolyMet made no further disclosures regarding its relationship with Glencore

Since December 2017, Glencore's potential ownership of PolyMet if all warrants to purchase PolyMet shares were exercised has increased to 40.3%.<sup>53</sup>

Without Glencore, PolyMet's capacity to conduct the NorthMet mining operation is questionable. PolyMet currently has a U.S. non-capital loss carry forward of approximately \$136.4 million.<sup>54</sup> PolyMet's current Management Discussion and Analysis states that, although PolyMet "has the necessary resources to carry out its plans and operations through December 31, 2018, it does not currently have sufficient capital to complete the development of NorthMet and generate future profitable operations." PolyMet "is in discussions to arrange sufficient capital to meet these requirements."55

PolyMet's Technical Report explains that PolyMet's relationship to Glencore is important to reduce the risk of project failure due to lack of financing, stating, "PolyMet will require successful financing in order to complete the development and construction of the NorthMet Project. If PolyMet cannot raise the money necessary to fund the Project, development will be suspended." The Report continues, "This risk is partially mitigated through the company's ongoing relationship with Glencore."<sup>56</sup>

In addition to the potential ownership by Glencore of 40.3% of PolyMet's shares, PolyMet relies on an offtake and marketing agreement with Glencore to purchase, transport, and sell all products that would be generated by the NorthMet project:

PolyMet has entered into a long-term marketing agreement with Glencore AG (Glencore) whereby Glencore will purchase all products (metals, concentrates or intermediate products) on independent commercial terms at the time of sale. . In view of Glencore's position as one of the world's largest traders of commodities, with especially strong positions in copper and nickel, there are no material risks associated with product marketing for the Project.<sup>57</sup>

Documents recently filed on SEDAR disclose that, together with its dominant ownership share and control of all of PolyMet's potential products, Glencore has undertaken financial and technical operational decision making necessary to conduct the NorthMet mining operation. PolyMet and Glencore have entered into a Financial Advisory Agreement, where Glencore provides "financial advisory support" and is reimbursed by PolyMet. Similarly PolyMet has

<sup>&</sup>lt;sup>52</sup> PolyMet PTM Application, *supra*, p. 24. <sup>53</sup> Glencore News Release March 2018, *supra*, p. 1; Glencore March 2018 Early Warning Report, *supra*, p. 1.

 <sup>&</sup>lt;sup>54</sup> PolyMet March 2018 Consolidated Financial Statements, *supra*, p. 22.
 <sup>55</sup> PolyMet March 2018 MD&A, *supra*, p. 18.
 <sup>56</sup> PolyMet March 2018 Technical Report, *supra*, p. 36.

<sup>&</sup>lt;sup>57</sup> Id, p. 191; see also PolyMet March 2018 Annual Information Form, supra, p. 23.

entered into a Technical Service Agreement with Glencore, where Glencore provides NorthMet "technical support" in "detailed project design and mineral processing" for which Glencore is reimbursed by PolyMet. In 2017, PolyMet reimbursed Glencore \$832,000 for these services.<sup>58</sup>

The degree to which Glencore is already directing operational decisions for the PolyMet NorthMet project is evident in the Technical Report. PolyMet compiled the commodity price forecast with the aid of its "financial partners."<sup>59</sup> Capital costs for mechanical equipment were based on specifications to ensure "the concentrate adheres to Glencore's requirements for final product processing." Further, designs for structural support steel, bins, chutes and building storage requirements "were based on consultation with Glencore."<sup>60</sup>

Prior to July 2016, PolyMet only had one member of its Board of Directors directly associated with Glencore; Stephen Rowland, a Trader who has been a Glencore Executive since 1988. However, in the past year-and-a-half, PolyMet has added two more Directors actively involved with Glencore: Helen Harper, Glencore's Asset Manager for North American Copper Operations, who joined PolyMet's Board in July 2016; and Mike Ciricillo, Glencore's Head of Copper & Smelting and Refining, who joined PolyMet's Board in July 2017. At least one of Glencore's Directors serves on every one of PolyMet's Board Committees.<sup>61</sup>

Glencore has the right to nominate the number of directors proportionate to Glencore's ownership, not to exceed 49% of the total board.<sup>62</sup> Interestingly, PolyMet's recent Management Discussion and Analysis discloses that there are agreements with key non-Glencore leadership – Director/President/CEO Jonathan Cherry, CFO Patrick Keenan and Executive Vice President Bradley Moore – "containing severance provisions for termination without cause or in the event of a take-over."<sup>63</sup>

PolyMet may have previously given the impression in its 2012 Technical Report filed with SEDAR as well as documents submitted to DNR that the Company had independent capacity to attract investors and conduct a nonferrous mining operation. Whether or not this capacity was ever present, recent SEDAR filings and communications by PolyMet to news media and investors demonstrate that PolyMet is dependent on Glencore for capital, for marketing of all of its products for the duration of the NorthMet project, and for financial, technical and operational decision-making.

It may serve PolyMet's and Glencore's interests to propose that only PolyMet be deemed a permittee for a Permit to Mine. However, Minnesota's law supports and Minnesota's public interest requires that no Permit to Mine for the PolyMet NorthMet project be considered that does not include Glencore as one of the "persons" proposing to jointly engage in the proposed nonferrous mining operation.

<sup>&</sup>lt;sup>58</sup> PolyMet March 2018 Consolidated Financial Statements, *supra*, p. 22; *See also* PolyMet March 2018 MD&A, *supra*, p. 18.

<sup>&</sup>lt;sup>59</sup> PolyMet March 2018 Technical Report, *supra*, p. 25.

<sup>&</sup>lt;sup>60</sup> *Id.*, p. 204.

<sup>&</sup>lt;sup>61</sup> PolyMet March 2018 Annual Information Form, *supra*, p. 48.

<sup>&</sup>lt;sup>62</sup> *Id.*, p. 51.

<sup>&</sup>lt;sup>63</sup> PolyMet March 2018 MD&A, *supra*, p. 18.

# WL SEIS Exhibit 8

WaterLegacy Comments on Petitions for Contested Case Hearing on Permit to Mine April 5, 2018 Page 11

# Conclusion

WaterLegacy appreciates the opportunity to comment on the petitions for contested case hearing that our organization and the MCEA previously filed in this matter.

New information disclosed by PolyMet's filings on SEDAR and communications to news media and investors underscores the need for a contested case hearing to evaluate the sufficiency of PolyMet financial assurance, the protection of Minnesota water resources from long-term pollution and degradation and the risks posed by a flotation tailings storage facility using outmoded technology and an inappropriate site with unstable foundations.

In addition, the new information made available by PolyMet during the last week of March 2018 requires an in-depth examination of whether the PolyMet NorthMet project is financially feasible as a stand-alone project. As a corollary, the DNR must determine, as a matter of fact, whether PolyMet and Glencore have become so intertwined that Glencore as well as PolyMet must be included on any proposed Permit to Mine.

WaterLegacy continues to request the specific relief that the DNR deny and reject the PolyMet draft Permit to Mine reflected in PolyMet's December 2017 application and in the DNR's draft Permit to Mine Conditions.

Respectfully submitted,

s/Paula G. Maccabee

Paula Goodman Maccabee Counsel/Advocacy Director for WaterLegacy

Recordable Disc with Comments, Exhibits & Table of Exhibits Enclosed

In re the Matter of the Minnesota Department of Natural Resources' Consideration of a draft Permit to Mine for the PolyMet NorthMet Copper-Nickel Mine Project

WaterLegacy Comments on Petitions for Contested Case Hearing

# **Table of Exhibits**

- Exhibit 1 PolyMet Mining NorthMet Project Form NI 43-101F1 Technical Report, March 26, 2018.
- Exhibit 2 PolyMet Mining Annual Information Form, filed March 28, 2018.
- Exhibit 3 PolyMet Mining Management Discussion and Analysis, filed March 28, 2018.
- Exhibit 4 PolyMet Consolidated Financial Statements, filed March 28, 2018.
- Exhibit 5 Glencore Early Warning Report Form 62-103F1, filed March 28, 2018.
- Exhibit 6 PolyMet Mining News Release, *PolyMet reaffirms economic and technical viability of NorthMet Project*, March 27, 2018.
- Exhibit 7 Glencore News Release, *Glencore restructures loans to PolyMet and acquires common share purchase warrants*, March 28, 2018.
- Exhibit 8 PolyMet Mining, Investor Presentation for NorthMet Project, March 28, 2018.
- Exhibit 9 PolyMet Mining NorthMet Project Form NI 43-101 Technical Report, October 2, 2012 Excerpts.
- Exhibit 10 DNR's Draft Special Conditions for the PolyMet Permit to Mine, Jan. 5, 2018, Excerpt, Appendix A-page 2.



# ANNUAL INFORMATION FORM

# FOR THE ELEVEN MONTHS ENDED DECEMBER 31, 2017

of

**POLYMET MINING CORP.** (the "Company" or "PolyMet")

March 27, 2018

Suite 5700 – 100 King Street West, Toronto, Ontario M5X 1C7

Tel: 416-915-4149 Fax: 416-915-4189 Website: www.polymetmining.com

# TABLE OF CONTENTS

1. INTRODUCTORY NOTES	. 1
2. CORPORATE STRUCTURE	. 3
3. GENERAL DEVELOPMENT OF THE BUSINESS	. 3
4. DESCRIPTION OF THE BUSINESS	6
5. RISK FACTORS	39
6. DIVIDENDS	46
7. CAPITAL STRUCTURE	46
8. MARKET FOR SECURITIES	47
9. SECURITIES NOT LISTED OR QUOTED	47
10. DIRECTORS AND OFFICERS	48
11. LEGAL PROCEEDINGS AND REGULATORY ACTIONS	50
12. INTEREST OF MANAGEMENT AND OTHER MATERIAL TRANSACTIONS	50
13. AUDITORS, TRANSFER AGENT AND REGISTRAR	50
14. MATERIAL CONTRACTS	50
15. INTEREST OF EXPERTS	52
16. CONTROLS AND PROCEDURES	52
17. AUDIT COMMITTEE	53
18. ADDITIONAL INFORMATION	55
SCHEDULE A. AUDIT COMMITTEE CHARTER	56

# 1. Introductory Notes

In this Annual Information Form ("AIF") "PolyMet" or the "Company" refers to PolyMet Mining Corp. and its subsidiaries (unless the context otherwise dictates). All information contained herein is as of March 27, 2018 unless otherwise indicated, other than certain financial information which is as of December 31, 2017, being the date of the Company's most recently audited financial year end. All dollar amounts in this AIF are expressed in United States ("U.S.") dollars, the functional and reporting currency of the Company, unless otherwise indicated.

Additional information related to the Company is available for view on the System for Electronic Document Analysis and Retrieval ("SEDAR") and EDGAR at www.sedar.com and at www.sec.gov, respectively, and on the Company's website www.polymetmining.com.

# Cautionary Statement Regarding Forward-Looking Statements

This AIF contains "forward-looking statements". Within the meaning of applicable Canadian securities legislation and Section 27A of the United States Securities Act of 1933 and Section 21E of the United States Securities Exchange Act of 1934, forward-looking statements are not, and cannot be, a guarantee of future results or events. Forward looking statements are based on, among other things, opinions, assumptions, estimates and analyses that are subject to significant risks. uncertainties, contingencies and other factors that may cause actual results and events to be materially different from those expressed or implied by the forward-looking statement. All statements in this AIF that address events or developments that PolyMet expects to occur in the future are forward-looking statements and are generally, although not always, identified by words such as "expect", "plan", "anticipate", "project", "target", "potential", "schedule", "forecast", "budget", "estimate", "intend" or "believe" and similar expressions or their negative connotations, or that events or conditions "will", "would", "may", "could", "should" or "might" occur. These forward-looking statements include, but are not limited to, PolyMet's objectives, strategies, intentions, expectations, production, costs, capital and exploration expenditures, including an estimated economics of future financial and operating performance and prospects for the possible expansion of the operation based on a PEAlevel study and a ramp-up evaluation representing production growth and improved margins mine, life projections, recovery rate and concentrate grade projections, ability to obtain all necessary environmental and government approvals to completion and if undertaking an expansion case, ability to obtain at all, the viability and all information with respect to the ability to develop the Project to additional potential by mining additional resources beyond the permit design at a higher production rate. Prior to any decision to apply for permits to develop the project further, PolyMet would need to complete preliminary and definitive feasibility studies, as well as an analysis of the environmental impact and alternatives of any proposal. In addition, any future proposal would be subject to environmental review and permits, public notice and comment, and approval by appropriate federal and state Agencies. All forward-looking statements in this AIF are qualified by this cautionary note.

The material factors or assumptions that PolyMet has identified and were applied by PolyMet in drawing the conclusions or making forecasts or projections set in the forward-looking statements include, but are not limited to:

- various economic assumptions, in particular, metal price estimates, set out in this AIF and elsewhere;
- certain operational assumptions set out in the AIF, including mill recovery, operating scenarios;
- construction schedules and timing issues; and
- assumptions concerning timing and certainty regarding the environmental review and permitting process.

The risks, uncertainties, contingencies and other factors that may cause actual results and events to differ materially from those expressed or implied by the forward-looking statement may include, but are not limited to, risks generally associated with the mining industry, such as: economic factors (including future commodity prices, currency fluctuations, inflation rates, energy prices and general cost escalation); uncertainties related to the development of the NorthMet Project; dependence on key personnel and employee relations; risks relating to political and social unrest or change,

operational risk and hazards, including unanticipated environmental, industrial and geological events and developments and the inability to insure against all risks; failure of plant, equipment, processes, transposition and other infrastructure to operate as anticipated; compliance with governmental and environmental regulations, including permitting requirements; etc., as well as other factors identified and as described in more detail under the heading "Risk Factors" in Item 5. The list is not exhaustive of the factors that may affect the forward-looking statements. There can be no assurance that such statements will prove to be accurate, and actual results, performance or achievements could differ materially from those expressed in, or implied by, these forward-looking statements. Accordingly, no assurance can be given that any events anticipated by the forward-looking statements will transpire or occur, or if any of them do, what benefits or liabilities PolyMet will derive therefrom. The forwardlooking statements reflect the current expectations regarding future events and operating performance and speak only as of the date hereof and PolyMet does not assume any obligation to update the forward-looking statements if circumstances or management's beliefs, expectations or opinions should change other than as required by applicable law. For the reasons set forth above, undue reliance should not be placed on forward-looking statements.

# Cautionary Note to U.S. Investors – Information Concerning Preparation of Resource Estimates

This AIF has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of United States securities laws. The terms "mineral reserve", "proven mineral reserve" and "probable mineral reserve" are Canadian mining terms as defined in accordance with Canadian National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") – CIM Definition Standards on Mineral Resources and Mineral Reserves, adopted by the CIM Council, as amended. These definitions differ materially from the definitions in the United States Securities and Exchange Commission's ("SEC") Industry Guide 7 under the United States Securities Act of 1933, as amended. Under SEC Industry Guide 7 standards, mineralization could be economically and legally extracted at the time the reserve determination is made. As applied under SEC Industry Guide 7, a "final" or "bankable" feasibility study is required to report reserves, and the primary environmental analysis or report must be filed with the appropriate governmental authority.

In addition, the terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are defined in and required to be disclosed by NI 43-101; however, these terms are not defined terms under SEC Industry Guide 7 and are normally not permitted to be used in reports and registration statements filed with the SEC. Investors are cautioned not to assume that all or any part of a mineral deposit in these categories will ever be converted into SEC Industry Guide 7 reserves. "Inferred mineral resources" have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or prefeasibility studies, except in rare cases. Investors are cautioned not to assume that all or any part of an inferred mineral resource will or legally mineable. Disclosure of "contained metal" in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC Industry Guide 7 standards as in place tonnage and grade without reference to unit measures.

Accordingly, information concerning mineral deposits contained in this AIF may not be comparable to similar information made by public U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.

# Qualified Persons Under NI 43-101

Except where specifically indicated otherwise, the disclosure in this AIF of scientific and technical information regarding PolyMet's mineral properties has been reviewed and approved by the following persons who are Qualified Persons as defined by NI 43-101:

- Zachary J. Black, SME-RM, of Hard Rock Consulting, of Lakewood, CO;
- Jennifer J. Brown, P.G., of Hard Rock Consulting, of Lakewood, CO;
- Nicholas Dempers, Pr. Eng., SAIMM, of Senet, of South Africa;
- Thomas L. Drielick, P.E., of M3 Engineering, of Tucson, AZ.
- Art S. Ibrado, P.E., of M3 Engineering., of Tucson, AZ; and
- Erin L. Patterson, P.E., of M3 Engineering., of Tucson, AZ;
- Tom Radue, P.E., of Barr Engineering, of Minneapolis, MN;
- Jeff S. Ubl, P.E., of Barr Engineering, of Minneapolis, MN;
- Herbert E. Welhener, SME-RM, Independent Mining Consultants, of Tucson, AZ;

# 2. Corporate Structure

PolyMet Mining Corp. was incorporated under the *Business Corporations Act* (British Columbia) on March 4, 1981 under the name Fleck Resources Ltd. and changed its name to PolyMet Mining Corp. on June 10, 1998. Through its 100%-owned subsidiary, Poly Met Mining, Inc. ("PolyMet US" and, together with PolyMet Mining Corp., "PolyMet" or the "Company") the Company is engaged in the exploration and development of natural resource properties. PolyMet US was incorporated in Minnesota, United States on February 16, 1989.

The Company's corporate office is located at 100 King Street West, Suite 5700, Toronto, ON M5X 1C7, Canada. The principal executive office is located at 444 Cedar Street, Suite 2060, St. Paul, MN 55101, USA. The registered and records office is located at 2500 – 700 West Georgia Street, Vancouver, B.C. V7Y 1B3, Canada. The operational headquarters are located at 6500 County Road 666, Hoyt Lakes, MN 55750-0475, USA.

On December 7, 2017, the Board of Directors approved a resolution to change the year end from January 31 to December 31.

# 3. General Development of the Business

# Significant History of the Company

PolyMet's primary mineral property and principal focus is the commercial development of its NorthMet Project ("NorthMet" or "Project"), a polymetallic project in northeastern Minnesota, United States of America, which hosts copper, nickel, cobalt and platinum group metal mineralization.

The NorthMet ore body is at the western end of a series of known copper-nickel-precious metals deposits in the Duluth Complex. Completion of the Definitive Feasibility Study ("DFS") in 2006 established proven and probable reserves, positioning NorthMet as the most advanced of the four advanced projects in the Duluth Complex: namely, from west to east, NorthMet, Mesaba, Serpentine, and Maturi.

# Asset Acquisition

PolyMet acquired the Erie Plant, associated infrastructure, and approximately 12,400 acres (19.4 square miles) of surface rights from Cliffs Erie LLC, a subsidiary of Cleveland-Cliffs Inc. (together "Cliffs"). The plant is located about six miles west of the NorthMet ore body and comprises a 100,000 ton-per-day crushing and milling facility, a railroad and railroad access rights connecting the Erie Plant to the NorthMet ore body, tailings storage facilities, 120 railcars, locomotive fueling and maintenance facilities, water rights and pipelines, administrative offices on site, and approximately 6,000 acres of land to the east and west of the existing tailings storage facilities.

# Financing

In 2008, PolyMet and Glencore AG, a wholly owned subsidiary of Glencore plc (together "Glencore"), entered into a strategic partnership in which Glencore will market PolyMet's products, provides technical and commercial support, and owns 29.1% of PolyMet's issued shares, holds \$25 million initial principal senior secured convertible debentures, and holds \$70 million initial principal senior secured non-convertible debentures as at December 31, 2017. Subsequent to December 31, 2017, \$5.0 million was issued on January 18, 2018 and PolyMet and Glencore agreed to extend the maturity date of the secured non-convertible debt to March 31, 2019, reduce the interest rate on the secured non-convertible debt, and issue secured debentures with a total principal amount of up to \$80.0 million.

# Permitting

In November 2015, the Minnesota Department of Natural Resources ("MDNR"), the U.S. Army Corps of Engineers ("USACE"), and the United States Forrest Service ("USFS") published the NorthMet Final Environmental Impact Statement ("EIS") as required under the Minnesota Environmental Policy Act ("MEPA") and the National Environmental Policy Act ("NEPA"). The U.S. Environmental Protection Agency ("EPA") was a Cooperating Agency in preparation of the EIS. As part of the decade-long MEPA and NEPA processes there were several extensive periods for public review and comment prior to publication of the Final EIS. The EIS included a proposed land exchange between the USFS and the Company.

Since March 2016, when the MDNR issued its decision that the Final EIS met the requirements under MEPA, PolyMet has submitted the permit applications required to construct and operate the NorthMet Project. During the second half of 2017 and 2018 to date, the regulatory agencies for the state of Minnesota have released a number of draft permits, including the Permit to Mine. PolyMet's objectives for the remainder of 2018 include receipt of key permits and approvals needed to construct and operate the NorthMet Project.

# Land Exchange

On January 9, 2017, after responding in writing to more than 22,500 comments, and supported by a Memorandum of Agreement under Section 106 of the National Historic Preservation Act, the USFS issued its Final Record of Decision ("ROD") authorizing the land exchange.

On November 28, 2017, the U.S. House of Representatives voted approval of the HR3115, the land exchange between PolyMet and the USFS, with a vote of 309 to 99. This bill has been advanced to the US Senate for consideration. The Company will continue its involvement in the administrative steps to complete the land exchange transaction while the bill is under consideration.

# Three Year History

The Company's focus over the last three years has been on completion of the environmental review process by state and federal agencies, preparation and submission of permit applications, and support of the agencies during review of permit application, issuance of draft permits, and issuance of final permits.

Major highlights include:

- March 2016 MDNR determined that the Final EIS addresses the objectives defined in the EIS scoping review, meets procedural requirements and responds appropriately to public comments demonstrating the NorthMet Project can be constructed and operated in compliance with state and federal standards. The 30-day period allowed by law to challenge the state's decision passed without any legal challenge being filed;
- July 2016 the Company submitted applications for water-related permits required to construct and operate NorthMet. The Eastern Region Regional Office of the USFS issued its response to comments on the Draft ROD for the land exchange and instructed the Superior National Forest to proceed with completing the Final ROD;

- October 2016 the Company closed the initial tranche of a private placement of 25,963,167 units for gross proceeds of \$19.5 million and a second tranche of a private placement of 14,111,251 units for gross proceeds of \$10.6 million pursuant to Glencore's right to maintain its pro rata ownership;
- December 2016 the Memorandum of Agreement of the Section 106 Consultation under the National Historic Preservation Act was signed by the statutory parties;
- January 2017 the USFS issued its Final ROD authorizing a land exchange to transfer title to the surface rights over and around the NorthMet mineral rights to PolyMet in exchange for certain other lands owned by PolyMet;
- June 2017 the Company also appointed Patrick Keenan as Chief Financial Officer;
- August and September 2017 the MDNR released six draft water appropriation permits and two draft dam safety permits for 30-days of public review and comment which have all closed;
- September 2017 the Company issued and committed to issue to Glencore secured debentures with a total principal amount of \$20 million;
- October 2017 the Company entered into an agreement with EIP Credit Co., LLC ("EIP Credit") to reserve wetland bank credits for the NorthMet Project;
- November 2017 the U.S. House of Representatives approved bipartisan legislation introduced by Rep. Rick Nolan, D-MN-8 directing the Secretary of Agriculture to ratify the previously approved land exchange between PolyMet and the U.S. Forest Service. This bill has been advanced to the US Senate for consideration;
- January 2018 the MDNR released its draft Permit to Mine for public review and comment which has closed;
- January 2018 the Minnesota Pollution Control Agency ("MPCA") released its draft water quality permit, draft section 401 certification, and draft air emissions permit for public review and comment which have all closed;
- February 2018 the final public hearings on the draft permits were completed;
- March 2018 the Company and Glencore agreed to extend the term of outstanding debentures until March 31, 2019, reduce the interest rate on the outstanding debentures, and make available \$80 million in additional debentures during 2018. Proceeds will be used to complete pre- and post-permitting work, including detailed engineering and environmental cleanup, and to purchase wetland credits; and
- March 2018 the Company issued an Updated Technical Report under NI 43-101 incorporating
  process improvements, project improvements, and environmental controls described in the Final
  EIS and draft permits. The update also included detailed capital costs, operating costs, and
  economic valuation for the mine plan being permitted as well as an assessment of potential
  future opportunities.

# Goals and Objectives for the Next Twelve Months

The permitting process is managed by the regulatory agencies and, therefore, timelines are not under PolyMet control. Given these circumstances, PolyMet's objectives include:

- Transfer of title to the surface rights over and around the NorthMet mineral rights to PolyMet as part of the authorized land exchange;
- Favorable decision by the state on 401 Water Quality Certification and USACE Final ROD and 404 wetlands permit under Clean Water Act;
- Favorable decisions on state permits (Permit to Mine, air, water, and dam safety permits);
- Completion of project implementation plan; and

 Completion of construction finance plan, subject to typical conditions precedent such as receipt of key permits.

Upon completion of the land exchange, PolyMet will own surface rights to approximately 19,050 acres or 29.8 square miles of contiguous surface rights stretching from west of the Erie Plant to east of the proposed East Pit at NorthMet.

Following the agreement reached with Glencore to make available additional funding at the Company's option, subject to permitting progress, PolyMet expects to spend approximately \$80 million during the year ended December 31, 2018, with \$30 million to complete the permit process and maintain existing infrastructure and \$50 million to complete pre- and post-permitting work, including detailed engineering, environmental cleanup, and to purchase wetland credits.

The Company is in discussions with commercial banks and other sources of debt and equity construction finance and aims to secure commitments sufficient to fund project requirements upon receipt of key permits. Construction and ramp-up to commercial production is anticipated to take twenty-four to thirty months from receipt of key permits.

# 4. Description of the Business

The following disclosure relating to the Company's NorthMet Project is based, in part, on information derived from the 2018 Technical Report prepared by the qualified persons set out in Section 1 of this AIF. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein. Reference should be made to the full text of the 2018 Technical Report which has been filed with certain Canadian securities regulatory authorities pursuant to NI 43-101 and is available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov.

# Property Description and Location

#### **Project Location**

The NorthMet Project comprises two key elements: the NorthMet Deposit (or Mine Site) and the Erie Plant. The NorthMet Deposit is situated on mineral leases located in St. Louis County in northeastern Minnesota at Latitude 47° 36' north, Longitude 91° 58' west, about 70 miles north of the City of Duluth and 6.5 miles south of the town of Babbitt. The Erie Plant is approximately eight miles west of the NorthMet Deposit.

The NorthMet Deposit site totals approximately 4,300 acres and the Erie Plant site, including the existing tailings basin, covers approximately 12,400 acres.

The NorthMet Project is located immediately south of the eastern end of the historic Mesabi Iron Range and is in proximity to a number of existing iron ore mines including the Peter Mitchell open pit mine located approximately two miles to the north of the NorthMet Deposit. NorthMet is one of several known mineral deposits that have been identified within the 30-mile length of the Duluth Complex, a well-known geological formation containing copper, nickel, cobalt, platinum group metals, silver, gold and titanium.

The NorthMet Deposit is connected to the Erie Plant by a transportation and utility corridor that is comprised of an existing private railroad that will primarily be used to transport ore, a segment of the existing private Dunka Road that will be upgraded to provide vehicle access, and new water pipelines and electrical power network for the NorthMet Mine Site.

# Project Ownership

The Company owns 100% of PolyMet US. For the sake of simplicity this summary will for the most part refer to both entities as PolyMet, except when specific differentiation is required for legal clarity.

The mineral rights covering 4,282 acres or 6.5 square miles at the NorthMet orebody are held through two mineral leases:

- The U.S. Steel Lease dated January 4, 1989, subsequently amended and assigned, covers 4,162 acres originally leased from U.S. Steel Corporation (U.S. Steel), which subsequently sold the underlying mineral rights to RGGS Land & Minerals Ltd., L.P. (RGGS). PolyMet has extended the lease indefinitely by making \$150,000 annual lease payments on each successive anniversary date. The lease payments are advance royalty payments and will be deducted from future production royalties payable to RGGS, which range from 3% to 5% based on the net smelter return, subject to minimum payments of \$150,000 per annum.
- On December 1, 2008, PolyMet entered into an agreement with LMC Minerals ("LMC") whereby PolyMet leases 120 acres that are encircled by the RGGS property. The initial term of the renewable lease is 20 years with minimum annual lease payments of \$3,000 on each successive anniversary date until the earlier of NorthMet commencing commercial production or for the first four years, after which the minimum annual lease payment increases to \$30,000. The initial term may be extended for up to four additional five-year periods on the same terms. The lease payments are advance royalty payments and will be deducted from future production royalties payable to LMC, which range from 3% to 5% based on the net smelter return, subject to a minimum payment of \$30,000 per annum.

PolyMet US holds various rights of ownership and use, and other property rights that currently give it control of 100% of the Erie Plant, which covers approximately 12,400 acres, or 19.4 square miles, through contracts for deed with Cliffs Erie, L.L.C. (Cliffs Erie).

PolyMet (in its predecessor name, Fleck Resources Inc.) acquired a 20-year perpetually renewable mineral rights lease to the NorthMet Deposit in 1989 from U.S. Steel. The lease is subject to yearly lease payments before production and then to a sliding scale Net Smelter Return (NSR) royalty ranging from 3% to 5%, with lease payments made before production considered as advance royalties and credited to the production royalty.

Mineral and surface rights have been severed, with the United States Forest Service (USFS) owning the surface rights within most of the lease area. U.S. Steel retained the mineral rights and certain rights to explore and mine on the site under the original documents that ceded surface title to the USFS.

# Surface Rights

Surface rights of the NorthMet Deposit are held by the USFS. The United States acquired the surface rights from U.S. Steel in 1938 under provisions of the Weeks Act of 1922. U.S. Steel retained certain mining rights, which PolyMet secured under the U.S. Steel Lease, along with the mineral rights.

PolyMet and the USFS have proposed a land exchange to consolidate their respective land ownerships.

In this land exchange, the USFS will acquire 6,690 acres of private land in four separate tracts currently held by PolyMet, to become part of the Superior National Forest and managed under the laws relating to the National Forest System. Already located within the Superior National Forest boundaries, these lands will have multiple uses including recreation, research and conservation. The USFS will convey 6,650 acres of federally-owned surface land to PolyMet, which includes the surface rights overlying and surrounding the NorthMet Deposit. These lands are located near an area heavily used for mining and mine infrastructure, are consistent with regional land uses, and will generate economic benefits to the region through employment and tax revenues.

Following the Final NorthMet Environmental Impact Statement (FEIS), the Superior National Forest of USFS issued a Final Record of Decision (ROD) to proceed with the administrative land exchange in January 2017. The ROD stated, among other things, that the proposed exchange will be beneficial to the USFS and is in the public's interest. On November 28, 2017, H.R. 3115, the Superior National

Forest Land Exchange Act of 2017, passed by voice vote in the House of Representatives. If enacted into law, H.R. 3115 will legislatively accomplish the same land exchange approved in the January 2017 USFS ROD. The administrative land exchange process is ongoing as of the date of the 2018 Technical Report.

# Royalties and Encumbrances

The NorthMet Deposit mineral rights carry variable royalties of 3% to 5% based on the NSR per ton of ore mined. For an NMV of under \$30 per ton, the royalty is 3%, for \$30-35 per ton it is 4%, and above \$35 per ton it is 5%. Both the U.S. Steel Lease (RGGS) and the LMC Lease carry advance royalties which can be recouped from future royalty payments, subject to minimum payments in any year. The US Steel leases were transferred through sale to RGGS although the underlying agreement terms remain the same.

# Environmental Liabilities

Federal, state and local laws and regulations concerning environmental protection affect the PolyMet operation. As part of the consideration for the purchase of the Erie Plant and associated infrastructure, the Company indemnified Cleveland-Cliffs Inc. (Cliffs) for reclamation and remediation obligations of the acquired property. Completion of that purchase remains subject to certain contingencies, including, among other things, issuance of final permits for the NorthMet Project under applicable environmental laws and release of Cliffs, and its subsidiary Cliffs Erie LLC, from its obligations under existing state permits with respect to the Erie Plant and other assets acquired by PolyMet.

The Company's estimate of the environmental rehabilitation provision under International Financial Reporting Standards (IFRS) on October 31, 2017 was \$72.772 million based on estimated cash flows required to settle this obligation in present day costs of \$78.729 million, a projected inflation rate of 2.00%, a market risk-free interest rate of 2.66% and expenditures expected to occur over a period of approximately 30 years. This estimate includes but is not limited to water treatment and infrastructure closure and removals, with costs estimated by PolyMet and its consultants and construction contractors. This estimate has been reviewed and accepted by auditors for PolyMet's financial statements.

# Permits

Prior to construction and operation of the NorthMet Project, PolyMet will require several permits from federal and state agencies. These are discussed in greater detail below.

# Accessibility, Climate, Local Resources, Infrastructure and Physiography

# Accessibility and Climate

Access to the NorthMet Project is by a combination of good quality asphalt and gravel roads via the Erie Plant site. The nearest center of population is the town of Hoyt Lakes, which has a population of about 2,500 people. There are a number of similarly sized communities in the vicinity, all of which are well serviced, provide ready accommodations, and have been, or still are, directly associated with the region's extensive taconite mining industry. The road network in the area is well developed, though not heavily trafficked, and there is an extensive railroad network which serves the taconite mining industry across the entire Range. There is access to ocean shipping via the ports at Taconite Harbor and Duluth/Superior (on the western end of Lake Superior) and the St. Lawrence Seaway.

Climate is continental and characterized by wide temperature variations and significant precipitation.

# Local Resources and Infrastructure

The area has been economically dependent on the mining industry for many years and while there is an abundance of skilled labor and local mining expertise, the closure in 2001 of the LTVSMC open pit

mines and taconite processing facility has had a significant negative impact on the local economy and population growth. There are, however, several other operating mines in other parts of the Iron Range. Because of this, the mining support industries and industrial infrastructure remains well developed and of a high standard.

The Erie Plant site is connected to the electrical power supply grid and a main HV electrical power line (138 kV) runs parallel to the road and railroad that traverse the southern part of the mining lease area. PolyMet has a long-term power contract with Minnesota Power.

There are plentiful local sources of fresh water, and electrical power and water are available nearby. Previous operations at the site processed 100,000 STPD with adequate water supply, which is more than three times the plan for PolyMet.

# Physiography

The Mesabi Iron Range forms an extensive and prominent regional topographic feature. The NorthMet Project site is located on the southern flank of the eastern Range where the surrounding countryside is characterized as being gently undulating. Elevation at the NorthMet Project site is about 1,600 ft asl (1,000 ft above Lake Superior). Much of the region is poorly drained and the predominant vegetation comprises wetlands and boreal forest.

# History

The NorthMet deposit was formally discovered in 1969 during exploration carried out by U.S. Steel. Between 1969 and 1974, U.S. Steel drilled 112 holes for a total of 113,716 ft, producing 9,475 assay intervals which are included in the modern-day NorthMet Project database. Assay data from U.S. Steel core samples was not necessarily collected at the time of the original drilling.

A number of historic mineral resource estimates were completed (U.S. Steel, Fleck Resources, NERCO) prior to PolyMet's acquisition of the NorthMet Project. These resource estimates predate current NI 43-101 reporting standards and the associated resource models, electronic or otherwise, are not available for verification.

There is no historical production data to report for the NorthMet Project.

# **Geological Setting and Mineralization**

# Regional Geology

The NorthMet Deposit is situated on the western edge of the Duluth Complex in northeastern Minnesota. The Duluth complex is a series of distinct intrusions of mafic to felsic tholeiitic magmas that intermittently intruded at the base of a comagmatic volcanic edifice during the formation of the Midcontinental rift system between 1108 and 1098 Ma. The intrusives of the Duluth Complex represent a relatively continuous mass that extends in an arcuate fashion from Duluth to the northeastern border between Minnesota and Canada near the town of Grand Portage. Footwall rocks are predominantly comprised of Paleoproterozoic and Archean rocks, the hanging wall rocks are made up of mafic volcanic rocks and hypabyssal intrusions, and internally scattered bodies of strongly granoblastic mafic volcanic and sedimentary hornfels can be found.

# Local and Property Geology

The NorthMet Deposit is situated within the Partridge River Intrusion ("PRI"). The PRI has been mapped, drilled, and studied in detail because of its importance as a host for copper-nickel ("Cu-Ni") and iron-titanium ("Fe-Ti") deposits. The PRI consists of varied troctolitic and (minor) gabbroic rock types that are exposed in an arcuate shape that extends from the Water Hen (Fe-Ti) deposit in the south to the Babbitt (Cu-Ni) deposit in the North. The PRI is bound on the west by the Paleoproterozoic Virginia Formation (slate and graywacke), and to a lessor extent, the Biwabik Iron Formation ("BIF"). The upper portion of the PRI forms a complex contact an assemblage of

anorthositic, gabbroic, and hornfelsic rocks. This assemblage is also found as large inclusions within the interior of the PRI. The inclusions are thought to represent earlier roof zone screens that were overplated by later emplacement of Partridge River intrusion magmas.

#### Mineralization

The metals of interest at NorthMet are copper, nickel, cobalt, platinum, palladium, silver, and gold. Minor amounts of rhodium and ruthenium are present though these are considered to have no economic significance. In general, except for cobalt and gold, the metals are positively correlated with copper mineralization. Cobalt is well correlated with nickel. Most of the metals are concentrated in, or associated with, four sulfide minerals: chalcopyrite, cubanite, pentlandite, and pyrrhotite, with platinum, palladium and gold also found as elements and in bismuthides, tellurides, and alloys.

Mineralization occurs in four broadly defined horizons or zones throughout the NorthMet property. Three of these horizons are within basal Unit 1, though they likely will not be discriminated in mining. The upper horizon locally extends upward into the base of Unit 2. The thickness of each of the three Unit 1 enriched horizons varies from 5 ft to more than 200 ft. Unit 1 mineralization is found throughout the base of the NorthMet deposit. A less extensive mineralized zone (the copper-rich, sulfur-poor Magenta Zone) is found in Units 4, 5 and 6 in the western part of the NorthMet deposit.

# Deposit Types

The NorthMet deposit is considered a magmatic Copper - Nickel ± platinum group element (PGE) deposit. These are a broad group of deposits containing nickel, copper and PGEs occurring as sulfide concentrations associated with a variety of mafic and ultramafic magmatic rocks. Magmatic Cu-Ni sulfide deposits with or without PGEs account for approximately 60 percent of the world's nickel production. Magmatic Ni-Cu±PGE sulfide deposits are spatially and genetically related to bodies of mafic and/or ultramafic rocks. The sulfide deposits form when the mantle-derived magmas become sulfide-saturated and segregate immiscible sulfide liquid, commonly following interaction with continental crustal rocks.

The NorthMet deposit is a large-tonnage, disseminated accumulation of sulfide in mafic rocks, with rare massive sulfides. Copper to nickel ratios generally range from 3:1 to 4:1. Primary mineralization is probably magmatic, though the possibility of structurally controlled re-mobilization of the mineralization (especially PGE) has not been excluded. The sulfur source is both local and magmatic. Extensive detailed logging has shown no definitive relation between specific rock type and the quantity or grade quality of sulfide mineralization in the Unit 1 mineralized zone or in other units, though local noritic to gabbronoritic rocks (related to footwall assimilation) tend to be of poorer PGE grade and higher in sulfur.

# Exploration

U.S. Steel commenced mapping and ground surveys of the NorthMet Project in 1967 and initiated drilling exploration in 1968. Drilling has been the primary method of exploration at the NorthMet Project; however, 240 geophysical soundings, numerous test pits, and down-hole geophysical testing have been completed to better understand the depth to bedrock and the lithologic contacts.

# Drilling

Prior to PolyMet's involvement in the NorthMet Project, 116 core holes were drilled in the main project area by U.S. Steel and NERCO (see Table 10-1 of the 2018 Technical Report).

PolyMet completed 290 drill holes on the NorthMet Project between 1998 and 2010 totaling 171,332 ft. Of the 290 holes drilled by PolyMet, 52 were drilled using reverse circulation, and 238 are diamond core holes.

From 1998 to 2000, PolyMet drilled 52 vertical reverse circulation (RC) holes to supply material for a bulk sample. A portion of these drill-holes twinned U.S. Steel holes, and others served as in-fill over

the extent of the NorthMet deposit. The RC holes averaged 474 ft, with a minimum of 65 ft and a maximum depth of 745 ft.

The first PolyMet core drilling program was carried out during the later parts of the RC program, with three holes drilled late in 1999 and the remainder in early 2000. There were seventeen BTW (1.65 inch) and fifteen NTW (2.2 inch) diameter holes all of which were vertical. Three RC holes were reentered and deepened with AQ core. Core holes averaged 692 ft in depth, with a minimum of 229 ft and a maximum depth of 1,192 ft. (not including RC holes extended with AQ core). These holes were assayed from top to bottom (with minimal exception) on 5-foot intervals. Samples were split into half core at the PolyMet field office in Aurora, Minnesota.

PolyMet's 2005 drilling program had four distinct goals: collection of metallurgical sample, continued in-fill drilling for resource estimation, resource expansion, and collection of oriented core for geotechnical data. The program included 109 holes totaling 77,165 ft, including:

- 15 one-inch diameter holes for metallurgical samples (6,974 ft) drilled by Boart-Longyear of Salt Lake City (February - March 2005).
- PQ sized holes (core diameter 3.3 inches) totaling 6,897 ft, to collect bulk sample material, and to improve the confidence in the known resource area (February March 2005).
- 52 NTW sized holes (2.2 inches) totaling 41,403 ft for resource definition.
- 30 NQ2 sized holes (2.0 inches) totaling 21,892 ft for resource definition and geotechnical purposes. The NTW and NQ2 size core was drilled in the spring (February-March) and fall (September-December) of 2005.

Roughly 11,650 multi-element assays were collected from the 2005 drilling program. Another 1,790 assays were performed on previously drilled U.S. Steel and PolyMet core during, as well. Of the 109 holes drilled in 2005, 93 were drilled at an angle. The angled holes were aligned on a grid oriented N34W with dips ranging from -60° to -75°. Sixteen NQ2 sized holes were drilled and marked for oriented core at varying dips, for geotechnical assessment across the NorthMet Project.

In 2007, PolyMet conducted two drilling programs, a winter program of 47 holes totaling 19,102.5 ft and a summer program of 14 holes totaling 5,437.5 ft. The initial 16 winter holes were NTW sized, the remaining drill holes from both programs were NQ2 core. Most of these holes were angled to north-northwest (azimuth 326°). The 2007 holes averaged 402 ft in depth, with a minimum of 148 ft and maximum of 768.5 ft.

In 2010, PolyMet conducted a winter drilling program with two objectives:

- Collect detailed geostatistical data across a grid in the initial mining area, and
- Develop a geologic and assay framework around the west margin of the deposit.

Secondary to these purposes was the gathering of approximately ten tons of potential bulk sample material.

The grid area in the planned east pit encompassed 8,720 ft of drilling with 1,664 multi-element assays and the western drilling totaled 11,401 ft with 1,345 samples taken. Grid drilling was sampled by elevations representing bench levels. Data from this was used to establish appropriate sampling protocols during mining.

Assay results in the grid area were consistent with expectations from previous block models. In the west, Unit 1 and Magenta Zone ore grade mineralization continue well outside the planned pit boundaries with the furthest hole in this program 2,600 feet to the west of the planned pit edge.

The drilling exploration conducted by PolyMet is summarized in Table 10-1 of the 2018 Technical Report, and drill hole distribution is shown on Figure 10-1 of the 2018 Technical Report.

Core recovery is reported by PolyMet to be upwards of 99% (see table below) with rare zones of poor recovery. Rock quality designation (RQD) is also very high, averaging 85% for all units, excluding the Iron formation. Experience in the Duluth Complex indicates that core drilling has no difficulty in producing samples that are representative of the rock mass. Rock is fresh and competent and the types of alteration (when observed: sausserization, uralization, serpentinization and chloritization) do not affect recovery.

Unit	Recovery	Recovery Percentage	RQD	RQD
Onit	Count	(%)	Count	Percent
1	8,906	99.9	4,194	91.8
2	1,879	99.5	968	90.3
3	4,374	100	2,632	93.5
4	2,160	100	1,063	96.4
5	1,901	100	838	94.3
6	2,262	100	1,041	94.7
7	951	99.3	396	87.4
Virginia Formation	2,095	99.7	1,069	87.6
Inclusions	62	98.1	57	86.6
Biwabik Iron Formation	381	100	60	79.8
Duluth Complex Average		99.96		92.82

Summary of Core Recoveries and RQD Measurements (includes all drilling through 2010)

# Sample Preparation, Analyses and Security

There are multiple generations of sample analyses that contribute to the overall NorthMet Project assay database:

- Original U.S. Steel core sampling, by U.S. Steel, 1969-1974
- Re-analysis of U.S. Steel pulps and rejects, selection by Fleck and NRRI, 1989-1991
- Analysis of previously un-sampled U.S. Steel core, sample selection by Fleck and NRRI in 1989-1991, and 1999-2001
- Analysis of 2 of the 4 NERCO drill-holes, 1991
- PolyMet RC cuttings, 1998-2000
- PolyMet core, 2000, 2005, 2007, and 2010

The laboratories utilized by U.S. Steel were not independent of the company, and no information regarding accreditation is available. All the labs that have provided analytical testing for PolyMet were or currently are fully accredited, independent, commercial labs that are not related to any of the exploration companies or any of its directors or management.

PolyMet's drill hole and assay database is administered by the Company's geologic staff from the operational headquarters in Hoyt Lakes. PolyMet uses Excel and Gemcom GEMS to manage the geologic data. Paper logs are available at the operational headquarters.

There is no documentation indicating sample handling protocols at drill sites, and only limited documentation of sample handling between the drill site and assay laboratory for programs conducted by U.S. Steel and NERCO.

Employees of PolyMet (or its predecessor, Fleck Resources) have been either directly or indirectly involved in all sample selection since the original U.S. Steel sampling. Sample cutting and preparation of core for shipping has been done by PolyMet employees or contract employees. Reverse circulation sampling at the rig was done by, or in cooperation with, PolyMet employees and the drilling contractor.

The diamond drillers remove the drill core samples from the rods and place them into covered core boxes. PolyMet representatives collect the trays and transport them to the core storage facility located near the processing plant each day where the core is inventoried prior to processing. Once the geologist is ready to log the hole, the core trays are laid out on core logging tables where all logging takes place prior to sampling.

Drill core samples are placed into plastic sample bags, sealed, and placed into a cardboard box. The cardboard box is sealed shut with tape and couriered to the laboratory. Once the laboratory has accepted delivery of the samples they remain under the control of the laboratory.

The RC holes were assayed on 5-ft intervals. Six-inch RC drill-holes produced about 135 lb to 150 lb of sample for every 5 feet of drilling. This material was split using a riffle splitter into two samples and placed in plastic bags and stored underwater in five-gallon plastic buckets. A 1/16th sample was taken by rotary splitter from each 5-ft interval of chip sample for assay. The assay values were used to develop a composite pilot plant sample from bucket samples. Actual compositing was completed after samples had been shipped to Lakefield. A second 1/16th sample was sent to the Minnesota Department of Natural Resources for their archive.

There are 5,216 analyses from the RC drilling in the current PolyMet database. RC sample collection involved a 1/16 sample representing each five-foot run. These were sent to Lerch for preparation, and then sent to ACME or Chemex for analysis.

Chip samples were collected and logged at the PolyMet office and are currently retained at the PolyMet warehouse. While the chip sample logging is less precise than logging of core samples, the major silicate and sulfide minerals are identifiable, and the location of marker horizons can be derived based on the composition of the individual samples. The underlying metasedimentary rocks (Virginia Formation) are readily recognized in chip sample, and the base of the NorthMet Deposit is relatively easy to define. Where rock recognition is difficult, the higher zinc content of the footwall rocks is used to help define the contact.

PolyMet geologists log all drill cores at the core storage facility located near the processing plant. The geologists record information for each drillhole including the hole number, azimuth, total depth, coordinate datum, drilling company, hole logger, start and end of drilling dates, rock codes, and a written description of stratigraphy, alteration, texture, mineralogy, structure, grain size, ground conditions, and any notable geologic features. The rock quality designation (RQD) and recovery percentage are also recorded.

Sample intervals are determined by the geologist with respect to stratigraphy, mineralization, and sulfide content, otherwise a standard 10-ft interval is sampled. Zones of increased sulfide mineralization >2.5 ft are sampled down to 5-ft intervals. Core within Unit 1 is sampled on 5-ft intervals. Core samples are cut to  $\frac{1}{4}$  or  $\frac{1}{8}$  of the total core with a diamond bladed saw by trained personnel following written procedures. Each sample is placed in a numbered plastic sample bag with the corresponding sample number tag and placed in a cardboard box for transport to the laboratory. All QA/QC samples are inserted into the sample stream prior to shipment.

# Sample Preparation

Samples were prepared for analysis at Lerch, Acme, or Chemex facilities. In general, all the facilities followed a similar preparation procedure. Samples were crushed to an approximate -10 mesh, prior to being reduced to a 250-gram split for pulverization (149 to 106  $\mu$ m range). Pulps were split again to separate a sample for the following analyses:

- Base metals (Cu, Co, Mo, Ni and Zn) Four-acid digestion with ICP-AES finish,
- Base metals (Ag, Cu, Co, Mo, Ni and Zn) Aqua Regia digestion with ICP-AES finish,
- PGEs (Au, Pt and Pd) 30 gm fire assay with ICP-AES finish, and
- Total Sulphur by LECO furnace.

Select core samples were crushed to -1/2 inch and placed in a poly bottle, purged with nitrogen, and capped and sealed for special metallurgical and environmental analysis.

# Quality Assurance/Quality Control Procedures

QA/QC samples used by PolyMet include blanks, standards and field duplicates. PolyMet inserts QA/QC samples into the sample stream at the following frequencies:

- Insertion of coarse blank every 40 samples;
- Insertion of Standard Reference Material (SRM) every 40 samples; and
- Submission of duplicate 1/4 or 1/8 of the drill core every 40 samples.

# Core Storage and Sample Security

The U.S. Steel core has been stored, either at the original U.S. Steel warehouse in Virginia, Minnesota during drilling, or more recently at the CMRL (now a part of the University of Minnesota). Core has been secured in locked buildings within a fenced area that is locked at night where a key must be checked out. The NERCO BQ size core is also stored at this facility.

The PolyMet core and RC reference samples were stored in a PolyMet leased warehouse in Aurora, Minnesota during drilling and pre-feasibility. Core and samples were then moved in 2002 to a warehouse in Mountain Iron, Minnesota where they remained until 2004. They were then moved to a warehouse at the Erie Plant site in Hoyt Lakes. Access to this warehouse is limited to PolyMet employees.

# Opinion on Adequacy

Hard Rock Consulting (HRC), an independent consulting firm retained by PolyMet, concluded that the sample preparation, security and analytical procedures are correct and adequate for the purpose of the 2018 Technical Report. The sample methods and density were appropriate, and the samples were of sufficient quality to comprise a representative, unbiased database.

# **Data Verification**

The NorthMet mineral resource estimate is based on the exploration drill-hole database available as of April 17, 2014. Drill hole data including collar coordinates, down-hole surveys, sample assay intervals, and geologic logs were provided by PolyMet in Microsoft Excel spreadsheets. The database was reviewed and validated by HRC prior to estimating mineral resources. The NorthMet database includes 114 (116) historic drill holes, 323 PolyMet drill holes, 240 vertical sounding holes, 15 depths to bedrock test pits, and 47 geologic holes from the surrounding area. Of the 739 drill holes, only 437 drill holes were used in the estimation, although many of the 437 holes include only select analytical information. The database was validated using Leapfrog Geo 3D® Version 2.0.0 software. Validation checks performed prior to loading the database into Datamine's Studio 3 Version 3.24.25.0 mining software included:

- No overlapping intervals,
- Down-hole surveys at drill-hole collar,
- Consistent drill-hole depths for all data tables, and
- Gaps in the "from to" data tables.

The analytical information used for the resource estimate includes copper, nickel, platinum, palladium, gold, silver, cobalt and sulfur. All assay values Below Detection Limits (BDL) were assigned a value of one half of the detection limit, and missing or non-sampled intervals were assigned a value of zero (0).

HRC reviewed PolyMet's check assay programs and considers the programs to provide adequate confidence in the data. Samples that are associated with QA/QC failures were reviewed and reanalyzed as necessary.

Exploration drilling, sampling, security, and analysis procedures were conducted in a manner that meets or exceeds industry standard practice. All drill cores and cuttings from PolyMet's drilling have been photographed. Drill logs have been digitally entered into an exploration database organized and maintained in Gemcom. The split core and cutting trays have been securely stored and are available for further checks.

# Mineral Processing and Metallurgical Testing

The NorthMet Deposit is hosted in the Duluth Complex in northeastern Minnesota. A significant amount of metallurgical test work has been conducted on the Duluth Complex; therefore, the general metallurgy of the complex is fairly well understood.

Orway Mineral Consultants (OMC) in 2014 studied SAG Mill based comminution circuits for the NorthMet Project. This was done to assess if a SAG Mill based circuit would be practical for the NorthMet Project and capable of rationalizing the existing 4-stage crushing circuit (total of 11 crushers) and 12 lines of Rod Mill + Ball Mill grinding circuits in the existing Erie concentrator. Comminution test work results from SGS were interpreted by OMC and used to scope out a SAG mill based comminution circuit to process 32,000 STPD. Further comminution test work was conducted by Hazen Research (Golden, Co.) in 2015 to confirm the comminution parameters.

The development of the current NorthMet flotation process flowsheet was based on test work (SGS, 2015) and includes the following:

- Flotation Test work conducted by SGS Lakefield (SGS) between 1998 and 2014, and
- Supplementary flotation test work conducted by SGS in 2015 and interpreted by Eurus Mineral Consultants (EMC) for circuit modeling and flotation plant design.

SGS conducted extensive flotation test work up until 2010. The work covered by SGS included significant amounts of batch and rate flotation test work on a number of samples provided by PolyMet. A flotation process block flow diagram was developed from the results and observations of the initial batch test work conducted by SGS. The process block flow diagram shown in Figure 13-1 in the 2018 Technical Report can be summarized into three main circuits as follows:

- The Bulk Copper-Nickel Flotation circuit
- The Copper-Nickel Separation Circuit
- The Pyrrhotite Flotation Circuit

Pilot scale test work was conducted by SGS to demonstrate the flowsheet developed for the NorthMet process. The results of the pilot test work are also included in the SGS report.

Additional flotation test work was requested of SGS in 2015 to fill in gaps in the flotation test work. EMC conducted a flotation circuit simulation of the process flow based on the results obtained from both SGS's batch and pilot scale test work. The work that EMC conducted was initially targeted at simulating the pilot plant, and then to producing full production scale results. EMC's simulations were based on a throughput of 32,000 STPD. The results of the simulations were used to review the previous design and update the current process plant design basis and criteria.

A second pilot plant program was carried out by SGS in 2009 to investigate hydrometallurgical processes.

# Mineral Resource Estimates

Zachary J. Black, RM-SME, of Hard Rock Consulting, LLC ("HRC") is a Qualified Person as defined by NI 43-101 for mineral resource estimation and classification. HRC estimated the mineral resource

for the NorthMet Project from drill-hole data constrained by geologic boundaries using an Ordinary Kriging ("OK") algorithm.

The NorthMet Deposit was divided into eight units for geological modeling: the Biwabik Iron Formation including banded iron formation, sedimentary marine rocks of the Virginia Formation that overlie the Biwabik Formation, and five distinct units within the Duluth Complex and overburden.

The Magenta Zone, a smaller mineralized zone that cuts through Units 3 through 7 but resides primarily within Units 5 and 6, was modeled from select intercepts provided by PolyMet US. Grades that were estimated include copper, nickel, cobalt, platinum, palladium, gold, silver and total sulfur.

HRC created a rotated three-dimensional (3D) block model in Datamine Studio 3® mining software. The block resource model was estimated using the lithologic boundaries of the Duluth Complex as the basis for an estimation domain. Units 1, 3, 5, 6, 7, the Magenta Zone, and Virginia Formation were all estimated using only samples that resided inside of the defined boundaries. Grades were estimated from 10-foot (ft) down-hole composites using Ordinary Kriging. Composites were coded according to their domain. Each metal was estimated using variogram parameters established by AGP Mining Consultants Inc. (AGP) in 2013, which were re-evaluated by HRC and deemed acceptable for use in the current mineral resource estimation.

The mineral resources reported herein are classified as Measured, Indicated and Inferred in accordance with standards defined by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") and prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on May 10, 2014. Each individual mineral resource classification reflects an associated relative confidence of the grade estimates.

The mineral resources estimated for the NorthMet Project includes 649.3 million tons of Measured and Indicated resources and 508.9 million tons Inferred resources. The resource has been limited to the material that resides above the optimized pit shell. All mineralization below the optimized pit shell has been excluded from any resource classification and is not considered to be part of the mineral resource.

The mineral resource estimate for the NorthMet Project is summarized in the below table. This mineral resource estimate includes all drill data obtained as of January 31, 2016 and has been independently verified by HRC. The Measured and Indicated mineral resources are <u>inclusive</u> of the mineral reserves. Inferred mineral resources are, by definition, always additional to mineral reserves.

		Grades (UnDiluted)														
Class	Tonnage (Mt)	Copper	Nickel	Platinum	Palladium	Gold	Cobalt	Silver	NSR	Cu- EQ						
		(%)	(%)	(ppb)	(ppb)	(ppb)	(ppm)	(ppm)	\$/ton	(%)						
Measured	237.2	0.270	0.080	69	241	35	72	0.97	19.67	0.541						
Indicated	412.2	0.230	0.070	63	210	32	70	0.87	16.95	0.470						
M&I	649.3	0.245	0.074	65	221	33	71	0.91	17.94	0.496						
Inferred	508.9	0.240	0.070	72	234	37	66	0.93	17.66	0.489						

Source: Hard Rock Consulting, LLC, January 2018 \*Notes:

1. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

2. All resources are stated above a \$7.35 NSR cut-off. Cut-off is based on estimated processing and G&A costs. Metal Prices and metallurgical recoveries used for the development of cut-off grade are presented in Table 14-33 of the 2018 Technical Report.

3. Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.

4. Cu-Eq (copper equivalent grade) is based on the mill recovery to concentrates and metal prices (see Table 14-33 of the 2018 Technical Report).

5. Copper Equivalent (Cu Eq) = ((Cu head grade x recovery x Cu Price)) + (Ni head grade x recovery x Ni Price) + (Pt head grade x recovery x Pt Price) + (Pd head grade x recovery x Pd Price) + (Au head grade x recovery x Au Price) + (Co head grade x recovery x Co Price) + (Ag head grade x recovery x Ag Price)) / (Cu recovery x Cu Price).

# **Mineral Reserve Estimates**

Proven and Probable Mineral Reserves of 254.7 million tons are reported for the NorthMet Project within the final pit design used for the mine production schedule and shown in the below table. All inferred material was classified as waste and scheduled to the appropriate waste stockpile. The final mineral reserves are reported using a \$7.98 NSR cut-off inside the pit design using the diluted grades. Both the mineral resource and mineral reserve estimates take into consideration metallurgical recoveries, concentrate grades, transportation costs, smelter treatment charges and royalties in determining NSR values. The below table also shows the mineral reserves by classification category and grade. The Qualified Person responsible for the Mineral Reserve estimate is Herb Welhener, Vice President of IMC.

Class	Tonnogo	Grades (Diluted)														
		Copper	Nickel	Platinum	Palladium	Gold	Cobalt	Silver	NSR	Cu-Eq						
	(X 1,000)	(%)	(%)	(ppb)	(ppb)	(ppb)	(ppm)	(ppm)	\$/ton	(%)						
Proven	121,849	0.308	0.087	82	282	41	74.81	1.11	19.87	0.612						
Probable	132,820	0.281	0.081	78	256	37	74.06	1.02	18.02	0.559						
Total	254,669	0.294	0.084	80	268	39	74.42	1.06	18.90	0.584						

\*Notes:

1. Mineral reserve tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding

2. All reserves are stated above a \$7.98 NSR cutoff and bound within the final pit design.

- 3. Tonnage and grade estimates are in Imperial units
- 4. Total Tonnage within the pit is 628,499 ktons; average waste: ore ratio = 1.47

5. Cu-Eq values are based on the metal prices in Table 15-2 of the 2018 Technical Repot and total mill recoveries in Table 15-3 of the 2018 Technical Report and diluted mill feed.

- 6. Copper Equivalent (CuEq) = ((Cu head grade x recovery x Cu Price) + (Ni head grade x recovery x Ni Price) + (Pt head grade x recovery x Pt Price) + (Pd head grade x recovery x Pd Price) + (Au head grade x recovery x Au Price) + (Co head grade x recovery x Co Price) + (Ag head grade x recovery x Ag Price)) / (Cu head grade x recovery x Cu Price) x Cu Price)
- 7. NSR values include post property concentrate transportation, smelting and refining costs and payable metal calculations.

# **Mining Methods**

# Open Pit Mine Plan

The NorthMet Project contains mineralization at or near the surface that is ideal for open pit mining methods.

Mining is planned on a 7 day per week schedule, with two 12-hour shifts per day. There will be four crews planned to cover the rotating schedule. The mine plan includes 225 million tons of ore at an overall strip ratio of 1.6:1. Mining is planned in three pits: The East Pit, the Central Pit, and the West Pit. As mining of the Central Pit commences, it will extend into the East Pit, thereby joining the pits. The combined pit will be referred to as the East Pit.

The method of material transport evaluated for the 2018 Technical Report is open pit mining using two 36.6-yd3 hydraulic front shovels as the main loading units with a 22.5-yd3 front end loader as a backup loading unit. The material will be loaded into 240-ton haul trucks and the ore will be hauled to the rail transfer hopper for rail haulage to the mill or ore surge pile (OSP) areas, and the waste rock to waste stockpiles or pit backfills.

During the first half of the operation, the more reactive waste rock mined will be placed in two temporary stockpiles (one west of the East Pit referred to as the Category 4 Stockpile, and one south of the East Pit referred to as the Category 2/3 Stockpile), and the least reactive waste rock will be placed in a permanent stockpile north of the West Pit (referred to as the Category 1 Stockpile). Once mining is completed in the East Pit, the more reactive waste rock mined will be placed directly in the East Pit as backfill. The more reactive waste rock in the Category 4 Stockpile (in the location of the

future Central Pit) will then be relocated as backfill into the East Pit, thus clearing the area for mining of the Central Pit. the Category 2/3 Stockpile will then be moved into the East Pit as backfill. Once mining is completed in the Central Pit, waste rock will be backfilled into that pit, too. By the end of the mine life, all of the more reactive waste rock will be placed as backfill in the pits. As the least reactive waste rock is mined, it will be placed in the permanent Category 1 Stockpile or in the East and Central Pits as backfill. The three mine pits will flood with water after mining and backfilling are completed, which results in the more reactive waste rock being permanently disposed of subaqueously. The general Mine Site layout, including pits, waste rock stockpiles, ore surge pile, rail transfer facility, and overburden storage and laydown area are shown on Figure 16 1 in the 2018 Technical Report.

# Pre-Production Development

The preproduction mine development will be carried out by contractors until bedrock has been uncovered. Clearing, grubbing and harvesting of marketable timber and biomass will be completed as part of Mine Site development and mining. The surface overburden consists of glacial till and peat. Final pre-stripping overburden bank slopes will be maintained at a slope that is not steeper than 2.5H:1V. Excavated peat will be stockpiled in the OSLA or near construction footprints until it can be reused for construction and other on-site reclamation. The remaining glacial till fraction of the overburden will also be removed from the pit footprints and, where necessary, within the stockpile liner footprints, separated based on being saturated or unsaturated, and hauled to the appropriate construction or disposal areas.

Pre-production mine development will utilize on-site construction materials, where possible, including overburden materials and Category 1 waste rock, once available. Additional construction materials will be obtained, as approved by the MDNR. Potential construction materials include waste rock from the state-owned waste rock stockpile located approximately 5 miles west of the Mine Site along Dunka Road, and possibly waste rock and overburden from the inactive (LTVSMC) Area 5 Mine Site to the north and east of the FTB.

Before mining operations can begin, the Mine Site infrastructure, facilities and water management systems must be developed. Mine Site development will take 18-24 months.

# Production Schedule

The production schedule for the NorthMet Project is driven by the nominal ore rate of 32,000 STPD equivalent to 11.6 million tons per annum (average of 362.5 days per year, or 99% availability) with a 20-year mill life. Mining is planned on a 7 day per week schedule, with two 12-hour shifts per day. The mine plan includes 225 million tons of ore and an overall strip ratio of 1.6:1. The production schedule has been calculated on an annual basis for the life of the mine.

The cutoff grade used for the mine schedule is based on the NSR values assigned to the block model described in Section 15.1.3 of the 2018 Technical Report. The NSR value is based on the diluted metal grades and the dilution approach is described in Section 15.1.2 of the 2018 Technical Report. An elevated cutoff is used in the early mining years to achieve a higher metal content in the mill feed tonnage. Material below mill cutoff is temporarily stockpiled for processing later in the mill schedule. The cutoff to the OSP is \$8.50/t NSR and includes the tonnage between the mill cutoff NSR used in a particular year and the \$8.50/t NSR stockpile cutoff value. The NSR cutoff ranges between \$14.00/t to \$10.00/t during years 1 through 10 and then is \$7.98/t for years 11 through 18. The cutoffs for the mill ore are shown in the below table as part of the annual production schedule. The \$7.98/t NSR cutoff covers the cost of processing, site G&A and waste water treatment on a per ton of ore basis.

The Life of Mine (LOM) schedule was developed on an annual basis for all years. Milling of the mined ore begins in month four of Year 1 and ramps up to full production; a total of 7.250 Mt are milled during Year 1, approximately 63% of a full year's production rate. The yearly mine production schedule showing ore and waste tonnages is presented in the below table.

# Yearly Mine Production Schedule

		Total	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
<b>Ore Mined</b> ktons DCu, % DNi, % Cu-Eq Mill, %	NSR cutoff>	198,867 0.311 0.088 0.617		14.00 7,250 0.348 0.103 0.688	14.00 11,600 0.358 0.105 0.712	14.00 11,600 0.355 0.095 0.716	13.00 11,600 0.334 0.087 0.674	11.00 11,600 0.334 0.086 0.662	11.00 11,600 0.333 0.089 0.664	12.00 11,600 0.334 0.097 0.664	11.00 11,600 0.314 0.093 0.619	9.00 11,600 0.300 0.085 0.597	9.00 11,600 0.280 0.083 0.555	7.98 11,600 0.273 0.082 0.559	7.98 11,600 0.268 0.083 0.562	7.98 11,600 0.274 0.083 0.548	7.98 11,600 0.275 0.081 0.540	7.98 11,600 0.287 0.080 0.563	7.98 11,600 0.292 0.081 0.564	7.98 11,600 0.322 0.088 0.613	7.98 6,017 0.345 0.094 0.650		
Ore to Stockpile (8.50/t NSR cutoff) ktons DCu, % DNi, % CuEq Mill, %		26,133 0.171 0.058 0.348		2,364 0.182 0.064 0.364	4,487 0.184 0.062 0.364	5,254 0.182 0.057 0.370	3,882 0.171 0.055 0.355	1,512 0.153 0.052 0.324	1,799 0.160 0.054 0.324	3,170 0.164 0.059 0.335	2,805 0.157 0.058 0.322	383 0.137 0.052 0.293	477 0.137 0.053 0.292										
Ore from Stockpile ktons DCu, % DNi, % Cu-Eq Mill, %		26,133 0.171 0.058 0.348																			5,583 0.171 0.058 0.348	11,600 0.171 0.058 0.348	8,950 0.171 0.058 0.348
<b>Mill Feed</b> ktons DCu, % DNi, % CuEq Mill, %		225,000 0.295 0.085 0.586		7,250 0.348 0.103 0.688	11,600 0.358 0.105 0.712	11,600 0.355 0.095 0.716	11,600 0.334 0.087 0.674	11,600 0.334 0.086 0.662	11,600 0.333 0.089 0.664	11,600 0.334 0.097 0.664	11,600 0.314 0.093 0.619	11,600 0.300 0.085 0.597	11,600 0.280 0.083 0.555	11,600 0.273 0.082 0.559	11,600 0.268 0.083 0.562	11,600 0.274 0.083 0.548	11,600 0.275 0.081 0.540	11,600 0.287 0.080 0.563	11,600 0.292 0.081 0.564	11,600 0.322 0.088 0.613	11,600 0.261 0.077 0.505	11,600 0.171 0.058 0.348	8,950 0.171 0.058 0.348
Waste, ktons Cat 1 Cat 2 Cat 3 Cat 4	Total	348,823 212,065 95,980 23,490 17,288		25,868 16,686 4,029 1,200 3,953	23,913 13,409 5,191 1,713 3,600	20,204 13,462 4,814 821 1,107	24,518 18,810 4,740 810 158	26,888 20,864 4,830 979 215	26,601 20,088 4,978 1,166 369	17,142 10,802 4,792 1,094 454	16,743 7,235 7,307 1,435 766	18,379 10,477 5,571 1,710 621	19,923 11,283 5,740 2,020 880	20,400 12,180 5,637 2,023 560	17,280 10,462 4,591 1,623 604	15,509 8,637 4,601 1,576 695	16,440 8,939 5,425 1,351 725	15,085 7,730 6,104 954 297	16,433 8,177 6,838 1,143 275	18,030 9,222 6,895 851 1,062	9,467 3,602 3,897 1,021 947	0	
Total ktons mined	573,823			35,482	40,000	37,058	40,000	40,000	40,000	31,912	31,148	30,362	32,000	32,000	28,880	27,109	28,040	26,685	28,033	29,630	15,484	0	0
Re-handle, ktons Stockpiled ore to mill Waste rock to pit backfill	26,133 60,521			0	0	0	0	0	0	0	0	0 7,384	0 7,385	0 2,000	0 2,000	0 2,000	0 1,000	0 3,021	0 2,812	0 1,000	5,583 10,000	11,600 18,270	8,950 3,649
Total ktons moved	660,477		Year -1	35,482 <b>Year 1</b>	40,000 <b>Year 2</b>	37,058 <b>Year 3</b>	40,000 <b>Year 4</b>	40,000 <b>Year 5</b>	40,000 <b>Year 6</b>	31,912 <b>Year 7</b>	31,148 <b>Year 8</b>	37,746 <b>Year 9</b>	39,385 <b>Year 10</b>	34,000 <b>Year 11</b>	30,880 <b>Year 12</b>	29,109 <b>Year 13</b>	29,040 <b>Year 14</b>	29,706 <b>Year 15</b>	30,845 <b>Year 16</b>	30,630 Year 17	31,067 <b>Year 18</b>	29,870 <b>Year 19</b>	12,599 <b>Year 20</b>

# Water Management System

Water at the NorthMet Mine Site will be segregated as mine water and stormwater. Mine water is defined for the NorthMet Project as water that has contacted surfaces disturbed by mining activities, such as drainage collected on stockpile liners, pit dewatering water, saturated overburden dewatering water, and runoff contacting ore, waste rock, and Mine Site haul road surfaces. Mine water is collected by mine water management systems at the Mine Site. Mine water runoff from the overburden storage and laydown area or saturated overburden will be routed to the FTB or used to backfill the East Pit during later years of the operation. The rest of the mine water would go through treatment by chemical precipitation or membrane separation treatment prior to discharge to the FTB or, after closure, to the Mine Site.

Water at the Plant Site will also be segregated into process water and stormwater. Water collected in the FTB seepage capture systems will be routed to the FTB or WWTS for treatment by membrane separation prior to discharge to wetlands downstream of the FTB seepage capture systems.

Stormwater includes runoff that has not been exposed to active mining activities and includes non-contact, industrial, and construction storm water. These include runoff from natural, stabilized, or reclaimed surfaces, or construction areas consisting primarily of unsaturated overburden or peat. Once areas are reclaimed, runoff is considered stormwater. Stormwater is routed to sedimentation ponds prior to discharge off-site to tributaries to the Partridge River.

A diagram of the Process Plant Water Balance is included in Figure 16-4 in the 2018 Technical Report.

# Railroad

PolyMet will utilize existing, private railroad infrastructure to transport ore from the Mine Site to the Coarse Crusher at the Plant Site, receive incoming process consumables and supplies and to stage outgoing railcars containing the final products on common carrier Canadian National (CN) track for shipping. The existing private railroad infrastructure was constructed by the original operator, Erie Mining Company, and consisted of two railroads; one for hauling run-of-mine ore from the operating pits to the Coarse Crusher and the second for hauling the product, taconite pellets, to Taconite Harbor on Lake Superior. To insure consistent operations, it was critical to the previous site operators that the two railroads were reliable, therefore the railroad infrastructure was well maintained. The track to be used by PolyMet for ore haulage between the Mine Site and the Plant Site is 136-pound per yard (#) and 140# rail, with much of the 140# rail being welded. In 1999 a major railroad tie replacement program took place. PolyMet has agreements in place with Cliffs Erie as part of its contract for deed arrangements with Cliffs Erie to utilize the existing railroad lines that will continue to be owned by Cleveland Cliffs.

Two new segments of railroad tracks will be constructed and an ore storage and loading pocket, also known as the rail transfer hopper, will be re-constructed at the Mine Site. The rail transfer hopper is the transfer point where the run-of-mine ore is placed into the side dump rail cars for hauling to the Coarse Crusher.

In addition to the railroads and the loading pocket, infrastructure such as fueling stations, sand towers and maintenance facilities, are in place and will be refurbished and returned to service by PolyMet.

# **Recovery Methods**

# Plant Design

The NorthMet Project plant design is based on utilizing as much of the existing infrastructure as feasible, while ensuring a safe and cost effective operating philosophy by incorporating the latest technology.

The original plan for refurbishing the existing Erie plant comminution circuit was reviewed and the following was taken into consideration:

- The existing circuit design and equipment is more than 50 years old
- The plant has been idle for more than 15 years
- The complex's operational and maintenance requirements associated with running a tertiary and quaternary crushing circuit as well as 12 milling streams
- The large number of transfer points associated with the above

Based on this, the viability of replacing the existing milling circuit with larger, modern mills capable of handling the throughput requirements through a single stream was investigated. A single stream SAG and ball mill circuit with a pebble crusher would mean significant changes to the layout within the concentrator building, but has the following benefits:

- Tertiary and quaternary crushing would no longer be required. This eliminates a large portion of the current circuit which is highly maintenance intensive, and also requires significant dust control measures and building heating requirements.
- The ore storage bin operating and discharge methodology would be changed to allow a greater volume of the bin to be used, while also reducing the number of operating transfer points. This would significantly reduce the dust emissions within the concentrator building.
- The new milling circuit would have variable speed control on both mills allowing for greater process control and adaptability to cater to any potential variability in the upstream and downstream process characteristics.
- New larger mills have greater operating efficiencies and less maintenance requirements, therefore reducing operating costs.
- Simplified milling control system as a result of reduced service requirements to the mills. These include process water addition points, lubrication systems monitoring, discharge density and grind size control and ore feed.

Based on all of the above, the decision to change the milling philosophy to incorporate a new semi autogenous ball-mill-crushing (SABC), circuit was made. The concentrator building was modelled to accommodate the new equipment, while ensuring that the building structure remained as per the original design. The new circuit also allowed for the existing electrical rooms, cranes and process water tanks to be utilized.

Existing equipment was analysed to determine its suitability to the new process. Generally, existing equipment that was found to be compatible with the new process design would require refurbishment. Where possible, the original equipment manufacturers (OEMs) were utilised to determine the refurbishment requirements and costs.

Detailed plant models were developed to identify existing infrastructure and to determine the space available for the new process equipment. Figure 17-1 in the 2018 Technical Report illustrates the main buildings that would be utilised in the new plant design.

#### Process Plant Flowsheet Development

The overall plant process flows for the NorthMet Project are shown in Figure 17 5 in the 2018 Technical Report.

# Hydrometallurgical Processing

PolyMet's previous hydrometallurgical recovery process design included two autoclaves and a copper solvent extraction/electrowinning ("SX-EW") circuit to produce copper metal. In addition, the process included the precipitation processes of nickel-cobalt hydroxide and precious metals as value-added by-products.

PolyMet has now simplified this metallurgical process to recover base metals, gold and PGMs. PolyMet intends to construct the plant in two phases:

- Phase I: The Beneficiation Plant consisting of crushing, grinding, flotation, concentrate thickening and concentrate filtration. The Beneficiation Plant will produce and market concentrates containing copper, nickel, cobalt and precious metals.
- Phase II: In mine year 2, a hydrometallurgical plant is expected to be commissioned to process nickel sulfide and pyrrhotite concentrates, with processing starting in mine year 3. This concentrate stream will be processed through a single autoclave to recover high-grade copper concentrate, and recover the nickel-cobalt hydroxide and precious metals precipitates as by-products.

The advantages of the phased approach to building the complete plant is to delay capital expenditure by deferring the hydrometallurgical plant. This deferral of costs reduces capital-at-risk in the initial years of production of the NorthMet deposit.

# Water Management

Water will be consumed at the NorthMet Plant Site in both the Beneficiation Plant and the Hydrometallurgical Plant. For the most part, water operations within these two plants would be independent of each other. The only exceptions would be the transfer of flotation concentrates from the Beneficiation Plant to the Hydrometallurgical Plant and the combining of filtered copper concentrate and solution from Au/PGM Recovery in the Copper Concentrate Enrichment process step.

All water that enters the Hydrometallurgical Plant will be recycled at each step of the process. The average annual water demand for the Hydrometallurgical Plant is estimated at 240 gpm, but may vary from 114 to 406 gpm monthly as operating and climatological variations occur. To the extent possible, water used to transport residue to the tailing facility would be returned to the Hydrometallurgical Plant; however, losses may occur via evaporation and storage within the pores of the deposited residue. In addition, spilled fluids will be returned to the appropriate process streams.

# Project Infrastructure

The NorthMet Project has a large amount of existing infrastructure that is well established but requires modifications and refurbishment to support the process application. The existing usable infrastructure includes the following:

- 138 kV incoming HV power supply from the Minnesota Power grid
- Power distribution to the existing facilities
- Process plant buildings complete with distribution services
- Administration and site offices
- Site and mine access roads
- Rail network including locomotive services and re-fueling facilities
- Natural gas supply
- FTB with return water barge and pumps
- Mining and plant workshops

A description of the existing and new infrastructure required for the NorthMet Project, along with details of the work required to bring these facilities into operation, is described in detail in Section 18 of the 2018 Technical Report.

# Market Studies and Contracts

Saleable products from the NorthMet Project will initially be copper and nickel concentrates under the Phase I scenario. These products will be sold to smelting and refining complexes capable of recovering a number of
metals contained in these products. It is estimated copper will contribute 61% of net revenues, nickel 18%, PGMs 18%, cobalt 2%, gold and silver 1%.

Phase II of the NorthMet Project includes construction of a hydrometallurgical facility that will result in upgrading the nickel concentrates into a higher purity nickel-cobalt hydroxide and a precious metals precipitate. Including copper concentrate sales, it is estimated net revenues will comprise copper 54%, nickel 20%, PGMs 22%, cobalt 2% and gold and silver 2%.

PolyMet has entered into a long-term marketing agreement with Glencore AG (Glencore) whereby Glencore will purchase all products (metals, concentrates or intermediate products) on independent commercial terms at the time of sale. Glencore will take possession of the products at site and be responsible for transportation and ultimate sale. Pricing is based on London Metal Exchange with market terms for processing. In the case of copper concentrates, the benchmark is annual Japanese smelter contracts.

#### Environmental Studies, Permitting and Social or Community Impact

The NorthMet Project has undergone extensive state and federal environmental review culminating in publication of the Final Environmental Impact Statement (FEIS) in November 2015. The FEIS concluded that the NorthMet Project could be constructed and operated in a manner that meets both federal and state environmental standards and is protective of human health and the environment. The FEIS provides a detailed description of the NorthMet Project, the potential impacts to the environment, and the associated design and mitigating measures. PolyMet made numerous refinements during the environmental review process to incorporate avoidance or mitigation measures that will produce substantial environmental benefits and other advantages to the NorthMet Project.

PolyMet is in process of obtaining a number of state and federal permits in reliance on the FEIS that will guide PolyMet's construction, operations, reclamation, closure, and post-closure maintenance activities.

#### Environmental Review and Permitting

The United States Forest Service, together with the U.S. Army Corps of Engineers (USACE) and the Minnesota Department of Natural Resources (MDNR) (collectively, the "Co-Lead Agencies") led a joint federal and state environmental review of the NorthMet Mining Project and Land Exchange under the National Environmental Policy Act (NEPA) and the Minnesota Environmental Policy Act (MEPA) over the course of ten years. The United States Environmental Protection Agency (EPA) and tribal authorities were cooperating agencies in the process, and the Minnesota Pollution Control Agency (MPCA) assisted in the preparation of the FEIS. This comprehensive process included multiple rounds of agency, tribal, and public review and comment.

In December 2013, the Co-lead Agencies published the Supplemental Draft EIS. As required, the EPA issued comments on the Supplemental Draft EIS, including an EC-2 rating, which is the highest rating for a proposed mining project in the US known to PolyMet.

The Co-Lead Agencies published the Final Environmental Impact Statement (FEIS) in November 2015. In March 2016, the Minnesota Department of Natural Resources (MDNR) issued a Record of Decision (ROD) concluding that the FEIS addresses the objectives defined in the EIS scoping review, meets procedural requirements, and responds appropriately to public comments. The 30-day period allowed by state law to challenge the ROD passed without any legal challenge being filed.

The USFS completed its administrative review process and issued a Final ROD for the proposed land exchange on January 9, 2017. The USACE will use the analysis developed in the FEIS to prepare a Record of Decision (ROD) for PolyMet's pending CWA Section 404 permit application.

The environmental review process that culminated in the FEIS provides governmental decision makers and the public with information about the potential effects of the NorthMet Project, as well as the mitigation measures that will be taken to eliminate or reduce the effects of the NorthMet Project on the surrounding

environment. As required by NEPA and MEPA, agency decision makers will consider the information in the FEIS before issuing the various permits and approvals needed to build and operate the NorthMet Project.

PolyMet has submitted the permit applications needed for all applicable major state and federal permits. The MDNR and the Minnesota Pollution Control Agency (MPCA) are now proceeding with the permitting processes, which will allow them to determine whether, and on what conditions, to issue state permits for the NorthMet Project. Both agencies issued all major draft state permits by the end of January 2018. The public review and comment periods for those permits presently were completed in mid-March 2018. The agencies will then consider public comments as part of their determinations on whether to issue final state permits.

The below table lists the permits PolyMet has applied for, which agency oversees the permit, and what subjects are covered by the permit.

Permit	Agency	Subject(s) Covered
NPDES/SDS Permit	MPCA	Treated water discharge; groundwater and surface water monitoring; water quality
401 Certification	MPCA	State water quality certification of federal 404 related activities
Air Quality Permit	MPCA	Air emissions; sources and limits
Construction Stormwater Permit	MPCA	Addresses runoff from land-disturbing construction activities
Permit to Mine	MDNR	Construction and development; financial assurance
Dam Safety Permit	MDNR	Construction, operation and maintenance of dams
Public Waters Work Permit	DNR	Construction within a public water
Water Appropriation Permit	MDNR	Water quantity and use
Wetland Replacement Plan	MDNR	Wetland impacts and mitigation
404 Permit	USACE	Wetland impacts and mitigation

### **Permits Under Application**

The NorthMet Project incorporates, consistent with Minnesota policy, the refurbishment and reuse of existing ferrous mining facilities at the Plant Site. These existing ferrous mining facilities remain subject to several permits issued to Cliffs Erie, including a ferrous Permit to Mine for closure activities issued by the DNR and two existing NPDES/SDS permits issued by MPCA for closure purposes. Only portions of these existing permits are applicable to the NorthMet Project, and they also include many facilities and locations that will not be used in the NorthMet Project. The portions of these existing DNR and MPCA permits held by Cliffs Erie that are subject to the NorthMet Project are expected to be either assigned to PolyMet or terminated at or before issuance of the NorthMet permits by DNR and MPCA if those final state permits are issued. The draft permit to mine and NPDES/SDS permit for the NorthMet Project. PolyMet's contract for deed arrangement with Cliffs Erie also address these permitting matters, and release of Cliffs Erie from its existing DNR and MPCA permitting obligations and assumption of those obligations by PolyMet are among the conditions for final closing on the contracts for deed and ultimate conveyance of fee title of certain properties, including the Erie Plant, from Cliffs Erie to PolyMet.

### Baseline Studies

Extensive baseline studies were completed for the NorthMet Project and are described in Section 4 (Affected Environment) of the FEIS. These studies include extensive data on local lakes and rivers, including: meteorological conditions, ground and surface water, wetlands, hydrology, geotechnical stability, waste characterization, air quality, vegetation (types, invasive non-native plants, and threatened and endangered species), wildlife (listed species and species of special concern, species of greatest conservation need and regionally sensitive species), aquatic species (surface water habitat, special status fish and macroinvertebrates), noise, socioeconomics, recreational and visual resources, and wilderness and other special designation areas.

### **Environmental Considerations**

There are no known environmental issues for the NorthMet Project that cannot be successfully mitigated through implementation of the various management plans that have been developed based on accepted scientific and engineering practices. Adaptive management will be employed at the NorthMet Project by using flexible engineering controls that can be adjusted to continue achieving compliance with applicable water quality standards and permit conditions when site-specific conditions vary.

### Waste Management

PolyMet plans to re-use an existing taconite tailings basin for storage of NorthMet's Flotation Tailings. The stability and design of the FTB have been investigated and reviewed by numerous geotechnical consultants, including Barr Engineering, Knight Piésold, Scott Olson (geotechnical professor at the University of Illinois), and Dirk Van Zyl (University of British Columbia). The results and recommendations of these third-party peer reviews have been incorporated into the design and operating plans for the FTB.

The results of PolyMet's waste characterization program were used for multiple purposes in support of the design, environmental review, and permitting of the NorthMet Project. At early stages of Project design, results from the waste characterization program were used to form the conceptual models for metal leaching and potential acid generation from Project materials. The characterization data on mineralogy, petrology, chemistry (including dissolved solids release), acid-base accounting, and static leach tests on Project materials were used to identify the minerals with potential to release metals or acidity during weathering, and the NorthMet Project-specific mechanisms that are expected to consume acidity. Results from the waste characterization program were used to identify the sulfur criteria thresholds used to classify waste rock as part of the NorthMet Project's waste rock management program.

Custom test work on tailings deposition, conducted by Saint Anthony Falls Laboratory, University of Minnesota, informed decisions on management of the Flotation Tailings. Additional custom test work on potential interactions between Flotation Tailings and LTVSMC tailings was used to identify potential chemical interaction, or lack thereof, that would need to be incorporated into predictions of the chemistry of the FTB seepage. In the case of the hydrometallurgical residue, waste characterization results were used to compare leachate chemistry with criteria values for classification of hazardous waste.

In addition to the testing listed above, results from the waste characterization program were used to define input parameters for PolyMet's probabilistic water models developed to predict water quantity and quality at the Mine Site and the Plant Site used for environmental review and permitting. Input parameters from PolyMet's waste characterization program included constituent release rates, concentration caps, constituent flushing loads, time lag to formation of acidic conditions, and parameters that are used to model residual saturation of Flotation Tailings.

#### Water Management

The overall NorthMet Project water management strategy includes reusing water from the Mine Site at the Plant Site, as well as reusing water within various Plant Site facilities, to maximize water recycling and minimize discharges to the environment. Water will be treated using chemical precipitation and/or membrane separation treatment. Treated water discharge will be used to augment streamflow, where needed, in watersheds around the FTB. The NorthMet Project design includes systems for managing and monitoring water to comply with applicable surface water and groundwater quality standards at appropriate compliance points. PolyMet designed the water management systems to achieve compliance based on modeling of expected water quantity and quality (See Section 16.8). The key treatment technologies include membrane filtration and high-density sludge chemical precipitation. Additionally, PolyMet has created adaptive management and contingency mitigation procedures for water management that it will utilize as necessary to maintain regulatory compliance.

#### Air Management

PolyMet will use conventional air pollution control techniques common to mining and other industrial operations. These control techniques include fabric filters, venturi and packed-bed scrubbers, and fugitive dust control procedures at various facilities, locations, and phases within the NorthMet Project to provide levels of emission control that will protect human health and the environment. These control techniques are considered to be state-of-the art with respect to air pollution control.

The MPCA, pursuant to its authority under state law and under the federal CAA as delegated by the USEPA, will be responsible for the air permitting for the NorthMet Project. PolyMet's draft air permit contains achievable terms and conditions to protect human health and the environment as applicable to air quality management.

#### Land Management

PolyMet has control of the mineral rights necessary for the NorthMet Project. Control of the surface rights at the Mine Site is the subject of the land exchange with the USFS. As noted above, the USFS issued its Record of Decision (ROD) to transfer title to PolyMet on January 9, 2017, with the administrative title transfer process underway. Pending litigation could affect the title transfer process.

#### Treaties and Indigenous Groups

The NorthMet Project area is located within the territory ceded by the Chippewa of Lake Superior to the United States in 1854. The Chippewa hunt, fish, and gather on lands in the 1854 Ceded Territory. Harvest levels and other activities are governed by either individual tribal entities (in the case of the Fond du Lac Band) or the 1854 General Codes and subsequent Amendments under the 1854 Treaty Authority (in the case of the Grand Portage and Bois Forte bands). Pursuant to Section 106 of the National Historic Preservation Act, the federal Co-lead Agencies identified several historic properties in consultation with the State Historic Preservation Office (SHPO), Bands, and PolyMet. A Memorandum of Agreement under Section 106 was signed by PolyMet, USFS, USACE, and SHPO in December 2016.

#### Closure Plan and Financial Assistance

PolyMet plans to build and operate the NorthMet Project in a manner that will facilitate concurrent reclamation, in order to minimize the portion of the NorthMet Project that will need to be reclaimed at closure.

The overall objectives of the Closure Plan are to meet the following criteria:

- The closed Mining Area or portion is safe, secure, and free of hazards,
- It is in an environmentally stable condition, and
- It minimizes hydrologic impacts and the release of hazardous substances that adversely affect natural resources; and it is maintenance free

Before a final Permit to Mine can be granted, financial assurance instruments covering the estimated cost of reclamation, should the mine be required to close in the upcoming year, must be submitted and approved by the MDNR. Minnesota Rules require PolyMet to annually update its financial assurance. These costs have been accounted for in the overall project economics. The draft permit to mine includes detailed conditions regarding the financial assurance that will be required in connection with the final permit to mine, if it issued, and possible future changes to the financial assurance, including possible changes based on any revisions to applicable law or to the mining plans.

Under Minnesota law, the reclamation cost estimates that form the basis of the financial assurance will be updated annually. This process acknowledges possible future changes to the financial assurance, including possible changes based on any revisions to applicable law or to the mine plan. For purposes of the 2018 Technical Report, PolyMet has assumed that the Minnesota water quality standards governing sulfate in wild rice water will be revised, as required by law, after the NorthMet Project is in operations.

### Capital and Operating Costs

Capital and operating costs for the PolyMet project were developed and estimated based on feasibility-level design and engineering performed by Senet, Barr, IMC, Krech Ojard (KO) and M3. Site inspections were conducted (with vendors where possible) to evaluate the condition of the plant, the mine and the equipment.

### Capital Cost Estimates

The capital cost estimate is divided into the following major sections:

- Mine CAPEX which includes cost estimates for mine site development and major mining equipment costs,
- Mine ore loadout and mine and plant railroad refurbishment costs,
- Comminution, processing, utilities and plant refurbishment costs,
- Costs to build out the existing tailings basin, and
- Costs for water treatment and water management.

The capital cost estimate is based on the following assumptions:

- The NorthMet Project utilizes a 20-year LOM plan.
- It isn't anticipated that final operating permits will result in any material changes to mine or plant design.
- Most of the process equipment would be procured and fabricated in the US and is transportable to site by road or rail.

The below table depicts the initial direct capital requirement for the development of the NorthMet Project. This estimate includes capital costs compiled by the firms associated with numerous scopes of work for the mine, mine equipment and refurbishing the Erie Plant (Phase I) which have been escalated to reflect Q4 2017 pricing.

Description	PHASE I
***DIRECT COST***	(\$000)
MINE CAPEX	
Mine Site	65,395
Construction Material Testing	1,490
Mine Equipment	99,710
RAILROAD AND ORE DELIVERY	20,200
COMMINUTION	135,013
COPPER & NICKEL CONCENTRATION	120,609
CONCENTRATES LOADOUT FACILITIES	49,895
WATER MANAGEMENT	62,651
PLANT CONTROL SYSTEM (PCS)	1,919
FLOTATION TAILINGS BASIN	39,684
PLANT INFRASTRUCTURE	10,879
PLANT UTILITIES	99,245
Subtotal DIRECT COST (MINE & CONCENTRATOR)	706,690

### Phase I Direct Costs

The capital costs for the Phase II Hydrometallurgical Plant, as set out in the below table, were developed by M3 and were based on the following:

- Recent quotations (Q4 2016 and Q1 2017) were obtained for new mechanical equipment based on detailed enquiries including specifications and equipment duty sheets. The mechanical equipment was sized based on test work results, system modelling and in certain cases equipment sizing was dictated by physical layout/foot print constraints.
- Preliminary designs for new structures, bins and chutes.
- Preliminary civil and earthworks designs associated with the new structures, equipment and operational requirements including access and spillage containment.
- Priced piping and valve MTOs developed from preliminary PFDs and General Arrangement drawings.
- Quotations for electrical and instrumentation equipment based on recent enquiries, including installation on similar projects.
- A complete instrument index including a comprehensive BOM was developed and issued for pricing.
- Man-hour estimations for the installation of new equipment, electrical, instrumentation, structures and associated civil works. These were based on industry standards.

	PHASE II
DIRECT COST	(\$000)
HYDROMET	
Site General	24,152
Ni-Cu Concentrate Oxidative Leaching	68,880
Au/PGM Recovery	3,780
Cu Concentrate	3,743
Cu Sulfide Precipitation	1,621
Iron/Acid Removal	5,808
Mixed Hydroxide Precipitation	3,486
Magnesium Removal	736
Hydromet Tailings	840
Hydrometallurgical Residue Facility	43,903
Reagent Storage and Mixing	15,671
Plant Scrubber	1,591
Hydromet Raw Water	1,647
Hydromet Process Water	1,241
Steam Systems	1,085
Gas Systems	784
Subtotal DIRECT COST (PHASE II)	178,966

### Phase II Direct Costs (Hydrometallurgical Plant)

The following table depicts the estimated direct and indirect capital costs for the development of the NorthMet Project for Phases I and II.

	PHASE I (\$000)	PHASE II (\$000)
TOTAL DIRECT COST (Excluding Mine Equipment)	606,980	178,966
FREIGHT - LOGISTICS	19,393	7,017
MOBILIZATION, TEMPORARY FACILITIES AND		4,523
POWER		
TOTAL CONSTRUCTED COST	626,373	\$190,506
EPCM	90,999	32,196
COMMISSIONING	7,790	1,394
CAPITAL SPARES		929
TOTAL CONTRACTED COST	725,162	225,025
CONTINGENCY	71,597	33,754
AVERAGE CONTINGENCY	9.9%	15%
ADDED OWNER'S COST (including initial fills & reagents)	24,489	
TOTAL CONTRACTED AND OWNER'S COST	821,248	258,779
Owner's Cost Mine Equipment (Initial Capital)	99,710	
Haul Truck Tire Adjustment	(900)	
EIP Credits	25,065	
TOTAL EVALUATED PROJECT COST	945,124	258,779
COMBINED TOTALS	1,2	03,903

### Direct and Indirect Costs (Phase I & II)

### **Operating Cost Estimates**

The following table is a summary of the mine operating costs for the NorthMet project by the major categories of labor, consumables and repair parts.

### Mine Operating Costs by Process

		% of Total
CATEGORY	(\$000)	Mining Cost
Drilling	50,662	5.6
Blasting	97,144	10.7
Loading	99,297	11.0
Hauling	257,502	28.5
Auxiliary	147,737	16.3
General Mine	32,512	3.6
General Maintenance	33,888	3.7
Mine G&A	98,338	10.9
Locomotive	79,884	8.8
Analytical Lab Contract	6,000	0.7
TOTAL MINING COST	904,553	100

The following table is a summary of the operating cost estimates for PolyMet's Erie Process Plant and assay.

		32,000 STPD	
OPEX Parameter	Units	Value	Fraction (%)
Tonnage Processed	tpa	11,600,000	
Labor	USD/t	1.04	15.9
Power	USD/t	2.11	32.2
Natural Gas	USD/t	0.27	4.1
Consumables/Water Treatment	USD/t	2.44	37.3
Maintenance Supplies & Plant Vehicles	USD/t	0.66	10.1
Assay Costs	USD/t	0.02	0.3
Phase I Plant Costs	USD/t	6.55	100

Phase I Operating Cost Estimate Summary

M3 developed the on-site operating costs associated with the hydrometallurgical plant (or Phase II) which are summarized by cost element of labor, electric power, reagents, maintenance parts and supplies and services in the below table.

		32,000 STPD	
OPEX Parameter	Units	Value	Fraction (%)
Tonnage Processed	tpa	11,600,000	
Labor	USD/t	0.21	9.9
Power	USD/t	0.11	5.2
Consumables and Reagents	USD/t	1.17	55.2
Maintenance	USD/t	0.57	26.9
Supplies & Services	USD/t	0.06	2.8
Phase II Plant Costs	USD/t	2.12	100

### Phase II Operating Cost Estimate Summary

Additional detail concerning operating costs for the NorthMet Project are set out in Section 21 of the 2018 Technical Report.

### **Economic Analysis**

The following economic analysis of the NorthMet Project was prepared on the basis of processing 225 million tons of ore at a mining rate of 32,000 STPD (11.6 million tons per annum) for 20 years. Financial analysis was performed to determine the Net Present Value (NPV), payback period (time in years to recapture the initial capital investment), and the Internal Rate of Return (IRR) for the NorthMet Project. Annual cash flow projections were estimated over the anticipated life of the mine (20 years) based on estimates of capital expenditures, production cost and sales revenue. The sales revenue is based on the estimated production of copper and nickel concentrates containing PGMs, cobalt, and precious metals. The economic analysis uses the estimated capital expenditure and site production costs developed for the NorthMet Project and presented in Section 21 of the 2018 Technical Report. Financial projections have not been audited by PricewaterhouseCoopers LLP, the Company's independent registered public accounting firm.

The following economic analysis reflects PolyMet's plan to build the NorthMet Project in two phases (with Phase II being the addition of a Hydrometallurgical Plant):

- Phase I: produce and market concentrates containing copper, nickel, PGMs, cobalt and precious metals.
- Phase II: once processed via Phase I, continue processing the nickel concentrate through a single autoclave, resulting in production and sale of high grade copper concentrate, value added nickel-cobalt hydroxide, and precious metals precipitate products.

Life of mine, and the first five years at full production (years 2-6), economic assumptions and highlights for Phase I and Phase I & II combined are shown in the below table.

Cost Category	UOM	Phase I	Phase I &
Capital Costs			
Initial Capital	\$ millions	945.1	1.203.9
LOM Sustaining Capital	\$ millions	220.6	220.6 <sup>(1)</sup>
Operating Costs	,	L	OM
Mining & Delivery to Plant	\$/st processed	4.02	4.02
Processing	\$/st processed	6.55	8.66
G&A	\$/st processed	0.48	0.48
Total	\$/st processed	11.05	13.16
LOM Average Annual Payable Metal in Cons Produced			
Copper	000 lbs	54,792	57,754
Nickel	000 lbs	6,646	8,711
Cobalt	000 lbs	281	311
Platinum	koz	8	14
Palladium	koz	42	59
Gold	koz	2	4
Silver	koz	48	48
Average Annual Payable Metal in Cons Produced (Yrs			
2-6)			
Copper	000 lbs	66,748	69,384
Nickel	000 lbs	7,867	9,647
Cobalt	000 lbs	333	352
Platinum	koz	12	19
Palladium	koz	58	73
Gold	koz	3	6
Silver	koz	68	68

### LOM Operating Cost Highlights – Phase I and Phase I & II Combined

(1) Susutaing capex for Phase II is included as an OPEX cost for replacement parts piping liners etc for Hydromet plant

Base Case metal price assumptions, process plant recoveries and key operating data for the average over the life of mine are presented in the below table.

	Base Case	Metal Recoverv	Production	Contribution	Cash Cost per lb Cu Eq	Cash Cost per lb Cu
	(\$/lb or	to Conc.	(million lbs	to net	Cu Eq\$/lb or	by-product
	\$/oz)	(%)	or oz)	revenue (%)	\$/oz	\$/lb or \$/oz
	Assum	ptions		LO	M	
Phase I						
Copper (lb)	3.22	91.8	1,096	60.5	1.91	1.06
Nickel (lb)	7.95	63.5	133	18.1		
Cobalt (lb)	20.68	35.9	5.6	2.0		
Platinum (oz)	1,128	73.4	170	3.3		
Palladium (oz)	973	78.1	836	13.9		
Gold (oz)	1,308	58.9	45	1.0		
Silver (oz)	18.92	56.9	958	0.3		
Low-grade Nickel PGM						
(Ktonne)	55.00	N/A	912	0.9		

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During years 2 through 6 of full-scale production for Phase I, cash costs of production (excluding amortization of capital) on a co-product basis (allocating costs to each metal according to its contribution to revenue) are projected at \$1.71/lb for copper.

Base Case (Phase I	& II) Price a	nd Operating	g Assumptio	ns and Key P	roduction Nu	mbers

	Base Case	Metal Recovery	Production	Contribution	Cash Cost per lb Cu Eq	Cash Cost per lb Cu
	(\$/lb or	to Conc.	(million lbs	to net	Cu Eq\$/lb or	by-product
	\$/oz)	(%)	or oz)	revenue (%)	\$/oz	\$/lb or \$/oz
	Assum	ptions		LO	M	
Phase I & II						
Copper (lb)	3.22	91.8	1,155	54.3	1.79	0.59
Nickel (lb)	7.95	63.5	174	20.2		
Cobalt (lb)	20.68	35.9	6.2	1.9		
Platinum (oz)	1,128	73.4	286	4.7		
Palladium (oz)	973	78.1	1,189	16.9		
Gold (oz)	1,308	58.9	86	1.6		
Silver (oz)	18.92	56.9	958	0.3		
Low-grade Nickel PGM						
(Ktonne)	55.00	N/A	175	0.1		

The key estimated financial results for Phase I and combined Phase I and II for the NorthMet Project are presented in the below table.

		Phas	se l	Phase I & II	
	Units	First 5 Yrs <sup>1</sup>	LOM	LOM <sup>2</sup>	
Life of Mine	Yrs		20	20	
Material Mined	Mt	197	574	574	
Ore Mined	Mt	58	225	225	
Waste: Ore Ratio		2.4	1.6	1.6	
Ore Grade					
Copper	%	0.343	0.295	0.295	
Nickel	%	0.092	0.085	0.085	
Cobalt	ppm	76	75	75	
Palladium	ppm	0.327	0.269	0.269	
Platinum	ppm	0.099	0.079	0.079	
Gold	ppm	0.048	0.039	0.039	
Annual Payable Metal Produced					
Copper	mlb	66.7	54.8	57.8	
Nickel	mlb	7.9	6.6	8.7	
Cobalt	mlb	0.33	0.28	0.31	
Palladium	koz	57.6	41.8	59.4	
Platinum	koz	12.4	8.5	14.3	
Gold	koz	3.4	2.2	4.3	
Copper Equivalent <sup>3</sup>	mlb	112.4	90.6	106.4	
Cash Costs: by-product	\$/lb Cu	0.67	1.06	0.59	
Cash Costs: Cu equivalent	\$/lb CuEq	1.71	1.91	1.79	
Development Capital	\$M	945	945	1 204	
Sustaining Capital	\$M	99	221	221	
	\$M	362	292	343	
	\$M	170	118	152	
NPV <sub>7</sub> (After Taxes)	\$M	170	173	271	
IRR (After Taxes)	%		9.6	10.3	
Pavback (after taxes from first	70		0.0	10.0	
production)	Years		7.3	7.5	

#### Financial Summary – 32,000 STPD

<sup>1</sup>Represents first five years at full concentrator production.

<sup>2</sup> Phase II production is projected to commence in Year 3 of operations.

<sup>3</sup> Cu Eq recovered payable metal, is based on prices shown in Table 1-4 of the 2018 Technical Report, mill recovery assumptions shown in Table 15-3 of the 2018 Technical Report and Hydromet Phase II recoveries shown in Table 13-14 of the 2018 Technical Report.

Key estimated Phase I results include a pre-tax IRR of 10.2%, a pre-tax NPV@7% of \$217 million, an after-tax IRR of 9.6%, an after-tax NPV@7% of \$173 million and an after-tax payback period of 7.3 years.

Key estimated Phase I and II combined results include a pre-tax IRR of 10.9%, a pre-tax NPV@7% of \$322 million, an after-tax IRR of 10.3%, an after-tax NPV@7% of \$271 million and an after-tax payback period of 7.5 years.

### Adjacent Properties

There are no adjacent properties that PolyMet is proposing to explore or drill as part of any drilling program or other evaluation. There are several other deposits in the Duluth Complex, including the Mesaba project owned by Teck Resources Limited, Serpentine owned by Encampment Resources, and the Maturi project owned by Twin Metals Minnesota, a wholly owned subsidiary of Antofagasta plc.

### Other Relevant Data and Information

### Project Implementation

The proposed execution of the NorthMet Project assumes a seamless transition between critical project phases, minimal project interruptions and a reduction in potential risks.

The NorthMet Project implementation would consist of the following phases:

- Engineering Basic and Detailed
- Demolition
- Construction

It is anticipated that the stages may somewhat overlap depending on receipt of final permits.

This approach assumes that all work associated with asset preservation has been accomplished prior to demolition. Asset preservation includes the removal of all asbestos, mold, and lead paint as well as some basic infrastructure repairs such as repair of the fire water loop and pumping system.

#### Potential Opportunities

PolyMet has considered opportunities to improve annual operating costs and LOM strategies at the NorthMet Project using the existing block resource model tons and grades as a basis for alternate economic scenarios. The scenarios presented in this section should not be misconstrued as proposals or detailed plans or strategies. PolyMet would need to prepare preliminary and definitive feasibility studies, as well as to conduct an analysis of the environmental impact and alternatives and budget and cost decisions prior to any decision to apply for permits to pursue these opportunities. Any such opportunities would be subject to various regulatory requirements and would require significant capital investment. Because the steps in this process have not been undertaken by PolyMet, the results presented in this section should be considered speculative.

In addition, any future project proposal would be subject to additional environmental review and permitting requirements and or public notice and comment, and approval by appropriate Federal and State Agencies. The NorthMet FEIS evaluates the reasonably foreseeable environmental effects of the NorthMet Project based in part on a mine plan that identified an average production rate of 32,000 STPD (approximately 225 million short tons over the 20-year life of the mine). PolyMet's focus and intention is to put into operation the 32,000 STPD plan detailed in the 2018 Technical Report as soon as possible.

A preliminary investigation was undertaken to evaluate the potential of developing the NorthMet Deposit to achieve higher throughputs than the current 32,000 STPD mine plan. In particular, and subject to the caveats above, the following two additional scenarios were evaluated at a PEA-level for the NorthMet deposit: (i) increase the daily mill feed rate to 59,000 STPD and mine to the completion of the West Pit design; and (ii) increase the daily mill feed rate to 118,000 STPD by expanding the pit limits outside the current permit limits. It is important to note that both the 59,000 STPD and 118,000 STPD scenarios include materials classified as inferred in addition to measured and indicated material. Inferred material is considered too poorly defined to include in most mine planning exercises except at the PEA level and are too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. Hence, the results predicted for the 59,000 STPD and 118,000 STPD throughput are speculative and may not be realized.

PEA-level initial and sustaining capital estimates were developed for the 59,000 and 118,000 STPD scenarios, as were operating costs for each scenario. For the 118,000 STPD scenario, M3 developed an estimate from current 2017 budgetary quotes and quotes from recently constructed projects of similar size. In some cases, costs were scaled from the original estimate using the "0.6 power rule" formula:

$$Cost_2 = Cost_1 X \left( \frac{Throughput_2}{Throughput_1} \right)^{0.6}$$

Examples of scaled costs from the 32,000 STPD CAPEX include revised civil/site work estimates, reagent & clear service pumps, HVAC, material quantity take-offs for structural steel and concrete, as well as piping and electrical allowances. For 59,000 STPD, cost estimates for the 32,000 STPD case were escalated to reflect current fourth quarter 2017 pricing using an ENR factor and then scaled using the 0.6 power rule to meet the new tonnage. In a few cases, the modifications/additions in plant equipment and process needs listed above were estimated separately and added to escalated totals. Capital costs for the 59,000 & 118,000 scenarios are presented in the below table.

Operating Plan	Unit of Measure	59,000 STPD		118,00	0 STPD
		Phase I Phase I &		Phase I	Phase I &
			II		II
Mineralized Material Processed	Million st	293	293	730	730
Operating Life	years	15	15	19	19
LOM Strip Ratio		1.5	1.5	2.2	2.2
Capital Costs					
Initial Capital	\$ millions	1,095	1,354	1,614	1,872
LOM Sustaining Capital	\$ millions	249	249	900	900
Operating Costs					
Mining & Delivery to Plant	\$/st processed	3.16	3.16	3.36	3.36
Processing	\$/st processed	5.32	6.94	5.36	6.34
G&A	\$/st processed	0.78	0.78	0.28	0.28
Subtotal Operating Costs	\$/st processed	9.26	10.88	9.00	9.98
Selling Costs	\$/st processed	3.23	2.55	2.94	2.34
Total Operating Costs	\$/st processed	12.49	13.43	11.94	12.32

### LOM Operating Highlights for 59,000 STPD & 118,000 STPD

Note: 118,000 STPD case mining and delivery costs to plant include G&A costs.

For the 59,000 STPD scenario (Phase I and II), operating cost over the LOM is estimated to be \$13.43 per ton of mineralized material processed. For the 118,000 STPD scenario (Phase I and II), operating cost over the LOM is estimated to be \$12.32 per ton of mineralized material processed. This represents a cost savings per ton processed for \$2.28 and \$3.40 for the 59,000 STPD and the 118,000 STPD scenarios, respectively, over the 32,000 STPD case.

The preliminary estimate developed for a throughput of 59,000 STPD (using total Phase I and II) amounted to an additional \$150 million dollars in initial capital over the 32,000 STPD base case (Phase I and II) and \$28 million US dollars in additional sustaining capital. Estimated financial indicators for the 59,000 STPD case improved over the 32,000 STPD throughput to \$963 million US dollars NPV@ 7% and 18.5% IRR for Phase I and II. The economic summary reflects processing 293 million tons of mineralized material grading at 0.576% Cu-Eq over a 15-year mine life, at an average of 59,000 STPD.

		Phas	Phase I & II	
	Units	First 5 Yrs <sup>1</sup>	LOM	LOM <sup>2</sup>
Life of Mine	Yrs		15 <sup>4</sup>	15
Material Mined	Mt	294	724	724
Mill Feed Mined	Mt	106	293	293
Waste: Mill Feed Ratio		1.8	1.5	1.5
Mill Feed Grade				
Copper	%	0.313	0.290	0.290
Nickel	%	0.087	0.083	0.083
Cobalt	ppm	75	74	74
Palladium	ppm	0.293	0.264	0.264
Platinum	ppm	0.087	0.079	0.079
Gold	ppm	0.043	0.039	0.039
Annual Payable Metal				
Produced				
Copper	mlb	110.5	93.6	98.2
Nickel	mlb	13.2	11.3	14.5
Cobalt	mlb	0.56	0.48	0.52
Palladium	koz	90.5	71.4	99.2
Platinum	koz	19.1	14.8	24.1
Gold	koz	5.0	3.9	7.3
Copper Equivalent <sup>3</sup>	mlb	184.7	154.7	179.7
Cash Costs: by-product	\$/lb Cu	0.45	0.72	0.23
Cash Costs: Cu equivalent	\$/lb CuEq	1.56	1.71	1.59
Development Capital	\$M	1,095	1,095	1,354
Sustaining Capital	\$M	128	249	249
Annual Revenue	\$M	595	498	579
Annual FBITDA	\$M	307	234	294
NPV7	\$M		751	963
IRR	%		17.5	18.5
Pavback (from first				
production)	Years		4.6	4.8

### 59,000 STPD Economic Highlights

<sup>1</sup> Represents first five years at full concentrator production.

<sup>2</sup> Phase II production is projected to commence in Year 3 of operations.

<sup>3</sup> Cu Eq recovered payable metal, is based on prices shown in Table 1-4 of the 2018 Technical Report, mill recovery assumptions shown in Table 15-3 of the 2018 Technical Report and HydroMet Phase II recoveries shown in Table 13-14 of the 2018 Technical Report.

<sup>4</sup> The 15<sup>th</sup> year is not a full year of production.

The 118,000 STPD case (Phase I and II) improved economics over the 32,000 STPD case. The post-tax NPV@7% is approximately \$2,243 million with an IRR of 23.6% and a payback period of 4.1 years for Phase I and II, as summarized in the below table. The economic summary reflects processing 730 million tons of mineralized material grading at 0.530% Cu-Eq (recovered) over a nineteen-year life, at an average of 118,000 STPD.

		Phase I		Phase I & II
	Units	First 5 Yrs <sup>1</sup>	LOM	LOM <sup>2</sup>
Life of Mine	Yrs	5	19 <sup>4</sup>	19 <sup>4</sup>
Material Mined	Mt	767	2,366	2,366
Mill Feed Mined	Mt	212	730	730
Waste: Mill Feed Ratio		2.6	2.2	2.2
Mill Feed Grade				
Copper	%	0.292	0.268	0.268
Nickel	%	0.084	0.076	0.076
Cobalt	ppm	74	70	70
Palladium	ppm	0.281	0.247	0.247
Platinum	ppm	0.074	0.073	0.073
Gold	ppm	0.038	0.037	0.037
Annual Payable Metal				
Produced				
Copper	mlb	203.5	167.8	172.4
Nickel	mlb	23.8	19.0	23.3
Cobalt	mlb	1.01	0.80	0.83
Palladium	koz	163.5	129.7	170.9
Platinum	koz	28.0	26.0	38.5
Gold	koz	7.8	7.6	11.6
Copper Equivalent <sup>3</sup>	mlb	336.9	275.6	309.5
Cash Costs: by-product	\$/lb Cu	0.56	0.85	0.39
Cash Costs: Cu equivalent	\$/lb CuEq	1.61	1.78	1.64
Development Capital	\$M	1.614	1.614	1.872
Sustaining Capital	\$M	226	900	900
Annual Revenue	\$M	1085	887	997
Annual EBITDA	\$M	542	397	488
NPV7	\$M		1737	2243
IRR	%		21.9	23.6
Payback (from first				
production)	Years		4.1	4.1

### 118,000 STPD Economic Highlights

<sup>1</sup>Represents first five years at full concentrator production.

<sup>2</sup> Phase II production is projected to commence in Year 3 of operations.

<sup>3</sup>Cu Eq recovered payable metal, is based on prices shown in Table 1-4 of the 2018 Technical Report, mill recovery assumptions shown in Table 15-3 of the 2018 Technical Report and HydroMet Phase II recoveries shown in Table 13-14 of the 2018 Technical Report.

<sup>4</sup> The 20<sup>th</sup> year is not a full year of production.

The foregoing economic analyses of the 59,000 STPD and 118,000 STPD scenarios is of a preliminary economic assessment level, is preliminary in nature and includes mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty the preliminary economic assessment would be realized.

### **Conclusions and Recommendations**

M3 recommended that PolyMet should proceed with final design engineering and initiate asset preservation and demolition activities of the Erie Plant as soon as permitting allows.

Prior to construction of the NorthMet Project, PolyMet should:

- Review and update the scope of the NorthMet Project design to reflect changes resulting from the permitting process, if any, and other Project enhancements.
- Select a water treatment plant design and supply provider once the final permits are in place.
- Complete basic engineering on all designs, and initiate detailed design.
- Establish construction contracts formats.
- Establish documents that will be used for all equipment purchases.
- Finalize permitting activities.

Other recommendations for further work resulting from this and the scoping-level expansion study include the potential for expansion and increasing mine mineralized material production.

The NorthMet resource base and the geometry of the deposits could allow for an increase in mineralized material tonnage. Section 24 details these resources and possible expansion and ramp-up scenarios. The following are recommendations to pursue expansion of the mine and maximize throughput and economic value.

- Commence a NI-43-101 Pre-feasibility study to increase the level of accuracy of the capital and operating estimates presented in Section 24.2 of the 2018 Technical Report.
- Design general arrangement drawings of the plant area to develop more accurate material take-offs for both the maximum and ramp-up throughput capital cost estimates.
- Update the financial model based on any changes to the current capital and operating cost estimates and to reflect current metal prices. Metal prices and terms for mine planning purposes may not be reflective of the prices presented in the 2018 Technical Report at the commencement of mining.
- M3 recommends reviewing the design of the WWTS with respect to the building costs and construction schedule.
- Design an infill drilling program on inferred resources in an attempt to move inferred into the measured and indicated classification.

The cost of performing this work to a pre-feasibility level is estimated to be approximately \$500,000.

### 5. Risk Factors

The following are major risk factors management has identified which relate to the Company's business activities. Such risk factors could materially affect the Company's future financial results, and could cause events to differ materially from those described in forward-looking statements relating to the Company. Although the following are major risk factors identified by management, they do not comprise a definitive list of all risk factors related to the Company's business and operations. Other specific risk factors are discussed elsewhere in this AIF, as well as in the Company's consolidated financial statements (under the headings "Description of Business and Nature of Operations", "Significant Accounting Policies" and "Financial Instruments" and elsewhere within that document) and in management's discussion and analysis (under the headings "Critical Accounting Estimates" and "Risk Factors" and elsewhere within that document) and is other disclosure documents, all as filed on SEDAR and EDGAR.

### Dependence on a single mineral project.

The NorthMet Project accounts for all of the mineral resources and mineral reserves and exclusively represents the current potential for the future generation of revenue. Mineral exploration and development involves a high degree of risk that even a combination of careful evaluation, experience and knowledge cannot eliminate and few properties that are explored are ultimately developed into producing mines. Any adverse development affecting the NorthMet Project may have a material adverse effect on PolyMet's business, prospects, financial position, results of operations and cash flows.

# The Company may experience delays, higher than expected costs, difficulties in obtaining environmental permits and other obstacles when implementing the development plans.

PolyMet is investing heavily in various facets of the NorthMet Project, which is subject to a number of risks that may make it less successful than anticipated, including:

- delays in the issuance of permits;
- delays or higher than expected costs in obtaining the necessary equipment or services to build and operate the Project; and
- adverse mining conditions may delay and hamper PolyMet's ability to produce the expected quantities of minerals.

# Future activities could be subject to environmental laws and regulations, which may have a materially adverse effect on future operations, in which case operations could be suspended or terminated.

PolyMet, like other companies doing business in Canada and the United States, is subject to a variety of federal, provincial, state and local statutes, rules and regulations designed to, among other things:

- protect the environment, including the quality of the air and water in the vicinity of exploration, development, and mining operations;
- remediate the environmental impacts of those exploration, development, and mining operations;
- protect and preserve wetlands and endangered species; and
- mitigate negative impacts on certain archaeological and cultural sites.

Compliance with statutory environmental quality requirements described above may require significant capital outlays, impacting the Company's earning power, or cause material changes in its intended activities. Environmental standards imposed by federal, state, or local governments may be changed or become more stringent in the future, which could materially and adversely affect proposed activities.

Moreover, governmental authorities and private parties may bring lawsuits based upon damage to property and injury to persons resulting from the environmental, health and safety impacts of prior and current operations. These lawsuits could lead to the imposition of substantial fines, remediation costs, penalties and other civil and criminal sanctions. Substantial costs and liabilities, including for restoring the environment after the closure of mines, are inherent in the Company's operations. PolyMet cannot assure that any such law, regulation, enforcement or private claim would not have a material adverse effect on its financial condition, results of operations or cash flows.

### Land reclamation requirements for the NorthMet Project may be burdensome.

Land reclamation requirements are generally imposed on mineral exploration companies (as well as companies with mining operations) in order to minimize long-term effects of land disturbance. In order to carry out reclamation obligations imposed on the Company in connection with exploration, potential development and production activities, PolyMet must allocate financial resources that might otherwise be spent on further exploration and development programs. In addition, regulatory changes could increase the Company's obligations to perform reclamation and mine closing activities. If PolyMet is required to carry out unanticipated reclamation work, the Company's financial position could be adversely affected.

# PolyMet is subject to significant governmental regulations and related costs and delays may negatively affect business.

Mining activities are subject to extensive federal, state, local and foreign laws and regulations governing environmental protection, natural resources, prospecting, development, production, post-closure reclamation, taxes, labor standards and occupational health and safety laws and regulations, including mine safety, toxic substances and other matters. The costs associated with compliance with such laws and regulations are substantial. Possible future laws and regulations, or more restrictive interpretations of current laws and regulations by governmental authorities, could cause additional expense, capital expenditures, restrictions on or suspensions of operations and delays in the development of new properties.

PolyMet is required to obtain various governmental permits to conduct exploration, development, construction and mining activities at its properties. Obtaining the necessary governmental permits is often a complex and time-consuming process involving numerous United States or Canadian federal, provincial, state, and local agencies. The duration and success of each permitting effort is contingent upon many variables not within the Company's control. In the context of obtaining permits or approvals, PolyMet must comply with known standards, existing laws, and regulations that may entail greater or lesser costs and delays depending on the nature of the activity to be permitted and the interpretation of the laws and regulations implemented by the permitting authority. The failure to obtain certain permits or the adoption of more stringent permitting requirements could have a material adverse effect on business, operations, and properties and the Company may be unable to proceed with exploration and development programs.

Federal legislation and implementing regulations adopted and administered by the United States Environmental Protection Agency, Army Corp of Engineers, Forest Service, Fish and Wildlife Service, Mine Safety and Health Administration, and other federal agencies, and legislation such as the Federal Clean Water Act, Clean Air Act, National Environmental Policy Act, Endangered Species Act, and Comprehensive Environmental Response, Compensation, and Liability Act, have a direct bearing on exploration, development and mining operations United States. Due to the uncertainties inherent in the permitting process, the Company cannot be certain that it will be able to obtain required approvals for proposed activities at any of the Company's properties in a timely manner, or that PolyMet's proposed activities will be allowed at all.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, which may require corrective measures including capital expenditures, installation of additional equipment or remedial actions. Parties engaged in mining operations or in the exploration or development of mineral properties may be required to compensate those suffering loss or damage by reason of the mining activities and may be subject to civil or criminal fines or penalties imposed for violations of applicable laws or regulations. Any such penalties, fines, sanctions or shutdowns could have a material adverse effect on business and results of operations.

# Because the price of metals fluctuate, if the prices of metals in PolyMet's ore body decrease below a specified level, it may no longer be profitable to develop the NorthMet Project for those metals and PolyMet will cease operations.

Prices of metals are determined by some of the following factors:

- global and regional supply and demand;
- political and economic conditions and production costs in major metal producing regions;
- the strength of the United States dollar; and
- expectations for inflation.

The aggregate effect of these factors on metals prices is impossible for the Company to predict. In addition, the prices of metals are sometimes subject to rapid short-term and/or prolonged changes because of speculative activities. The current demand for and supply of various metals affect the prices of copper, nickel, cobalt, platinum, palladium and gold, but not necessarily in the same manner as current supply and demand affect the prices of other commodities. The supply of these metals primarily consists of new production from mining. If the prices of copper, nickel, cobalt, platinum, palladium and gold are, for a substantial period, below foreseeable costs of production, PolyMet could cease operations.

### PolyMet is dependent on its key personnel.

Company success depends on key members of management. The loss of the services of one or more of such key management personnel could have a material adverse effect on the Company. PolyMet's ability to manage exploration and development activities, and hence success, will depend in large part on the efforts of these individuals. PolyMet faces intense competition for qualified personnel, and cannot be certain that it will be able to attract and retain such personnel.

In addition, PolyMet anticipates that if the NorthMet Project goes into production, PolyMet will experience significant growth in operations. PolyMet expects this growth to create new positions and responsibilities for management and technical personnel and will increase demands on operating and financial systems. There can be no assurance that PolyMet will successfully meet these demands and effectively attract and retain additional qualified personnel to manage anticipated growth. The failure to attract such qualified personnel to manage affect on business, financial position, results of operations and cash flows.

# The Company may not be able to raise the funds necessary to develop the NorthMet Project. If PolyMet is unable to raise such additional funds, the Company will have to suspend or cease operations.

PolyMet will need to seek additional financing to complete the development and construction of the NorthMet Project. Sources of such external financing may include future equity and debt offerings, advance payments by potential customers to secure long-term supply contracts, grants and low-cost debt from certain state financial institutions, and commercial debt secured by the NorthMet Project. If the Company cannot raise the money necessary to continue to explore and develop NorthMet, PolyMet will have to suspend or cease operations.

# PolyMet's metals exploration and development efforts are highly speculative in nature and may be unsuccessful.

As a development stage company, PolyMet's work is speculative and involves unique and greater risks than are generally associated with other businesses.

The development of mineral deposits involves uncertainties, which careful evaluation, experience, and knowledge cannot eliminate. Few properties explored are ultimately developed into producing mines. It is impossible to ensure that the current development program the Company has planned will result in a profitable commercial mining operation.

# PolyMet is subject to all the risks inherent to the mining industry, which may have an adverse affect on business operations.

PolyMet is subject to all of the risks inherent in the mining industry, including, without limitation, the following:

- Success in discovering and developing commercially viable quantities of minerals is the result of a number of factors, including the quality of management, the interpretation of geological data, the level of geological and technical expertise and the quality of land available for exploration;
- Operations are subject to a variety of existing laws and regulations relating to exploration and development, permitting procedures, safety precautions, property reclamation, employee health and safety, air and water quality standards, pollution and other environmental protection controls, all of which are subject to change and are becoming more stringent and costly to comply with;
- A large number of factors beyond PolyMet's control, including fluctuations in metal prices and production costs, inflation, the proximity and liquidity of precious metals and energy fuels markets and processing equipment, government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection, and other economic conditions, will affect the economic feasibility of mining;
- Substantial expenditures are required to construct mining and processing facilities;
- Title to mining properties may be subject to other claims; and
- In the development stage of a mining operation, PolyMet's mining activities could be subject to substantial operating risks and hazards, including metal bullion losses, environmental hazards, industrial accidents, labor disputes, encountering unusual or unexpected geologic formations or other geological or grade problems, encountering unanticipated ground or water conditions, cave-ins, pit-wall failures, flooding, rock falls, periodic interruptions due to inclement weather conditions or other unfavorable operating conditions and other acts of God. Some of these risks and hazards are not insurable or may be subject to exclusion or limitation in any coverage which the Company obtains or may not be insured due to economic considerations.

# Actual mineral reserves and mineral resources may not conform to the Company's established estimates.

The figures for mineral reserves and mineral resources stated in this AIF are estimates and no assurances can be given that the anticipated tonnages and grades will be achieved or that the indicated level of recovery will be realized. Market fluctuations and the prices of metals may render reserves and mineral resources uneconomic. Moreover, short-term operating factors relating to the mineral deposits, such as the need for the orderly development of the deposits or the processing of new or different grades of ore, may cause a mining operation to be unprofitable in any particular accounting period.

The estimating of mineral reserves and mineral resources is a subjective process that relies on the judgment of the persons preparing the estimates. Estimates of mineral resources are, to a large extent, based on the interpretation of geological data obtained from drill holes and other sampling techniques. This information is used to calculate estimates of the configuration of the mineral resource, expected recovery rates, anticipated environmental conditions and other factors. As a result, mineral resource estimates for the NorthMet Project may require adjustments or downward revisions based upon further exploration or development work or upon actual production experience, thereby adversely impacting the economics of the NorthMet Project. Any material reductions in estimates of mineralization, or of the Company's ability to extract this mineralization, could have a material adverse effect on the Company's results of operations or financial condition.

# There is no assurance that any of PolyMet's mineral resources, not currently classified as mineral reserves, will ever be classified as mineral reserves under the disclosure standards of the SEC.

Item 4 of this AIF discusses mineral resources in accordance with NI 43-101. Resources are classified as "measured resources", "indicated resources" and "inferred resources" under NI 43-101. However, U.S. investors are cautioned that the SEC does not recognize these resource classifications. There is no assurance that any of the Company's mineral resources, not currently classified as mineral reserves, will be converted into mineral reserves under the disclosure standards of the SEC.

# The Company has had no production history and does not know if it will generate revenues in the future.

While the Company was incorporated in 1981, it has no history of producing minerals. The Company has not developed or operated any mines and has no operating history upon which an evaluation of future success or failure can be made. PolyMet currently has no mining operations of any kind. The Company's ability to achieve and maintain profitable mining operations is dependent upon a number of factors, including its ability to successfully build and operate mines, processing plants and related infrastructure. PolyMet may not successfully establish mining operations or profitably produce metals at any of its properties. As such, the Company does not know if it will ever generate revenues.

# PolyMet has a history of losses, which it expects will continue for the future. If the Company does not begin to generate revenues, it may either have to suspend or cease operations.

As a development stage company with no holdings in any producing mines, PolyMet continues to incur losses and expect to incur losses in the future. As at December 31, 2017, the Company had an accumulated deficit of \$132 million. PolyMet may not be able to achieve or sustain profitability in the future. If the Company does not begin to generate revenues, it may either have to suspend or cease operations.

PolyMet has prepared its consolidated financial statements on a going concern basis, which contemplates the realization of assets and the settlement of liabilities in the normal course of operations.

PolyMet currently has negative cash flows from operating activities and cannot predict if or when it will operate profitably to generate positive cash flows. The Company has taken steps to fund operations through the issuance of equity and debt. The Company plans to meet its financial obligations to the point at which all regulatory approvals for the NorthMet Project have been obtained and which will allow the Company to raise capital to construct the mine and commence commercial production.

Since September 2006, the Company has raised approximately \$207 million in equity, \$95 million of initial principal debt secured by the Company's assets of which \$25 million may be exchangeable into equity upon receipt of permits necessary to build and operate the NorthMet Project. The Company also borrowed and repaid the IRRRB \$4 million principal plus accrued interest secured by land acquired with proceeds from the loan.

As a result of the extension to all outstanding debentures and agreement for additional debenture funding during 2018, the Company has secured sufficient financing to meet its current obligations, as well as fund ongoing development and administration expenses in accordance with the Company's spending plans through December 31, 2018. Management believes, based upon the underlying value of the NorthMet Project, the advanced stage of permitting, the history of support from its shareholders and the ongoing discussions with investment banks and investors, that financing will continue to be available allowing the Company to obtain financing necessary to complete the development of NorthMet and generate future profitable operations. While in the past the Company has been successful in closing financing agreements, there can be no assurance it will be able to do so again. Factors that could affect the availability of financing include the state of debt and equity markets, investor perceptions and expectations, and the metals markets.

# The Company may not have adequate, if any, insurance coverage for some business risks that could lead to economically harmful consequences to PolyMet.

The Company's business is generally subject to a number of risks and hazards, including:

- industrial accidents;
- railroad accidents;
- labor disputes;
- environmental hazards;
- electricity stoppages;
- equipment failures; and
- severe weather and other natural phenomena.

These occurrences could result in damage to, or destruction of, mineral properties, production facilities, transportation facilities, or equipment. They could also result in personal injury or death, environmental damage, waste of resources or intermediate products, delays or interruption in mining, production or transportation activities, monetary losses and possible legal liability. The insurance the Company maintains against risks that are typical in the business may not provide adequate coverage. Insurance against some risks (including liabilities for environmental pollution or certain hazards or interruption of certain business activities) may not be available at a reasonable cost or at all. As a result, accidents or other negative developments involving mining, production or transportation facilities could have a material adverse effect on operations.

# PolyMet may be subject to future litigation and regulatory proceedings which may have an adverse effect on business operations.

PolyMet may be subject to civil claims (including class action claims) based on allegations of negligence, breach of statutory duty, public nuisance or private nuisance or otherwise in connection with its operations or investigations relating thereto. While the Company is presently unable to quantify its potential liability under any of the above, such liability may be material to the Company and may have a material adverse effect on its ability to continue in operation.

In addition, the Company may be subject to actions or related investigations by governmental or regulatory authorities. Such actions may include civil or criminal prosecution for breach of relevant statues, regulations or rules or failure to comply with the terms of PolyMet's licenses and permits and may result in liability for pollution, other fines or penalties, revocation of consents, permits, approvals or licenses or similar action, which could be material and may affect the Company's results of operations. Exposures to fines and penalties generally are uninsurable as a matter of public policy.

# The mining industry is an intensely competitive industry and the Company may have difficulty effectively competing with other mining companies in the future.

The Company faces intense competition from other mining and producing companies. In recent years, the mining industry has experienced significant consolidation among some of the Company's competitors. PolyMet cannot assure you that the result of current or further consolidation in the industry will not adversely affect the Company.

In addition, because mines have limited lives, PolyMet must periodically seek to replace and expand its reserves by acquiring new properties. Significant competition exists to acquire properties producing, or capable of producing, copper, nickel and other metals.

If PolyMet is unable to successfully manage these risks, its growth prospects and profitability may suffer.

# The Company is dependent on information technology and its systems and infrastructure face certain risks, including cyber security risks and data leakage risks.

PolyMet utilizes a variety of information technology systems and infrastructure. Any significant breakdown, invasion, destruction or interruption of these systems by employees, others with authorized access to the systems, or unauthorized persons could negatively impact operations. There is also a risk that the Company could experience a business interruption, theft of information, or reputational damage as a result of a cyber-attack, such as a data leakage of confidential information either internally or by third-party providers. While the Company has invested in the protection of its data and information technology to reduce these risks and periodically test the security of its information systems network, there can be no assurance that these efforts will prevent breakdowns or breaches in PolyMet's systems that could adversely affect the business.

#### PolyMet may be subject to risks relating to the global economy.

Market events and conditions in recent years, including disruptions in the international credit markets and other financial systems and the deterioration of global economic conditions could impede the Company's access to capital or increase the cost of capital. These disruptions in the credit and financial markets have had a significant material adverse impact on a number of financial institutions and have limited access to capital and credit for many companies, including PolyMet. These disruptions could, among other things, make it more difficult for the Company to obtain, or increase its cost of obtaining capital and financing for operations.

### RISKS RELATED TO THE OWNERSHIP OF POLYMET COMMON SHARES

#### PolyMet may experience volatility in its share price.

PolyMet's common shares are listed for trading on the TSX and on the NYSE American. Shareholders may be unable to sell significant quantities of the common shares into the public trading markets without a significant reduction in the price of the Company's shares, if at all. The market price of the common shares may be affected significantly by factors such as changes in operating results, the availability of funds, fluctuations in the price of metals, the interest of investors, traders and others in development stage public companies such as PolyMet and general market conditions. In recent years, the securities markets have experienced a high level of price and volume volatility, and the market price of securities of many companies, particularly development companies similar to PolyMet, have experienced wide fluctuations, which have not necessarily been related to the operating performances, underlying asset values, or the future prospects of such companies. There can be no assurance that future fluctuations in the price of PolyMet's shares will not occur.

### A large number of shares will be eligible for future sale and may depress PolyMet's share price.

Shares that are eligible for future sale may have an adverse effect on the price of the Company's common shares. As at December 31, 2017 there were 319,303,098 common shares outstanding. The average trading volume for the three months prior to December 31, 2017 was approximately 32,000 shares per day on the TSX and 330,000 shares per day on the NYSE American. Sales of substantial amounts of the Company's common shares, or a perception that such sales could occur, and the existence of options or warrants to purchase common shares and debt convertible into common shares at prices that may be below the then current market price of the common shares, could adversely affect the market price of common shares and could impair the Company's ability to raise capital through the sale of equity securities.

# Ownership interest, voting power and the market price of common shares may decrease because the Company has issued, and may continue to issue, a substantial number of securities convertible or exercisable into common shares.

PolyMet has issued common shares, options, restricted shares, restricted share units, convertible debt and warrants to purchase its common shares to satisfy its obligations and fund operations. Since the Company currently does not have a source of revenue, it will likely issue additional common shares, or other securities exercisable for or convertible into common shares to raise money for continued operations or as non-cash

incentives to the Company's directors, officers, and key employees. If conversions of securities exercisable into common shares or additional sales of equity occur, ownership interest and voting power in PolyMet will be diluted and the market price of common shares may decrease.

Under the Company's 2007 Omnibus Share Compensation Plan, as amended and restated ("Omnibus Plan"), the aggregate number of share options, restricted shares, restricted share units, and other share-based awards is restricted to 10% of the issued and outstanding common shares on the grant date, excluding 2,500,000 common shares pursuant to an exemption approved by the Toronto Stock Exchange.

# Because PolyMet believes that it will be classified as a passive foreign investment company, or "PFIC", United States holders of common shares may be subject to United States federal income tax consequences that are worse than those that would apply if PolyMet were not a PFIC.

Because PolyMet believes that it will be classified as a PFIC, United States holders of common shares may be subject to United States federal income tax consequences that are worse than those that would apply if the Company were not a PFIC, such as ordinary income treatment plus a charge in lieu of interest upon a sale or disposition of common shares even if the shares were held as a capital asset.

### 6. Dividends

Since its incorporation, PolyMet has not declared or paid, and has no present intention to declare or to pay, any cash dividends with respect to its common shares. Earnings will be retained to finance further growth and development of the Company's business. However, if the board of directors were to declare a dividend, all common shares would participate equally.

### 7. Capital Structure

The Company's authorized capital consists of an unlimited number of common shares, without par value of which 319,303,098 common shares were issued and outstanding as fully paid and non-assessable as of December 31, 2017.

Shareholders are entitled to one vote per Common Share at all meetings of Shareholders except meetings at which only holders of another specified class or series of shares of the Company are entitled to vote separately as a class or series. The holders of Common Shares are entitled to receive dividends as and when declared by the Board, and to receive a pro rata share of the remaining property and assets of the Company in the event of liquidation, dissolution or winding up of the Company. The Common Shares carry no pre-emptive, redemption, purchase or conversion rights. Pursuant to the terms of prior financings, Glencore has certain anti-dilution rights that permit it to acquire additional securities so as to maintain its proportional equity interest in the Company. Neither the Business Corporations Act (British Columbia) ("BCBCA") nor the constating documents of the Company impose restrictions on the transfer of Common Shares on the register of the Company, provided that the Company receives the certificate representing the Common Shares to be transferred together with a duly endorsed instrument of transfer and payment of any fees and taxes which may be prescribed by the Board from time to time. There are no sinking fund provisions in relation to the Common Shares and they are not liable to further calls or to assessment by the Company. The BCBCA provides that the rights and provisions attached to any class of shares may not be modified, amended or varied unless consented to by special resolution passed by a majority of not less than two-thirds of the votes cast in person or by proxy holders of the common shares.

# 8. Market for Securities

PolyMet's common shares are listed and posted for trading on the Toronto Stock Exchange (the "TSX") under the symbol "POM", and on the NYSE-American ("NYSE American") under the symbol "PLM". The following table sets forth the market price range and trading volumes of the Company's common shares on each of the TSX and NYSE American for the periods indicated.

	TSX		NYSE American			
Month	High (C\$)	Low (C\$)	Volume	High (US\$)	Low (US\$)	Volume
February 2017	1.15	1.04	417,300	0.88	0.78	3,620,500
March 2017	1.06	0.98	474,400	0.80	0.74	5,370,900
April 2017	1.03	0.94	319,300	0.77	0.70	4,738,300
May 2017	0.98	0.85	220,800	0.72	0.66	4,398,900
June 2017	0.88	0.77	409,300	0.67	0.58	2,878,800
July 2017	0.90	0.75	231,200	0.70	0.59	2,988,100
August 2017	0.85	0.74	343,000	0.69	0.58	2,980,500
September 2017	0.78	0.74	569,800	0.64	0.59	3,768,300
October 2017	0.88	0.73	934,600	0.69	0.59	6,622,000
November 2017	0.84	0.75	444,600	0.66	0.60	4,635,600
December 2017	1.07	0.80	611,500	0.86	0.63	9,520,100

## 9. Securities Not Listed or Quoted

The only classes of securities of the Company that are not listed or quoted on a marketplace are stock options, restricted shares units ("RSU's"), deferred share units ("DSU's") and share purchase warrants.

The following stock options were issued during the year ended December 31, 2017:

Date of Issuance	Number of Stock Options Issued	Exercise Price (US\$)
June 15, 2017	1,892,000	0.61
July 20, 2017	250,000	0.66

The following RSU's were issued during the year ended December 31, 2017:

	Number of Restricted Share	
Date of Issuance	Units Issued	Exercise Price (US\$)
June 15, 2017	1,077,869	N/A

No share purchase warrants were issued during the year ended December 31, 2017.

As at December 31, 2017, the Company had the following outstanding securities held in escrow:

	Number of Securities	
Designation of Class	held in Escrow	Percentage of Class
Common shares <sup>(1)</sup>	191,000	0.01%

(1) Common shares are held by Farris, Vaughan, Wills & Murphy LLP and were issued as restricted shares to certain United States employees. Contractual restrictions on transfer ends on receipt of permits to commence construction (95,500 common shares) and commencement of commercial production (95,500 common shares).

## **10.** Directors and Officers

### Name, Occupation and Security Holding

The name, province or state, country of residence, position or office held with the Company and principal occupation during the past five years of each director and executive officer of the Company as at December 31, 2017 and as at the date hereof are described as follows:

Name & Residence	Position(s) with the Company	Principal Occupation during past five years	Director since
Dennis Bartlett <sup>(4,5)</sup> Arizona, United States	Director	Chief Executive Officer & Director, Cupric Canyon Capital	July 19, 2017
Jonathan Cherry <sup>(4,5)</sup> Minnesota, United States	Director, President & Chief Executive Officer	Same	July 16, 2012
Mike Ciricillo <sup>(4,5)</sup> Arizona, United States	Director	Head of Copper & Smelting and Refining, Glencore	July 19, 2017
David Dreisinger <sup>(2,3,4,5)</sup> British Columbia, Canada	Director	Professor and Chairholder of the Industrial Research and Chair in Hydrometallurgy, University British Columbia	October 3, 2003
W. Ian L. Forrest <sup>(1,2,3)</sup> Vaud, Switzerland	Director, Chairman	Chartered Accountant	October 3, 2003
Helen Harper <sup>(2,3,4,5)</sup> Ontario, Canada	Director	Asset Manager for North America Copper Operations, Glencore	July 13, 2016
Alan R. Hodnik <sup>(1,3,4)</sup> Minnesota, United States	Director	Chairman, President and Chief Executive Officer, Allete Inc.	March 9, 2011
Stephen Rowland <sup>(1,3)</sup> Connecticut, United States	Director	Executive, Glencore	October 30, 2008
Michael M. Sill <sup>(1,2)</sup> Minnesota, United States	Director	Chief Executive Officer, Road Machinery & Supplies Co.	March 9, 2011
Patrick Keenan Minnesota, United States	Chief Financial Officer	Same, and previously Senior Vice President of Finance and Treasurer, Newmont Mining Corporation	N/A
Bradley Moore Minnesota, United States	Executive Vice President, Environmental & Governmental Affairs	Same	N/A

Notes: (1) Member of the Compensation Committee.

(2) Member of the Audit Committee. Helen Harper is a non-voting participant.

(3) Member of the Nominating and Corporate Governance Committee. Helen Harper and Stephen Rowland are non-voting participants.

(4) Member of the Health, Safety, Environment and Communities Committee.

(5) Member of the Technical Steering Committee

As at the date of this AIF, PolyMet's directors and executive officers, as a group, beneficially owned, directly or indirectly, or exercised control or direction over 5,552,054 Common Shares, representing 1.7 percent of the total number of Common Shares outstanding before giving effect to the exercise of options or warrants to purchase Common Shares held by such directors and executive officers. The statement as to the number of Common Shares beneficially owned, directly or indirectly, or over which control or direction is exercised by the Company's directors and executive officers as a group is based upon information furnished by the directors and executive officers.

Each Director serves until the next annual general meeting of shareholders or until his/her successor is duly elected, unless his/her office is vacated in accordance with the Articles of Incorporation. Vacancies on the

Board of Directors are filled by election from nominees chosen by the remaining Directors and the persons filling those vacancies will hold office until the next annual general meeting of shareholders, at which time they may be re-elected or replaced.

### Indebtedness

No director or executive officer, nor any of their respective associates or affiliates is or has been at any time since the beginning of the last completed fiscal year indebted to PolyMet.

### Cease Trade Orders, Bankruptcies, Penalties or Sanctions

To the knowledge of PolyMet's management and as of the date of this AIF, except for Mr. Forrest's directorships as noted below, no directors: (i) are, at the date hereof, or have been, during the 10 years prior to the date hereof, a director or executive officer of any company that, while that person was acting in that capacity or within a year of that person ceasing to act in that capacity became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or became subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver-manager or trustee appointed to hold assets of the director; or (ii) have, within the 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangements or compromises with creditors, or had a receiver, receiver manager or trustee appointed to hold assets of the director. Viatrade plc, an investment company of which Mr. Forrest was a director, went into administration in August 2009. Georex SA, an oil services company of which Mr. Forrest was a director, filed for administration in France on account of its business model no longer being sustainable. Poros SAS, an associated company of Georex SA of which Mr. Forrest was also a director, has ceased to be active since France banned oil shale fracking.

### **Conflicts of Interest**

Directors and officers may become in a position of conflict. Directors and officers must disclose the nature and extent of the conflict and abstain from voting on the approval of the proposed contract or transaction, unless all of the directors have a disclosable interest, in which case the director may vote on such resolution and may be liable to account to the Company for any profit that accrued under such transaction. To the knowledge of PolyMet's management and as of the date of this AIF, there are no known existing conflicts of interest between the Company and any of PolyMet's directors or officers as a result of such individual's outside business interests.

### 11. Legal Proceedings and Regulatory Actions

To the knowledge of Company's management, there are no material legal proceedings or regulatory actions outstanding to which PolyMet is a party, or to which any of its property is subject to and no such proceedings or regulatory actions are known to the Company to be threatened or pending, as of the date hereof, with the exception of challenges to the USFS ROD as discussed below.

The Final ROD states the land exchange will eliminate a fundamental conflict between the rights that PolyMet has as a result of control of the mineral rights and the USFS position on those rights which otherwise could result in litigation that has no certain outcome and could set a judicial precedent regarding other lands acquired in the same deed under the Weeks Act.

Following issuance of the Final ROD in January 2017, four legal challenges were filed contesting various aspects of the land exchange. In cases where it was not already named as a defendant, PolyMet applied for and was granted intervenor status. It is now a co-defendant with the USFS in all four suits. Motions have been filed by PolyMet to dismiss each of these suits for lack of standing. On August 31, 2017, the U.S. District Court, District of Minnesota denied WaterLegacy's motion for a preliminary injunction to stop the land exchange from proceeding while the WaterLegacy suit was pending. There are no other pending motions for preliminary injunction. PolyMet believes the environmental review process was thorough, thoughtful and in compliance with the law and that the USFS properly evaluated the proposed land exchange in the Final ROD.

On March 6, 2018, the U.S. District Court for the District of Minnesota stayed all four of the pending challenges to the land exchange "pending Congress's consideration of the Act." The Court also denied PolyMet's pending motions to dismiss for lack of standing "without prejudice to their renewal." This means that the Court does not intend to address the plaintiffs' challenges to the land exchange unless and until the US Senate acts on HR3115. In the meantime, the Company is free to continue the administrative steps to complete the land exchange transaction.

### 12. Interest of Management and Other Material Transactions

Other than as disclosed in this AIF, PolyMet is not aware of any material interest, direct or indirect, involving any director or executive officer or any shareholder who holds more than 10% of the outstanding voting securities, or any associate or affiliate of any of the foregoing, which has been entered into since the commencement of the last completed fiscal year or in any proposed transaction which, in either case, has materially affected or will materially affect PolyMet or any of PolyMet's subsidiaries.

## 13. Transfer Agent and Registrar

The Company's registrar and transfer agent is Computershare Investor Services Inc. located at 100 University Avenue, 9th Floor, Toronto, Ontario M5J 2Y1, Canada.

### 14. Material Contracts

The following is a summary of each material contract to which the Company is a party, other than contracts entered into in the ordinary course of business, for the last fiscal year or before the last fiscal year that is still in effect.

- Acquisition of the mine site lease, see Item 4 for a complete description;
- Acquisition of the Erie Plant and associated infrastructure acquired in the Asset Purchase Agreements I and II, see Item 4 for a complete description; and
- Financing agreements entered into with Glencore, see below for a complete description.

Since October 2008, the Company and Glencore have entered into a series of financing and other agreements comprising:

- Equity five separate agreements comprising \$25.0 million placement of PolyMet common shares in calendar 2009 in two tranches; a \$30.0 million placement of PolyMet common shares in calendar 2010 in three tranches; a \$20.0 million placement of PolyMet common shares in calendar 2011 in one tranche; a \$20.960 million purchase of PolyMet common shares in the 2013 Rights Offering; and a \$10.583 million purchase of PolyMet common shares in the 2016 Private Placement;
- Convertible debt ("Glencore Convertible Debt") agreement comprising \$25.0 million initial principal secured convertible debentures drawn in four tranches;
- Non-convertible debt ("Glencore Non-Convertible Debt") four separate agreements comprising \$30.0 million initial principal secured debentures in calendar 2015 drawn in four tranches; an \$11.0 million initial principal secured debenture in calendar 2016 drawn in one tranche; a \$14.0 million initial principal secured debenture in calendar 2016 drawn in four tranches; and a \$20.0 million initial principal secured debenture in calendar 2016 drawn in four tranches; and a \$20.0 million initial principal secured debenture in calendar 2017 drawn in two tranches. Subsequent to December 31, 2017, a fifth separate agreement was entered into comprising up to \$80.0 million initial principal secured debentures in calendar 2018 to be drawn in five tranches at the Company's option;
- Marketing Agreement whereby Glencore committed to purchase all of the Company's production of concentrates, metal, or intermediate products on market terms at the time of delivery for at least the first five years of production; and
- Corporate Governance Agreement whereby from January 1, 2014 as long as Glencore holds 10% or more of PolyMet's shares (on a fully diluted basis), Glencore has the right, but not obligation, to nominate at least one director and not more than the number of directors proportionate to Glencore's fully diluted ownership of PolyMet, rounded down to the nearest whole number, such number to not exceed 49% of the total board.

As a result of these financing transactions and the purchase by Glencore of PolyMet common shares previously owned by Cliffs, Glencore's ownership and ownership rights of PolyMet as at December 31, 2017 comprises:

- 92,836,072 shares representing 29.1% of PolyMet's issued shares;
- Glencore Convertible Debt exchangeable through the exercise of an exchange warrant ("Exchange Warrant") at \$1.2696 per share into 38,660,854 common shares of PolyMet (including capitalized and accrued interest as at December 31, 2017), and where the exercise price and the number of shares issuable are subject to conventional anti-dilution provisions;
- Warrants to purchase 7,055,626 common shares at \$1.00 per share at any time until October 28, 2021, subject to acceleration on the earlier of receipt of permits necessary to construct NorthMet or the twelve month anniversary of the issue date provided the 20-day VWAP of PolyMet common shares is equal to or greater than \$1.50 ("Acceleration Triggering Event"), and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions; and
- Warrants to purchase 625,000 common shares at \$0.7797 per share at any time until October 28, 2021, and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions.

If Glencore were to exercise all of its rights and obligations under these agreements, it would own 139,177,552 common shares of PolyMet, representing 38.1% on a partially diluted basis, that is, if no other options or warrants were exercised or 34.4% on a fully diluted basis, if all other options and warrants were exercised, whether they are in-the-money or not. Subsequent to December 31, 2017, warrants to purchase 6,458,001 common shares at \$0.8231 per share at any time until March 31, 2019 were issued to Glencore.

## **15.** Interest of Experts

PricewaterhouseCoopers LLP has served as PolyMet's auditor since April 2006 and is located at 250 Howe Street, Suite 1400, Vancouver, British Columbia, Canada V6C 3S7. PricewaterhouseCoopers LLP report that they are independent of the Company in accordance with the code of professional conduct of the Chartered Professional Accountants of British Columbia and the rules of the Public Company Accounting Oversight Board and the Securities and Exchange Commission.

PolyMet has relied on the work of the qualified persons listed in the section of this AIF titled "Introductory Notes - Qualified Persons Under NI 43-101" in connection with the scientific and technical information presented in this AIF in respect of its mineral property, NorthMet, which is based upon the NI 43-101 Technical Report filed on SEDAR and EDGAR.

None of the qualified persons listed in the section of this AIF titled "Introductory Notes - Qualified Persons Under NI 43-101", nor any of the companies listed therein that employ those individuals, received or has received a direct or indirect interest in the property of the Company or of any associate or affiliate of the Company in connection with the preparation of reports relating to the Company's mineral properties. As of the date hereof, the aforementioned persons and companies beneficially own, directly or indirectly, less than 1% of the Company's outstanding securities of any class and less than 1% of the outstanding securities of any class of PolyMet's associates or affiliates.

### **16.** Controls and Procedures

### A. Evaluation of Disclosure Controls and Procedures

Disclosure controls and procedures are designed to ensure that information required to be disclosed in reports filed or submitted by the Company under Canadian and United States securities legislation is recorded, processed, summarized and reported within the time periods specified in those rules, including providing reasonable assurance that material information is gathered and reported to senior management, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), as appropriate, to permit timely decisions regarding public disclosure. Management, including the CEO and CFO, have evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures, as defined in Rule 13a-15(e) and 15d-15(e) of the US Exchange Act and the rules of the Canadian Securities Administrators (the "CSA"). Based on this evaluation, the CEO and CFO have concluded that the Company's disclosure controls and procedures were effective as at December 31, 2017.

### B. Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) and 15d-15(f) of the U.S. Exchange Act and National Instrument 52-109 Certification of Disclosure in Issuer's Annual and Interim filings. Any system of internal control over financial reporting, no matter how well designed, has inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Management has used the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission to evaluate the effectiveness of the Company's internal control over financial reporting. Based on this assessment, management concluded the Company's internal control over financial reporting was effective as at December 31, 2017.

### C. Attestation Report of the Registered Public Accounting Firm

The effectiveness of the Company's internal control over financial reporting as at December 31, 2017 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included with the Company's audited consolidated financial statements.

### D. Changes in Internal Controls

There have been no changes in the Company's internal control over financial reporting during the period covered by this AIF that have materially affected, or is reasonably likely to material affect, the Company's internal control over financial reporting.

### 17. Audit Committee

PolyMet is subject to National Instrument 52-110 - *Audit Committees*, which has been adopted in various Canadian provinces and territories and which prescribes certain requirements in relation to audit committees and defines the meaning of independence with respect to directors. These reflect current regulatory guidelines of the CSA as well as certain U.S. initiatives under the *Sarbanes-Oxley Act of 2002* and adopted corporate governance rules of the NYSE. A copy of the Company's Audit Committee's charter is attached as Schedule A to this AIF.

The Company's Audit Committee was composed of Michael M. Sill, Dr. David Dreisinger, and W. Ian L. Forrest, each of whom, in the opinion of the Company's Board of Directors, is independent as determined under the rules of the TSX and NYSE and each of whom is financially literate. The Audit Committee meets the composition requirements set forth by TSX and NYSE rules.

Michael M. Sill has served as a member of PolyMet's board of directors since March 2011. He serves as the Chair on the Audit committee and also serves on the Compensation and Health, Safety, Environment and Communities committees. Since 1994, Mr. Sill has served as President and CEO of Road Machinery & Supplies Co., a distributor of construction, mining and forestry equipment. Educated at Dartmouth College and J.L. Kellogg Graduate School of Management, Mr. Sill started his career as a financial analyst and commercial lending officer with The Northern Trust Company. He serves on the board of Reviva Corporation and Dunwoody College of Technology, and has previously served on the Twin Cities Regional Board of US Bank and numerous industry association boards.

Dr. David Dreisinger has served as a member of PolyMet's board of directors since October 2003. He serves as the Chair of the Technical Steering committee and also serves on the Health, Safety, Environment and Communities, Audit, and on the Nominating and Corporate Governance committees. Since 1988, Dr. Dreisinger has been a member of the faculty at the University of British Columbia in the Department of Materials Engineering and is currently Professor and Chairholder of the Industrial Research and Chair in Hydrometallurgy. He has published over 300 papers and has been extensively involved as a process consultant in industrial research programs with metallurgical companies. Dr. Dreisinger has participated in 21 U.S. patents for work in areas such as pressure leaching, ion exchange removal of impurities from process solutions, use of thiosulfate as an alternative to cyanide in gold leaching, and leach-electrolysis treatment of copper recovery from sulfide ores, and the Sepon Copper Process for copper recovery from sulfidic-clayey ores. Dr. Dreisinger serves as a director of Search Minerals, Inc., LeadFX Inc., and as Vice President – Metallurgy for each of Camrova Resources, Inc., and Search Minerals Inc.

W. Ian L. Forrest has served as a member of PolyMet's board of directors since October 2003 and as its Chairman since July 2012. Mr. Forrest previously served as Chairman of the board from May 2004 to February 2008 and Co-Chairman from January 2011 to July 2012. He serves as the Chair on the Nominating and Corporate Governance committees and also serves on the Audit and Compensation committees. Mr. Forrest played an important role in the Company's revival in 2003. Mr. Forrest is a member of the Institute of Chartered Accountants of Scotland. Mr. Forrest has more than 40 years of experience with public companies in the resource sector. His experience encompasses the areas of promotion, financing, exploration, production and company management. He has also participated in several notable projects including Gulfstream's North Dome gas discovery, Qatar, Reunion Mining's Scorpion zinc, Namibia, which was subsequently developed by Anglo American, and Ocean Diamond Mining, which pioneered the independent diamond dredging industry off the west coast of southern Africa. He also served as a director of Tanager Energy Inc. (formerly MGold Resources Inc.) until October 2011 and Belmore Resources (Holdings) plc until

July 2011 when it was acquired by Lundin Mining Ltd. Mr. Forrest was a director of Viatrade plc Georex SA, and Poros SAS. See further discussion surrounding these directorships in Item 10 above.

During the eleven months ended December 31, 2017, the Board of Directors determined that W. Ian L. Forrest qualified as the Audit Committee's "financial expert," as defined under the rules of the TSX and NYSE and was "financially sophisticated" as defined under the rules of the TSX and NYSE.

Mr. Forrest qualifies as a financial expert and is financially sophisticated, in that he has an understanding of generally accepted accounting principles and financial statements; is able to assess the general application of accounting principles in connection with the accounting for estimates, accruals and reserves; has experience analyzing or evaluating financial statements that entail accounting issues of equal complexity to the Company's financial statements (or actively supervising another person who did so); and has a general understanding of internal controls and procedures for financial reporting and an understanding of audit committee functions.

The members of the Audit Committee do not have fixed terms and are appointed and replaced from time to time by resolution of the Board of Directors.

The Audit Committee meets four times a year, at a minimum, and has access to all officers, management and employees of the Company and may engage advisors or counsel as deemed necessary to perform its duties and responsibilities as a committee.

The Audit Committee also meets with the Company's President and CEO, the Company's CFO, and the Company's independent auditors to review and inquire into matters affecting financial reporting, the system of internal accounting and financial controls, and the Company's audit procedures and audit plans. The Audit Committee also recommends to the Board of Directors the independent auditors to be appointed for each year. In addition, the Audit Committee reviews and recommends to the Board of Directors for approval the annual and quarterly financial statements and management's discussion and analysis. Finally, the Audit Committee undertakes other activities as required by the rules and regulations of the TSX and the NYSE American and other governing regulatory authorities.

#### **Pre-Approval Policies and Procedures**

All fees paid to the external auditors, PricewaterhouseCoopers LLP, were pre-approved by the Audit Committee. This pre-approval involved a submission by the auditors to the Audit Committee of a scope of work to complete the audit and prepare tax returns, an estimate of the time involved, and a proposal for the fees to be charged for the audit. The Audit Committee reviewed this proposal with management and after discussion with the auditors, pre-approved the scope of work and fees.

### **External Auditor Service Fees**

The following outlines the expenditures for accounting fees billed and paid for the last two fiscal periods ended:

		Audit Related		
Fiscal Year Ending	Audit Fees	Fees	Tax Fees	All Other Fees
December 31, 2017	CDN \$139,000	CDN \$54,000	CDN \$35,451	CDN \$Nil
January 31, 2017	CDN \$199,000	CDN \$54,000	CDN \$21,060	CDN \$Nil

"Audit Fees" are the aggregate fees billed by PricewaterhouseCoopers LLP for the audit of the Company's consolidated annual financial statements.

"Audit-Related Fees" are fees billed by PricewaterhouseCoopers LLP for services reasonably related to the performance of the audit or interim review and services associated with registration statements and prospectuses.

"Tax Fees" are fees for professional services rendered by PricewaterhouseCoopers LLP for tax compliance, tax advice on actual or contemplated transactions.

### 18. Additional Information

All documents referred to in this AIF are available for inspection at the Company's registered and records office, listed below, during normal office hours.

Farris, Vaughan, Wills & Murphy LLP 2500 - 700 W Georgia St Vancouver BC Canada V7Y 1B3

In Canada, the Company will file reports and other information with the Canadian Securities Administrators. These materials include additional financial information provided in the Company's financial statements and MD&A for its most recently completed fiscal year. These materials also include directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans, as contained in the Management Information Circular for the most recent annual meeting of security holders that involves the election of directors. Additional reports, registration statements, and other information relating to PolyMet may be found on SEDAR at <u>www.sedar.com</u>.

In the United States, the Company will file reports and other information with the SEC in accordance with the requirements of the Exchange Act. These materials, including this AIF and exhibits and the Company's financial statements and MD&A for its most recently completed fiscal year, may be inspected and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 and at the SEC's regional office at 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. Copies of the materials may be obtained from the Public Reference Room of the Commission at 100 F. Street, N.E., Washington, D.C. 20549 at prescribed rates. The public may obtain information on the operation of the Commission's Public Reference Room by calling the Commission in the United States at 1-800-SEC-0330. Additional reports, registration statements and other information relating to PolyMet can also be inspected on EDGAR available on the SEC's website at <u>www.sec.gov</u>.

### SCHEDULE A AUDIT COMMITTEE CHARTER

### 1. PURPOSE

The purpose of the Audit Committee (in this charter, the "Committee") is to oversee the accounting and financial reporting processes of PolyMet Mining Corp. (the "Company"), the audits of the Company's financial statements, the qualifications of the public accounting firm engaged as the Company's independent auditor to prepare or issue an audit report on the financial statements of the Company and internal control over financial reporting, and the performance of the Company's internal audit function and independent auditor. The Committee reviews and assesses the qualitative aspects of the Company's financial reporting to shareholders, the Company's financial risk assessment and management, and the Company's ethics and compliance programs. The Committee is directly responsible for the appointment (subject to shareholder ratification), compensation, retention, and oversight of the independent auditor. The Committee also reviews and assesses to manage and control risk, except for risks assigned to other committees of the Board or retained by the Board.

### 2. STRUCTURE AND OPERATIONS

The Committee shall be composed of not less than three (3) directors. Members of the Committee shall be independent and each shall be "financially literate" and will be appointed or reappointed at the meeting of the Board, immediately following the annual general meeting of the shareholders of the Company (the "AGM"), and in the normal course of business will serve a minimum of three (3) years. At least one member of the Committee shall in the judgment of the Board be an "audit committee financial expert" as defined by the rules and regulations of the Securities and Exchange Commission. Each member shall continue to be a member of the Committee until a successor is appointed, unless the member resigns, is removed or ceases to be a director. The Board may fill a vacancy that occurs in the Committee at any time. Generally, no member of the Committee may serve on more than three audit committees of publicly traded companies (including the Audit Committee of the Company) at the same time.

"Financially Literate" means the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements.

The Board or, in the event of its failure to do so, the members of the Committee, shall appoint or reappoint, at the meeting of the Board immediately following the AGM, a chairman from among their number. The chairman shall not be a former officer of the Company and shall serve as a liaison between the Committee and members of the Company's management team ("Management").

Meetings of the Committee shall be held at least four times annually, provided that due notice is given and a quorum of a majority of the members is present. Where a meeting is not possible, resolutions in writing which are signed by all members of the Committee are as valid as if they had been passed at a duly held meeting. The frequency and nature of the meeting agendas are dependent upon business matters and affairs, which the Company faces from time to time.

The Committee shall report to the Board on its activities after each of its meetings. In addition, it shall review and assess the adequacy of this charter annually and, where necessary, recommend changes to the Board for approval. The Committee shall undertake and review with the Board an annual performance evaluation of the Committee.

### 3. RESOURCES AND AUTHORITY

The Committee shall have the resources and authority appropriate to discharge its responsibilities, including the authority to use internal personnel and to obtain advice and assistance from internal or external legal, accounting or other advisors and the funding for compensating any such external advisors. In addition, the Committee shall have sole authority to retain and terminate any such firms and to approve the fees and other retention terms related to the appointment such firms.

### 4. **RESPONSIBILITIES**

The responsibilities of the Committee are:

- 1. To assist the Board of Directors in fulfilling its fiduciary responsibilities' relating to the Company's quality and integrity of accounting, auditing, and reporting practices and the integrity of the Company's internal accounting controls and management information systems;
- 2. To review with the auditors, internal accountants and management of the Company:
  - a. any audited financial statement of the Company, including any such statement that is to be presented to an annual general meeting or provided to shareholders or filed with regulatory authorities and including any audited financial statement contained in a prospectus, registration statement or other similar document, and
  - b. the financial disclosure in each Annual Report and Management Discussion and Analysis of the Company which accompanies such audited financial statement and in each such filing, prospectus, registration statement or other similar document;
- 3. To review with the internal accountants and management of the Company:
  - a. any unaudited financial statement of the Company, including any such statement that is to be presented to an annual general meeting or provided to shareholders or filed with regulatory authorities and including any unaudited financial statement contained in a prospectus, registration statement, Quarterly Report or other similar document,
  - b. the financial disclosure in each Quarterly Report and when applicable, Management Discussion and Analysis of the Company accompanying such unaudited financial statement and in each such filing, prospectus, registration statement or other similar document which accompanies such unaudited financial statement, and
  - c. in connection with the Form 40-F of the Company, review (i) Management's disclosure to the Committee and the independent auditor under Section 302 of the Sarbanes-Oxley Act, including identified changes in internal control over financial reporting; and (ii) the contents of the Chief Executive Officer and the Chief Financial Officer certificates to be filed under Sections 302 and 906 of the Sarbanes-Oxley Act and the process conducted to support the certifications;
- To otherwise review as required and report to the Board of Directors with respect to the adequacy of internal accounting and audit procedures and the adequacy of the Company's management information systems;
- 5. To otherwise ensure that no restrictions are placed by Management on the scope of the auditors review and examination of the Company's accounts;
- 6. To appoint or replace the independent auditor and approve the terms on which the independent auditor is engaged for the ensuing fiscal year;
- 7. At least annually, evaluate the independent auditor's qualifications, performance, and independence, including that of the lead partner. The evaluation will include obtaining a written report from the independent auditor describing the firm's internal quality control procedures; any material issues raised by the most recent Public Company Accounting Oversight Board inspection, internal quality control review, or PCAOB review, of the firm or by any inquiry or investigation by governmental or professional authorities within the past five years, concerning an independent audit or audits carried out by the firm,

and any steps taken to deal with those issues; and all relationships between the independent auditor and the Company;

- 8. Resolve any disagreements between Management and the independent auditor about financial reporting;
- 9. Establish and oversee a policy designating permissible services that the independent auditor may perform for the Company, providing for preapproval of those services by the Committee subject to the de minimis exceptions permitted under applicable rules, and quarterly review of any services approved by the designated member under the policy and the firm's non-audit services and related fees;
- 10. Ensure receipt from the independent auditor of a formal written statement delineating all relationships between the auditor and the Company, consistent with applicable requirements of the PCAOB regarding the independent auditor's communications with the Committee concerning independence, actively engage in a dialogue with the auditor about any disclosed relationships or services that may impact the objectivity and independence of the auditor, and take appropriate action to oversee the independence of the independent auditor;
- 11. Advise the Board about the Committee's determination whether the Committee consists of three or more members who are Financially Literate, including at least one member who has financial sophistication and is a financial expert;
- 12. Inquire of Management and the independent auditor about significant risks or exposures, review the Company's policies for risk assessment and risk management, and assess the steps Management has taken to control such risk to the Company, except as to those risks for which oversight has been assigned to other committees of the Board or retained by the Board;
- 13. Review with Management and the independent auditor:
  - a. The Company's annual assessment of the effectiveness of its internal controls and the independent auditor's attestation,
  - b. The adequacy of the Company's internal controls, including computerized information system controls and security,
  - c. Any "material weakness" or "significant deficiency" in the design or operation of internal control over financial reporting, and any steps taken to resolve the issue, and
  - d. Any related significant findings and recommendations of the independent auditor and internal audit together with Management's responses;
- 14. Develop, review, and oversee procedures for (i) receipt, retention, and treatment of complaints received by the Company regarding accounting, internal accounting controls, and auditing matters and (ii) the confidential, anonymous submission of employee concerns regarding accounting or auditing matters;
- 15. Review policies and procedures with respect to transactions between the Company and officers and directors, or affiliates of officers or directors, or transactions that are not a normal part of the Company's business, and review and approve those related-party transactions that would be disclosed pursuant to SEC Regulation S-K, Item 404;
- 16. Review with Management and the independent auditor at least annually the Company's critical accounting policies and significant judgments and estimates, including any significant changes in the Company's selection or application of accounting principles and the effect of regulatory and accounting initiatives on the financial statements of the Company;
- 17. To ensure that the Company disseminates information concerning its financial position and results of operations to the public in a timely fashion;
- 18. Complete an annual evaluation of the Committee's performance;
- 19. Include a copy of the Committee charter as an appendix to the proxy statement at least once every three years, or disclose annually in the proxy statement where the charter can be found on the Company's website;
- 20. Set clear hiring policies for the Company's hiring of employees or former employees of the independent auditor who were engaged in the Company's account, and ensure the policies comply with any regulations applicable to the Company; and
- 21. Review with Management the Company's policies and processes for tax planning and compliance.

## 5.0 COMMUNICATIONS

The independent auditor reports directly to the Committee. The Committee is expected to maintain free and open communication with the independent auditor, the internal auditors, and Management. This communication will include periodic private executive sessions with each of these parties.

#### 6.0 EDUCATION

The Company is responsible for providing new members with appropriate orientation briefings and educational opportunities, and the full Committee with educational resources related to accounting principles and procedures, current accounting topics pertinent to the Company, and other matters as may be requested by the Committee. The Company will assist the Committee in maintaining appropriate financial literacy.

WL SEIS Exhibit 8



## POLYMET MINING CORP.

MANAGEMENT DISCUSSION AND ANALYSIS

As at December 31, 2017 and January 31, 2017 And for the 11 months ended December 31, 2017 and 12 months ended January 31, 2017

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## General

The following information, prepared as at March 27, 2018 should be read in conjunction with the audited consolidated financial statements of PolyMet Mining Corp. and its subsidiaries (together "PolyMet" or the "Company") as at December 31, 2017 and January 31, 2017 and for the eleven months ended December 31, 2017 and twelve months ended January 31, 2017 and related notes attached thereto, which are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). All amounts are expressed in United States ("U.S.") dollars unless otherwise indicated.

## Change of the Financial Year End

On December 7, 2017, the Company's Board of Directors approved a change of the financial year end from January 31 to December 31. The Company's transition year consists of an eleven-month period ended on December 31, 2017. The Company's new financial year will consist of the following:

	Length of			
Period	Period	Ending of Period	Comparative Period	Filing Deadline
Interim financials (1 <sup>st</sup> Quarter)	3 months	Mar. 31, 2018	3 months ended Apr. 30, 2017	May 15, 2018
Interim financials (2 <sup>nd</sup> Quarter)	6 months	Jun. 30, 2018	6 months ended Jul. 31, 2017	Aug 14, 2018
Interim financials (3 <sup>rd</sup> Quarter)	9 months	Sep. 30, 2018	9 months ended Oct. 31, 2017	Nov 14, 2018
Audited Annual Financial Statements	12 months	Dec. 31, 2018	11 months ended Dec. 31, 2017	Apr 1, 2019

For additional information see the Notice filed on SEDAR on December 7, 2017.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts

## Forward Looking Statements

This Management Discussion and Analysis ("MD&A") contains statements that constitute "forward-looking statements" within the meaning of Section 21E of the United States Securities Exchange Act of 1934, as amended (the "US Exchange Act"). These statements appear in a number of different places in this MD&A and can frequently, but not always, be identified by words such as "expects", "anticipates", "believes", "intends", "estimates", "potential", "possible", "projects", "plans" and similar expressions, or statements that events, conditions or results "will", "may", "could" or "should" occur or be achieved or their negatives or other comparable words. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause PolyMet's actual results, performance or achievements to be materially different from any future results, performance or achievements to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements. Forward-looking statements include statements regarding the outlook for the Company's future operations, plans and timing for PolyMet's exploration and development programs, statements about future market conditions, supply and demand conditions, forecasts of future costs and expenditures, the outcome of legal proceedings, and other expectations, intentions and plans that are not historical fact. The Company's actual results may differ materially from those in the forward-looking statements due to risks facing PolyMet or due to actual facts differing from the assumptions underlying the Company's predictions.

The forward-looking statements contained in this MD&A are based on assumptions, which include, but are not limited to:

- Obtaining permits on a timely basis;
- Raising the funds necessary to develop the NorthMet Project and continue operations;
- Execution of prospective business plans; and
- Complying with applicable government regulations and standards.

Such forward-looking statements are subject to risks, uncertainties and other factors, including those listed or incorporated by reference under "Risk Factors" in the Annual Information Form. These risks, uncertainties and other factors include, but are not limited to:

- Changes in general economic and business conditions, including changes in interest rates and exchange rates;
- Changes in the resource market including prices of natural resources, costs associated with mineral exploration and development, and other economic conditions;
- Natural phenomena;
- Actions by governments and authorities including changes in government regulation;
- Uncertainties associated with legal proceedings; and
- Other factors, many of which are beyond the Company's control.

All forward-looking statements included in this MD&A are based on information available to the Company on the date of this MD&A. The Company expressly disclaims any obligation to update publicly, or otherwise, these statements, whether as a result of new information, future events or otherwise except to the extent required by law, rule or regulation. Readers should not place undue reliance on forward-looking statements. Readers should carefully review the cautionary statements and risk factors contained in this and all other documents that the Company files from time to time with regulatory authorities.

Cautionary note to U.S. investors: The terms "measured and indicated mineral resource", "mineral resource", and "inferred mineral resource" used in this MD&A are Canadian geological and mining terms as defined in accordance with National Instrument 43-101, Standards of Disclosure for Mineral Projects ("NI 43-101") under the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") Standards on Mineral Resources and Mineral Reserves. U.S. investors are advised that while such terms are recognized and required under Canadian regulations, the SEC does not recognize these terms. Mineral Resources do not have demonstrated economic viability. It cannot be assumed that all or any part of a Mineral Resource will be upgraded to Mineral Reserves. Under Canadian rules, estimates of inferred mineral resources may not form the basis of or be included in feasibility or other studies. U.S. investors are cautioned not to assume that any part of an inferred mineral resource exists, or is economically or legally mineable.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## Summary of Business

PolyMet is a TSX and NYSE American listed Issuer engaged in the exploration and development of natural resource properties. The Company's primary mineral property and principal focus is the commercial development of its NorthMet Project ("NorthMet" or "Project"), a polymetallic project in northeastern Minnesota, United States of America, which hosts copper, nickel, cobalt and platinum group metal mineralization.

The NorthMet ore body is at the western end of a series of known copper-nickel-platinum group metal deposits in the Duluth Complex. Completion of the Definitive Feasibility Study ("DFS") in 2006 established proven and probable reserves, positioning NorthMet as the most advanced of the four advanced projects in the Duluth Complex: namely, from west to east, NorthMet, Mesaba, Serpentine, and Maturi.

PolyMet acquired the Erie Plant, associated infrastructure, and approximately 12,400 acres (19.4 square miles) of surface rights from Cliffs Erie LLC, a subsidiary of Cleveland-Cliffs Inc. (together "Cliffs"). The plant is located about six miles west of the NorthMet ore body and comprises a 100,000 ton-per-day crushing and milling facility, a railroad and railroad access rights connecting the Erie Plant to the NorthMet ore body, tailings storage facilities, 120 railcars, locomotive fueling and maintenance facilities, water rights and pipelines, administrative offices, and approximately 6,000 acres of land to the east and west of the existing tailings storage facilities.

See additional discussion below.

## Summary of Recent Events and Outlook

## Highlights and recent events

PolyMet made significant progress during 2017 and 2018 to date. Notably the state of Minnesota released draft permits for public comment, the U.S. House of Representatives approved bipartisan legislation to advance the land exchange, an updated technical report was released which included an assessment of higher throughput scenarios, and additional financing was secured to complete permitting, final engineering and certain early works that will facilitate the transition to construction upon receipt of final permits.

More specifically:

- In January 2017, the United States Forest Service ("USFS") issued its Final Record of Decision ("ROD") authorizing a land exchange to transfer title of the surface rights over and around the NorthMet mineral rights to PolyMet in exchange for certain other lands owned by PolyMet;
- In June 2017, the Company appointed Patrick Keenan as Chief Financial Officer;
- In August 2017 and September, the Minnesota Department of Natural Resources ("MDNR") released six draft water appropriation permits and two draft dam safety permits for 30-days of public review and comment which have all closed;
- In September 2017, the Company issued and committed to issue to Glencore secured debentures with a total principal amount of \$20 million;
- In October 2017, the Company entered into an agreement with EIP Credit Co., LLC ("EIP Credit") to reserve wetland bank credits for the NorthMet Project;
- In November 2017, the U.S. House of Representatives approved bipartisan legislation introduced by Rep. Rick Nolan, D-MN-8 directing the Secretary of Agriculture to ratify the previously approved land exchange between PolyMet and the U.S. Forest Service. This bill has been advanced to the US Senate for consideration;

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

- In January 2018, the MDNR released the draft Permit to Mine for public review and comment which has closed;
- In January 2018, the Minnesota Pollution Control Agency ("MPCA") released the draft water quality permit, draft section 401 certification, and draft air emissions permit for public review and comment which have all closed;
- In February 2018, the final public hearings on the draft permits were completed;
- In March 2018, the Company and Glencore agreed to extend the term of outstanding debentures until March 31, 2019, reduce the interest rate on the outstanding debentures, and make available \$80 million in additional debentures during 2018. Proceeds will be used to complete pre- and postpermitting work, including detailed engineering and environmental cleanup, and to purchase wetland credits. See additional discussion in the "Financing Activities" section below; and
- In March 2018, the Company issued an Updated Technical Report under NI 43-101 incorporating
  process improvements, project improvements, and environmental controls described in the Final EIS
  and draft permits. The update also included detailed capital costs, operating costs, and economic
  valuation for the mine plan being permitted as well as an assessment of potential future opportunities.
  See additional discussion in the "Feasibility Study, Mineral Resources and Mineral Reserves" section
  below.

Net cash used in operating and investing activities during the eleven months ended December 31, 2017 was \$26.7 million. Primary activities during the period were related to permitting the NorthMet Project, including reimbursement to the state of Minnesota for its internal staff and contractor costs. Other spending related to engineering and studies, maintaining existing infrastructure, financing, and general corporate purposes.

## Goals and Objectives for the Next Twelve Months

The permitting process is managed by the regulatory agencies and, therefore, timelines are not under PolyMet control. Given these circumstances, PolyMet's objectives include:

- Transfer of title to the surface rights over and around the NorthMet mineral rights to PolyMet as part of the authorized land exchange;
- Favorable decision by the state on 401 Water Quality Certification and U.S. Army Corps of Engineers ("USACE") Final ROD and 404 wetlands permit under Clean Water Act;
- Favorable decisions on final state permits (Permit to Mine, air, water, and dam safety permits);
- Completion of project implementation plan; and
- Completion of construction finance plan, subject to typical conditions precedent such as receipt of key permits.

Upon completion of the land exchange, PolyMet will own surface rights to approximately 19,050 acres or 29.8 square miles of contiguous surface rights stretching from west of the Erie Plant to east of the proposed East Pit at NorthMet.

Following the agreement reached with Glencore to make available additional funding at the Company's option as described in the "Financing Activities" section below, subject to permitting progress, PolyMet expects to spend approximately \$80 million during the year ended December 31, 2018, with \$30 million to complete the permit process and maintain existing infrastructure and \$50 million to complete pre- and post-permitting work, including detailed engineering, environmental cleanup, and to purchase wetland credits.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

The Company is in discussions with commercial banks and other sources of debt and equity construction finance and aims to secure commitments sufficient to fund project requirements upon receipt of key permits. Construction and ramp-up to commercial production is anticipated to take twenty-four to thirty months from receipt of key permits.

See additional discussion in the "Liquidity and Capital Resources" section below.

## **Detailed Description of Business**

#### Asset Acquisitions

In November 2005, the Company acquired the Erie Plant and approximately 12,400 acres of surface rights, which is located approximately six miles west of the NorthMet deposit. The plant was managed by Cliffs for many years and was acquired by Cliffs from LTV Steel Mining Company ("LTV") after LTV's bankruptcy, at which time the plant was shut down with a view to a potential restart. The facility includes crushing and milling equipment, comprehensive spare parts, plant site buildings, real estate, tailings storage facilities and mine workshops, as well as access to extensive mining infrastructure including roads, rail, water, and power.

Plans are to refurbish, reactivate and, as appropriate, update the crushing, concentrating and tailings storage facilities at the Erie Plant to produce concentrates containing copper, nickel, cobalt and precious metals. Once commercial operations are established, the Company may install an autoclave to upgrade nickel concentrates to produce a nickel-cobalt hydroxide and a precious metals precipitate. The autoclave circuit is included as an option in the Final EIS.

In December 2006, the Company acquired from Cliffs, property and associated rights sufficient to provide a railroad connection linking the mine development site and the Erie Plant. The transaction also included 120 railcars, locomotive fueling and maintenance facilities, water rights and pipelines, administrative offices and an additional 6,000 acres of land to the east and west of the existing tailings storage facilities.

PolyMet indemnified Cliffs for reclamation and remediation associated with the property under both transactions. In April 2010, Cliffs entered into a consent decree with the Minnesota Pollution Control Agency ("MPCA") regarding short-term and long-term environmental mitigation. Field studies were completed in 2010 and 2011 and short-term mitigations approved by the MPCA were initiated in 2011. In April 2012, long-term mitigation plans were submitted to the MPCA and, in October 2012, the MPCA approved plans for pilot tests of various treatment options to determine the best course of action. Although there is substantial uncertainty related to applicable water quality standards, engineering scope, and responsibility for the financial liability, the October 2012 response from the MPCA, subsequent communications amongst the MPCA, Cliffs and the Company, and closure plans reflected in the Permit to Mine application provide increasing clarification of the potential liability for the long-term mitigation included in the Company's environmental rehabilitation provision.

## Feasibility Study, Mineral Resources and Mineral Reserves

PolyMet published an Updated Technical Report under NI 43-101 dated March 26, 2018 which incorporates process improvements, project improvements, and environmental controls described in the Final EIS and draft permits. The update also includes detailed capital costs, operating costs and economic valuations for the 32,000 short ton per day (STPD) mine plan being permitted. Preliminary assessments for 59,000 STPD and 118,000 STPD mine plans were developed, however, they are not permitted and would require additional capital, detailed engineering, and environmental review and permitting. This report also updated proven and probable mineral reserves to an estimated 254.7 million short tons grading 0.294% copper, 0.084% nickel, 80 ppb platinum, 268 ppb palladium, 39 ppb gold, 74.42 ppm cobalt, and 1.06 ppm silver. These mineral reserves lie within measured and indicated mineral resources of an estimated 649.3 million short tons grading 0.245% copper, 0.074% nickel, 65 ppb platinum, 221 ppb palladium, 33 ppb gold, 71 ppm cobalt, and 0.91 ppm silver. The Mineral Reserve

## Management Discussion and Analysis

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

estimates are based on metal prices for copper at \$2.93 per pound, nickel at \$6.50 per pound, cobalt at \$13.28 per pound, palladium at \$734 per ounce, platinum at \$1,286 per ounce, gold at \$1,263 per ounce, and silver at \$19.06 per ounce. Metal recovery factors are applied to each metal based on recovery curves. The NSR cut-off was set at \$7.98 per ton and reflects processing, water treatment and G&A costs. The Mineral Resource estimates are based on metal prices for copper at \$3.30 per pound. nickel at \$8.50 per pound, cobalt at \$13.28 per pound, palladium at \$734 per ounce, platinum at \$1,286 per ounce, gold at \$1,263 per ounce and silver at \$19.06 per ounce. Metal recovery factors are applied to each metal based on recovery curves developed. The NSR Cutoff was set at \$7.35 per ton and reflects processing, G&A and water treatment costs. See additional details in the Company's most recent Annual Information Form or the Company's NorhtMet Project Form NI 43-101F1 Technical Report dated March 26, 2018, both filed on SEDAR and EDGAR.

## Environmental Review and Permitting

PolyMet commenced the environmental review and permitting process in 2004. In 2005, the MDNR published its Environmental Assessment Worksheet Decision Document establishing the MDNR as the lead state agency and the USACE as the lead federal agency for preparation of an EIS for NorthMet.

In November 2009, the Co-lead Agencies published the NorthMet draft EIS, which marked the start of a period for public review and comment including two public meetings.

In June 2010, the Co-lead Agencies announced that they intended to complete the EIS process by preparing a supplemental draft EIS incorporating a proposed land exchange with the USFS and expanding government agency cooperation. The USFS joined the USACE as a federal Co-lead Agency and in June 2011, the U.S. Environmental Protection Agency ("EPA") joined as a Cooperating Agency.

In December 2013, the Co-lead Agencies published the supplemental draft EIS, which started a new period for public review and comment including three public meetings.

In November 2015, the Co-lead Agencies published the Final EIS, which incorporated responses to comments on the draft EIS and supplemental draft EIS.

Since March 2016, when the MDNR issued its decision that the Final EIS met the requirements under MEPA, PolyMet has submitted the permit applications required to construct and operate the NorthMet Project. During the second half of 2017 and 2018 to date, the regulatory agencies for the state of Minnesota have released a number of draft permits, including the Permit to Mine, Water Appropriation Permit, Dam Safety Permit, Section 401 Certification, and Air Emissions Permit.

Key permits and approvals to be received are:

## U.S. Army Corps of Engineers

• Section 404 Individual Permit for Impacted Wetlands

## Minnesota Department of Natural Resources

- Permit to Mine
- Water Appropriations Permit
- Dam Safety Permit
- Wetland Replacement Plan

## Minnesota Pollution Control Agency

- Section 401 Certification (required before the USACE can issue its ROD and Section 404 Permit)
- National Pollutant Discharge Elimination System (NPDES) Permit
- State Disposal System (SDS) Permit
- Air Emissions Permit

## Management Discussion and Analysis

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## State Permits

The permitting process is managed by the regulatory agencies and, therefore, timelines are not under PolyMet control.

On March 3, 2016, the MDNR issued its decision that the Final EIS addresses the objectives defined in the EIS scoping review, meets procedural requirements, and responds appropriately to public comments. The state's decision also laid the foundation for decisions on permits to construct and operate the NorthMet Project.

After consultation with the MDNR and the MPCA, PolyMet submitted state permit applications required to construct and operate the Project, with the water-related applications submitted on July 11, 2016, air-related application on August 24, 2016, and the Permit to Mine application on November 3, 2016.

On August 11, 2017, the MDNR released six draft water appropriation permits for public review and comment which have all closed.

On September 15, 2017, the MDNR released two draft dam safety permits for public review and comment which have both closed.

On January 5, 2018, the MDNR released the draft Permit to Mine for public review and comment which has closed.

On January 18, 2018, the MPCA released the draft water quality permit and draft Section 401 Certification for public review and comment which have both closed.

On January 24, 2018, the MPCA released the draft air emission quality permit for public review and comment which has closed.

## USFS Land Exchange

In November 2015, the USFS issued its Draft ROD on the proposed land exchange, concluding it is in the public interest and meets the desired conditions in the Superior National Forest Land and Resource Management Plan. Publication of the Draft ROD started an objection process during which the public could comment on the Final EIS or the Draft ROD.

On January 9, 2017, after responding in writing to more than 22,500 individual comments, and supported by a Memorandum of Agreement under Section 106 of the National Historic Preservation Act, the USFS issued its Final ROD authorizing the land exchange.

The Final ROD cites several benefits of the land exchange, including:

- A 505-acre net increase of wetlands to the federal estate;
- A net increase of 94 acres with public water frontage available for public and tribal use;
- A 40-acre net gain in USFS lands;
- Improved management effectiveness by exchanging lands that have no public overland access with lands that do have access;
- Reduction of 33 miles in property boundaries to be managed by the USFS;
- Federal cost savings from the elimination of two easements and their associated administrative costs; and
- Conveyance of federal lands already adjacent to intensively developed private lands for other inholdings in the Superior National Forest.

The Final ROD states the land exchange will eliminate a fundamental conflict between the rights that PolyMet has as a result of control of the mineral rights and the USFS position on those rights which

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

otherwise could result in litigation that has no certain outcome and could set a judicial precedent regarding other lands acquired in the same deed under the Weeks Act.

Following issuance of the Final ROD in January 2017, four legal challenges were filed contesting various aspects of the land exchange. In cases where it was not already named as a defendant, PolyMet applied for and was granted intervenor status. It is now a co-defendant with the USFS in all four suits. Motions have been filed by PolyMet to dismiss each of these suits for lack of standing. On August 31, 2017, the U.S. District Court, District of Minnesota denied WaterLegacy's motion for a preliminary injunction to stop the land exchange from proceeding while the WaterLegacy suit was pending. There are no other pending motions for preliminary injunction. PolyMet believes the environmental review process was thorough, thoughtful and in compliance with the law and that the USFS properly evaluated the proposed land exchange in the Final ROD.

On June 29, 2017, U.S. Rep. Rick Nolan, D-MN-8., introduced bipartisan legislation to direct the Secretary of Agriculture to move forward with the land exchange between PolyMet and the USFS, which will accelerate transfer and provide certainty of process. H.R. 3115, the Superior National Forest Land Exchange Act of 2017, was heard July 26, 2017 in the House Natural Resources Committee and passed with bipartisan support. On November 28, 2017, the US House of Representatives voted approval of the HR3115, the land exchange between PolyMet and the USFS, with a vote of 309 to 99. On November 29, 2017, the bill was advanced to the US Senate for consideration. The Company will continue its involvement in the administrative steps to complete the land exchange transaction while the bill is under consideration.

On March 6, 2018, the U.S. District Court for the District of Minnesota stayed all four of the pending challenges to the land exchange "pending Congress's consideration of the Act." The Court also denied PolyMet's pending motions to dismiss for lack of standing "without prejudice to their renewal." This means that the Court does not intend to address the plaintiffs' challenges to the land exchange unless and until the US Senate acts on HR3115. In the meantime, the Company is free to continue the administrative steps to complete the land exchange transaction.

## Financing Activities

## Glencore Financing

Since October 2008, the Company and Glencore have entered into a series of financing agreements comprising:

- Equity five separate agreements comprising \$25.0 million placement of PolyMet common shares in calendar 2009 in two tranches; a \$30.0 million placement of PolyMet common shares in calendar 2010 in three tranches; a \$20.0 million placement of PolyMet common shares in calendar 2011 in one tranche; a \$20.960 million purchase of PolyMet common shares in the 2013 Rights Offering; and a \$10.583 million purchase of PolyMet common shares in the 2016 Private Placement;
- Convertible debt ("Glencore Convertible Debt") agreement comprising \$25.0 million initial principal secured convertible debentures drawn in four tranches; and
- Non-convertible debt ("Glencore Non-Convertible Debt") four separate agreements comprising \$30.0 million initial principal secured debentures in calendar 2015 drawn in four tranches; an \$11.0 million initial principal secured debenture in calendar 2016 drawn in one tranche; a \$14.0 million initial principal secured debenture in calendar 2016 drawn in four tranches; and a \$20.0 million initial principal secured debenture in calendar 2016 drawn in two tranches. Subsequent to December 31, 2017, a fifth separate agreement was entered into comprising up to \$80.0 million initial principal secured debentures in calendar 2018 to be drawn in five tranches at the Company's option. See additional details below.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

As a result of these financing transactions and the purchase by Glencore of PolyMet common shares previously owned by Cliffs, Glencore's ownership and ownership rights of PolyMet as at December 31, 2017 comprises:

- 92,836,072 shares representing 29.1% of PolyMet's issued shares;
- Glencore Convertible Debt exchangeable through the exercise of an exchange warrant ("Exchange Warrant") at \$1.2696 per share into 38,660,854 common shares of PolyMet (including capitalized and accrued interest as at December 31, 2017) and where the exercise price and the number of shares issuable are subject to conventional anti-dilution provisions;
- Warrants to purchase 7,055,626 common shares at \$1.00 per share at any time until October 28, 2021, subject to acceleration on the earlier of receipt of permits necessary to construct NorthMet or the twelve month anniversary of the issue date provided the 20-day VWAP of PolyMet common shares is equal to or greater than \$1.50 ("Acceleration Triggering Event"), and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions; and
- Warrants to purchase 625,000 common shares at \$0.7797 per share at any time until October 28, 2021, and where the exercise price and the number of warrants are subject to conventional antidilution provisions.

If Glencore were to exercise all of its rights and obligations under these agreements, it would own 139,177,552 common shares of PolyMet, representing 38.1% on a partially diluted basis, that is, if no other options or warrants were exercised or 34.4% on a fully diluted basis, if all other options and warrants were exercised, whether they are in-the-money or not. Warrants giving Glencore the right to purchase 6,458,001 shares of its common shares at \$0.8231 per share expired on December 31, 2017. Subsequent to December 31, 2017, warrants to purchase 6,458,001 common shares at \$0.8231 per share at any time until March 31, 2019 were issued to Glencore. See additional details below.

On June 3, 2016, the Company issued \$3.0 million Tranche K secured debenture, on July 1, 2016 it issued \$5.0 million Tranche L-1 secured debenture, on July 26, 2016 it issued \$3.0 million Tranche L-2 secured debenture, and on August 5, 2016 it issued \$3.0 million Tranche M secured debenture to Glencore. Each of these debentures bears interest at twelve month U.S. dollar LIBOR plus 15.0%. The Company provided security on these debentures covering all of the assets of PolyMet, including a pledge of PolyMet's 100% ownership of Poly Met Mining, Inc. The due date of these debentures was initially the earlier of (i) March 31, 2017 or (ii) the availability of at least \$100 million of debt or equity financing or (iii) when it is prudent for PolyMet to repay the debt, on which date all principal and interest accrued to such date will be due and payable.

On September 14, 2016, the Company extended the term of the Glencore Non-Convertible Debt, the term of the Glencore Convertible Debt and the expiration date of the associated Exchange Warrant to the earlier of (i) March 31, 2018 or (ii) the availability of at least \$100 million of debt or equity financing or (iii) when it is prudent for PolyMet to repay the debt, on which date all principal and interest accrued to such date will be due and payable. In connection with this extension, the Company issued warrants to purchase 625,000 common shares at \$0.7797 per share at any time until October 28, 2021, and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions. All other terms of the debt were unchanged. The transaction has been accounted for as a modification of the existing debentures with the \$0.250 million fair value of the warrants allocated pro rata on the basis of the Glencore Non-Convertible Debt and Glencore Convertible Debt and an offsetting entry to equity reserves.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

As a result of anti-dilution provisions in the agreement, following the private placement which closed on October 18, 2016, the exchange price was adjusted to \$1.2696 per share from \$1.2920 per share. The adjustment did not have a material impact to the financial statements.

On October 28, 2016, the Company issued 14,111,251 units ("Glencore Units") to Glencore for gross proceeds of \$10.583 million pursuant to Glencore's right to maintain its pro rata ownership following the private placement which closed on October 18, 2016. Each Glencore Unit consists of one common share and one half of one common share purchase warrant, each whole warrant exercisable for one common share at a price of \$1.00 per share for a period beginning 6 months following the issue date and ending 60 months after the issue date, subject to the Acceleration Triggering Event, and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions.

On September 14, 2017, the Company agreed to issue to Glencore secured debentures with a total principal amount of \$20.0 million. The debentures bear interest at twelve month US dollar LIBOR plus 15.0% and are due on the earlier of (i) March 31, 2018 or (ii) the availability of at least \$100 million of debt or equity financing or (iii) when it is prudent for PolyMet to repay the debt, on which date all principal and interest accrued to such date will be due and payable. The Tranche N Debenture in the amount of \$15.0 million was issued on September 18, 2017. The Tranche O Debenture in the amount of \$5.0 million was issued subsequent to year end on January 18, 2018.

On March 23, 2018, the Company amended its previous financing arrangement with Glencore. The maturity date of the Convertible Debt and the Non-Convertible Debt was extended to the earlier of March 31, 2019, or the earlier of the availability of at least \$100 million of debt or equity financing, or when it is prudent for PolyMet to repay the debt. The interest rate was reduced from 12-month US dollar LIBOR plus 15.0% to 12-month US dollar LIBOR plus 10.0% effective April 1, 2018. The convertibility of the Convertible Debt was extended to March 31, 2019 and 6,458,001 purchase warrants were reissued with an expiration date of March 31, 2019 and an exercise price of \$0.8231 per share, both of which were approved by the NYSE American and TSX. All other terms of both the debentures and the warrants described above remain unchanged. In addition, the Company agreed to issue to Glencore secured debentures with a total principal amount of up to \$80.0 million at the Company's option. The debentures bear interest at twelve month US dollar LIBOR plus 10.0% and if issued, are due on the earlier of (i) March 31, 2019 or (ii) the availability of at least \$100 million of debt or equity financing or (iii) when it is prudent for PolyMet to repay the debt, on which date all principal and interest accrued to such date will be due and payable. The Tranche P Debenture in the amount of \$20.0 million may be issued on or before May 1, 2018. The Tranche Q Debenture in the amount of \$15.0 million may be issued on or before August 1, 2018. The Tranche R Debenture in the amount of \$20.0 million may be issued on or before September 18, 2018. The Tranche S Debenture in the amount of \$15.0 million may be issued on or before November 1, 2018. The Tranche T Debenture in the amount of \$10.0 million may be issued on or before December 31, 2018.

## Equity Financing

On October 18, 2016, the Company issued 25,963,167 units ("Placement Units") in a private placement to subscribers for gross proceeds of \$19.472 million. Each Placement Unit consists of one common share and one half of one common share purchase warrant, each whole warrant exercisable for one common share at a price of \$1.00 per share for a period beginning 6 months following the issue date and ending 60 months after the issue date, subject to the Acceleration Triggering Event, and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions. A total of 25,963,167 common shares and 13,641,586 purchase warrants were issued under this transaction, including 660,005 broker warrants issued to the underwriters. The amount attributable to common shares was \$15.881 million and the amount attributable to warrants was \$2.174 million, which includes the broker warrant fair value of \$0.151 million. Transaction costs for the issuance were \$1.568 million. The closing triggered customary anti-dilution provisions for the Exchange Warrant.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

On October 28, 2016, the Company issued 14,111,251 units ("Glencore Units") to Glencore for gross proceeds of \$10.583 million pursuant to Glencore's right to maintain its pro rata ownership following the private placement which closed on October 18, 2016. Each Glencore Unit consists of one common share and one half of one common share purchase warrant, each whole warrant exercisable for one common share at a price of \$1.00 per share for a period beginning 6 months following the issue date and ending 60 months after the issue date, subject to the Acceleration Triggering Event, and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions. A total of 14,111,251 common shares and 7,055,626 purchase warrants were issued under this transaction. The amount attributable to common shares was \$9.210 million and the amount attributable to warrants was \$1.270 million.

## Land Financing

During the twelve months ended January 31, 2017, the Company fully repaid a \$4.0 million initial principal loan, drawn in June 2011 from the Iron Range Resource and Rehabilitation Board ("IRRRB"). The Ioan was used to exercise the Company's options to acquire land as part of the proposed land exchange with the USFS authorized by the USFS on January 9, 2017. The Ioan was secured by the land acquired and carried a fixed interest rate of 5%, compounded annually. Warrants giving the IRRRB the right to purchase 461,286 shares of its common shares at \$2.1678 per share expired on June 30, 2016.

During the eleven months ended December 31, 2017 the Company issued 396,616 shares (January 31, 2017 – 241,376 shares) to maintain land purchase options valued at \$0.256 million (January 31, 2017 - \$0.200 million).

#### Other Financing

In March 2012, the Company acquired a secured interest in land owned by AG for Waterfowl, LLP ("AG") that is permitted for wetland restoration. AG subsequently assigned the agreement to EIP Minnesota, LLC ("EIP") in September 2012. EIP will restore the wetlands and, upon completion, wetland credits are to be issued by the proper government authorities. As part of the initial consideration, AG received warrants to purchase 1,249,315 common shares at \$1.3007 per share. These warrants expired December 31, 2015.

In April 2015, the Company entered into a revised agreement with EIP whereby EIP will seek to sell credits the Company does not need to third parties and, over time, reimburse the Company for its costs. The Company's right to purchase remaining credits under the April 2015 agreement expired on February 28, 2017 and EIP will seek to sell these credits and reimburse the Company for its costs under the terms of the agreement. The Company initially recognized the February 2017 receivable at fair value calculated using a 9.75% discount rate and 15-year term resulting in a receivable of \$0.564 million and a non-cash charge of \$1.324 million. Subsequent fair value changes are accounted for through other comprehensive income or loss.

On October 27, 2017, an agreement was entered into with EIP Credit Co., LLC to reserve wetland bank credits for the NorthMet Project for a minimum of five years in exchange for an initial down payment applicable to the purchase price, contractual transfer of certain lands, and annual option payments not applicable to the purchase price. The initial consideration paid was \$0.810 million in cash and \$2.320 million in lands valued using unobservable inputs (Level 3 measurements) and resulted in a non-cash charge of \$0.469 million. Annual option payments will not be recorded to Intangible whereas option exercise payments will be recorded to Intangible and transferred to Mineral Property, Plant and Equipment once placed into service.

## WL SEIS Exhibit 8

## PolyMet Mining Corp.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## Summary of Quarterly Results

(All figures in thousands of U.S. dollars except loss per share)

	Two and Three Months Ended										
	Dec 31,	Oct 31,	Jul 31,	Apr 30,	Jan 31,	Oct 31,	Jul 31,	Apr 30,			
	2017	2017	2017	2017	2017	2016	2016	2016			
Revenues	-	-	-	-	-	-	-	-			
General and Administrative	(1,584)	(1,193)	(2,080)	(1,268)	(2,583)	(993)	(1,178)	(1,840)			
Other Income (Expenses)	(350)	(1,058)	(608)	(1,957)	(645)	(1,101)	(377)	(512)			
Loss for the Period	(1,934)	(2,251)	(2,688)	(3,225)	(3,228)	(2,094)	(1,555)	(2,352)			
Loss per Share <sup>(1)</sup>	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)			
Cash used in operating	(748)	(914)	(1,454)	(1,874)	(1,589)	(1,483)	(855)	(1,536)			
activities											
Cash provided by (used) by	-	14,917	-	-	331	31,085	5,832	-			
financing activities											
Cash used in investing activities	(3,569)	(6,997)	(6,166)	(4,937)	(5,613)	(6,339)	(4,553)	(6,858)			

<sup>(1)</sup> Loss per share amounts may not reconcile due to rounding differences.

The loss for the period includes share-based compensation for the two and three months ended:

December 31, 2017 - \$0.223 million October 31, 2017 - \$0.283 million July 31, 2017 - \$0.672 million April 30, 2017 - \$0.140 million January 31, 2017 - \$0.811 million October 31, 2016 - \$0.137 million July 31, 2016 - \$0.233 million April 30, 2016 - \$0.627 million

Results fluctuate from period to period based on NorthMet development and corporate activities. Additional discussion of significant items is included below.

## Two months ended December 31, 2017 compared to three months ended January 31, 2017

Focus during the current year period was on environmental permitting for the NorthMet Project, maintenance of existing infrastructure, and financing consistent with prior periods.

a) Loss for the Period:

During the current year period, the Company incurred a loss of \$1.934 million (\$0.01 loss per share) compared to a loss of \$3.228 million (\$0.01 loss per share) during the prior year period. The decrease in net loss was primarily due to the current year period being one month shorter.

b) Cash Flows for the Period:

Cash used in operating activities during the current year period was \$0.748 million compared to cash used during the prior year period of \$1.589 million. The variance in cash is primarily due to the current year period being one month shorter.

Cash provided by financing activities during the current year period was \$nil compared to cash provided during the prior year period of \$0.331 million.

Cash used in investing activities during the current year period was \$3.569 million compared to cash used during the prior year period of \$5.613 million. The decrease was primarily due to the current year period being one month shorter.

Including the effect of foreign exchange, total cash on hand increased during the current year period by \$4.317 million to \$6.931 million compared to the prior year period where cash decreased \$6.871 million to \$18.674 million.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts

## c) Capital Expenditures for the Period:

During the current year period the Company reversed \$0.573 million of capitalized mineral property, plant, and equipment costs primarily related to the development and preservation of the NorthMet Project as compared to capitalizing \$13.748 million during the prior year period. The decrease largely reflects the period being one month shorter and a reduction to the environmental rehabilitation provision due to revisions to estimated cash flows as a result of closure plans reflected in the Permit to Mine application.

## Selected Annual Financial Information

(All figures in thousands of U.S. dollar except loss per share)

For the Periods Ended	11 months ended December 31, 2017	12 months ended January 31, 2017	12 months ended January 31, 2016
Revenue	-	-	-
Net Loss	(10,098)	(9,229)	(9,346)
Basic and Diluted Loss Per Share	(0.03)	(0.03)	(0.03)
Total Assets	409,042	389,049	337,660
Convertible and Non-Convertible Debt	141,335	107,906	79,009
Total Shareholders' Equity	198,675	207,329	184,657

The loss for the fiscal year includes share-based compensation expense of:

December 31, 2017 - \$1.318 million January 31, 2017 - \$1.808 million January 31, 2016 - \$0.457 million

## Eleven months ended December 31, 2017 compared to twelve months ended January 31, 2017

Focus during the current year period was on environmental permitting process for the NorthMet Project, maintenance of existing infrastructure and financing.

a) Loss for the Period:

During the current year period, the Company incurred a loss of \$10.098 million (\$0.03 loss per share) compared to a loss of \$9.229 million (\$0.03 loss per share) during the prior year period. The increased net loss was due to a non-cash charge on disposal of intangibles and land in the current year period.

b) Cash Flows for the Period:

Cash used in operating activities during the current year period was \$4.990 million compared to cash used during the prior year period of \$5.463 million. The variance in cash is primarily due to the current year period being one month shorter.

Cash provided by financing activities during the current year period was \$14.917 million compared to cash provided during the prior year period of \$37.248 million. The current year period includes \$14.917 million in net proceeds from funding of the non-convertible loan. The prior year period includes \$28.535 million in share issuance proceeds and \$13.943 million in non-convertible loan funding partially offset by \$5.111 million debt repayment.

Cash used in investing activities during the current year period was \$21.669 million compared to cash used during the prior year period of \$23.363 million. The decrease was primarily due to decreased environmental technical support as the permitting process winds down and the current year period being one month shorter.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

Including the effect of foreign exchange, total cash on hand decreased during the current year period by \$11.741 million to \$6.931 million compared to the prior year period where cash increased \$8.418 million to \$18.674 million.

c) Capital Expenditures for the Period:

During the current year period the Company capitalized \$30.292 million (prior year period - \$43.264 million) of mineral property, plant, and equipment costs primarily related to the development and preservation of the NorthMet Project. The decrease largely reflects a reduction to the environmental rehabilitation provision due to revisions to estimated cash flows as a result of closure plans reflected in the Permit to Mine application.

#### Year ended January 31, 2017 compared to year ended January 31, 2016

Focus during the year ended January 31, 2017 was on environmental permitting for the NorthMet Project, maintenance of existing infrastructure, and financing.

a) Loss for the Year:

During the year ended January 31, 2017, the Company incurred a loss of \$9.229 million (\$0.03 loss per share) compared to a loss of \$9.346 million (\$0.03 loss per share) during the year ended January 31, 2016. An increase in finance costs and non-cash share-based compensation was offset by a non-cash charge on disposal of intangibles.

b) Cash Flows for the Year:

Cash used in operating activities for the year ended January 31, 2017 was \$5.463 million compared to cash used in the year ended January 31, 2016 of \$4.822 million. The variance in cash is primarily due to operating variances noted above.

Cash provided by financing activities for the year ended January 31, 2017 was \$37.248 million compared to cash provided in the year ended January 31, 2016 of \$33.015 million. The year ended January 31, 2017 includes \$28.535 million in share issuance proceeds and \$13.943 million in non-convertible loan funding partially offset by \$5.111 million debt repayment. The year ended January 31, 2016 includes \$32.954 million in net proceeds from funding of the non-convertible loan and share option exercises.

Cash used in investing activities for the year ended January 31, 2017 was \$23.363 million compared to cash used in the year ended January 31, 2016 of \$27.228 million. The decrease was primarily due to decreased environmental technical support as the permitting process winds down.

Including the effect of foreign exchange, total cash for the year ended January 31, 2017 increased by \$8.418 million for a balance of \$18.674 million compared to the year ended January 31, 2016 where cash increased \$0.955 million for a balance of \$10.256 million.

c) Capital Expenditures for the Year:

During the year ended January 31, 2017 the Company capitalized \$43.264 million (prior year - \$25.402 million) of mineral property, plant, and equipment costs primarily related to the development and preservation of the NorthMet Project. The increase largely reflects a change in the environmental rehabilitation provision due to estimated cash flow revisions reflecting the status of discussion and negotiation at the time and changes in the market risk-free interest rate.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## Liquidity and Capital Resources

As at December 31, 2017, the Company had a working capital deficiency of \$138.057 million compared with working capital of \$16.267 million as at January 31, 2017 consisting primarily of cash of \$6.931 million (January 31, 2017 - \$18.674 million), accounts payable and accruals of \$3.630 million (January 31, 2017 - \$3.188 million), current convertible debt of \$49.067 million (January 31, 2017 - \$nil), current non-convertible debt of \$92.268 million (January 31, 2017 - \$nil) and current environmental rehabilitation provision of \$1.266 million (January 31, 2017 - \$0.781 million). Subsequent to December 31, 2017, PolyMet and Glencore agreed to extend the maturity date of the secured convertible debt and secured non-convertible debt to March 31, 2019. See additional details in the "Financing Activities" section above.

As at December 31, 2017, the Company had firm commitments related to the environmental permitting process, wetland credits, land options and rent of approximately \$1.5 million with \$0.4 million due over the next year and the remainder due over five years.

As at December 31, 2017, the Company had non-binding commitments to maintain its mineral lease rights of \$0.180 million with all due in the next two years.

The following table lists the known contractual obligations as at December 31, 2017:

Contractual Obligations	Carryi Value	ng Co e C	ont asł	ractual 1 flows	Les: 1	s than year	1 y€	– 3 ears	3 ye	– 5 ears	More 5 ye	than ears
Accounts payable and accruals	\$ 3,	530	\$	3,630	\$	3,630	\$	-	\$	-	\$	-
Convertible debt (Note 8)	49,0	)67		51,183		51,183		-		-		-
Non-convertible debt (Note 9)	92,2	268		96,294		96,294		-		-		-
Firm commitments		-		1,529		448		581		500		-
Total	\$ 144,9	965	\$	152,636	\$ 1	51,555	\$	581	\$	500	\$	-

As noted above, the convertible debt and non-convertible debt were both extended to March 31, 2019 subsequent to December 31, 2017. The Company expects to repay the non-convertible debt from additional financing and to either exchange the convertible debt into equity or repay from additional financings.

Firm commitments relate to the environmental permitting process, wetland credits, land options, and rent of approximately \$1.5 million with \$0.4 million due over the next year and the remainder due over five years.

As at December 31, 2017, the Company had obligations to issue 3,640,000 shares under the Company's bonus share incentive plan upon achievement of Milestone 4 representing commencement of commercial production at NorthMet at a time when the Company has not less than 50% ownership interest in NorthMet. At the Company's Annual General Meeting of shareholders held in June 2008, the disinterested shareholders approved the bonus shares for Milestone 4. Regulatory approval is required prior to issuance of these shares.

The consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities in the normal course of operations.

Liquidity risk is the risk the Company will not be able to meet its financial obligations as they become due and arises through the excess of financial obligations over financial assets due at any point in time.

As a result of the extension to all outstanding debentures and agreement to make available additional debenture funding as described further in Note 16, the Company has secured sufficient financing to meet its current obligations, as well as fund ongoing development and administration expenses in accordance with the Company's spending plans through December 31, 2018. Management believes, based upon the

## Management Discussion and Analysis

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

underlying value of the NorthMet Project, the advanced stage of permitting, the history of support from its shareholders (see Notes 7, 8, 9 and 16) and the ongoing discussions with investment banks and investors, that financing will continue to be available allowing the Company to obtain financing necessary to complete the development of NorthMet and generate future profitable operations. While in the past the Company has been successful in closing financing agreements, there can be no assurance it will be able to do so again. Factors that could affect the availability of financing include the state of debt and equity markets, investor perceptions and expectations, and the metals markets.

The Company is in discussions with commercial banks and other sources of both debt and equity construction finance and aims to secure commitments sufficient to fund the capital costs with funding available upon receipt of key permits. Construction and ramp up to commercial production is anticipated to take approximately twenty-four to thirty months from receipt of key permits.

## Financial Instruments and Risk Management

The Company's financial instruments are classified as loans and receivables, available for sale, and other financial liabilities.

#### Fair Value Measurements

The fair value hierarchy prioritizes inputs to valuation techniques used to measure fair value. The hierarchy gives highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

- Level 1 Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 Inputs for the asset or liability that are not based on observable market data.

The fair values of cash, current amounts receivable, accounts payable and accruals approximate their carrying amounts due to their short-term nature. The fair value of convertible debt and non-convertible debt approximates the carrying amount at amortized cost using the effective interest method. The Company believes this is appropriate as the maturity date is less than twelve months.

## Risks Arising from Financial Instruments and Risk Management

The Company's activities expose it to a variety of financial risks: market risk (including currency and interest rate), credit risk, and liquidity risk. Reflecting the current stage of development of the Company's NorthMet Project, the overall risk management program focuses on facilitating the Company's ability to continue as a going concern and seeks to minimize potential adverse effects on the Company's ability to execute its business plan.

Risk management is the responsibility of executive management. Material risks are identified and monitored and are discussed with the Audit Committee and the Board of Directors.

## Currency Risk

The Company incurs expenditures in Canada and in the United States. The functional and reporting currency of the Company and its subsidiary is the U.S. dollar. Foreign exchange risk arises because the amount of Canadian dollar cash, amounts receivable, or accounts payable and accrued liabilities will vary in U.S. dollar terms due to changes in exchange rates.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

As the majority of the Company's expenditures are in U.S. dollars, the Company has kept a significant portion of its cash in U.S. dollars. The Company has not hedged its exposure to currency fluctuations as the exposure to currency risk is currently insignificant.

#### Interest Rate Risk

Interest rate risk arises from interest paid on floating rate debt and interest received on cash and shortterm deposits. The Company has not hedged any of its interest rate risk. The Company currently capitalizes to qualifying assets the majority of interest charges, and therefore the risk exposure is primarily on cash interest payable and net earnings in relation to the subsequent depreciation of capitalized interest charges.

The Company was exposed to interest rate risk through the following assets and liabilities:

	December 31,			anuary 31,
		2017		2017
Cash	\$	6,931	\$	18,674
Convertible debt		49,067		42,154
Non-convertible debt	\$	92,268	\$	65,752

Based on the above net exposures, as at December 31, 2017, a 1% change interest rates would have impacted the Company's loss by approximately \$0.069 million and carrying value of convertible and non-convertible debt by approximately \$1.413 million.

## Credit Risk

Credit risk arises on cash held with banks and financial institutions, as well as credit exposure on outstanding amounts receivable. The maximum exposure to credit risk is equal to the carrying value of the financial assets of \$9.896 million.

The Company's cash is primarily held through a large Canadian financial institution.

## Liquidity Risk

Liquidity risk is the risk the Company will not be able to meet its financial obligations as they become due and arises through the excess of financial obligations over available financial assets due at any point in time. The Company's objective in managing liquidity risk is to maintain sufficient readily available reserves in order to meet its liquidity requirements at any point in time and is achieved by maintaining sufficient cash and managing convertible and non-convertible debt. See additional discussion in the "Liquidity and Capital Resources" section above.

## Capital Management

The Company's capital management objective is to safeguard the Company's ability to continue as a going concern in order to pursue the development of its mineral property. In the management of capital, the Company includes the components of shareholders' equity, convertible debt and non-convertible debt. The Company manages the capital structure and makes adjustments to it depending on economic conditions and the rate of anticipated expenditures. To maintain or adjust the capital structure, the Company may attempt to issue new shares, issue new debt, acquire or dispose of assets. The Company has no externally imposed capital requirements.

In order to assist in management of its capital requirements, the Company prepares budgets that are updated as necessary depending on various factors. The budgets are approved by the Company's Board of Directors.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

Although the Company has the necessary resources to carry out its plans and operations through December 31, 2018, it does not currently have sufficient capital to complete the development of NorthMet and generate future profitable operations and is in discussions to arrange sufficient capital to meet these requirements. See additional discussion in the "Liquidity and Capital Resources" section above.

## Related Party Transactions

The Company conducted transactions with senior management, directors and persons or companies related to these individuals, and paid or accrued amounts as follows:

	11 montl December 31	12 months ende January 31, 2017 <sup>(</sup>			
Salaries and other short-term benefits	\$	1,898	\$	1,828	
Other long-term benefits		42		44	
Share-based payment <sup>(3)</sup>		836		1,709	
Total	\$	2,776	\$	3,581	

<sup>(1)</sup> Eleven months ended December 31, 2017 includes Directors (Dennis Bartlett, Jonathan Cherry, Mike Ciricillo, Matthew Daley, David Dreisinger, W. Ian L. Forrest, Helen Harper, Alan Hodnik, Stephen Rowland, and Michael Sill) and senior management (Jonathan Cherry, Patrick Keenan, Douglas Newby, and Bradley Moore).

<sup>(2)</sup> Twelve months ended January 31, 2017 includes Directors (Jonathan Cherry, Matthew Daley, David Dreisinger, W. Ian L. Forrest, Helen Harper, Alan Hodnik, William Murray, Stephen Rowland, and Michael Sill) and senior management (Jonathan Cherry, Douglas Newby, and Bradley Moore).

<sup>(3)</sup> Share-based payment represents the amount capitalized or expensed during the period.

There are agreements with key employees (Jonathan Cherry, Patrick Keenan and Bradley Moore) containing severance provisions for termination without cause or in the event of a take-over. Other than the President and Chief Executive Officer, PolyMet directors do not have agreements providing for benefits upon termination of their engagement.

As a result of Glencore's 29.1% ownership it is also a related party. In addition to the transactions described in the "Financing Activities" section above, the Company has entered into a Technical Services Agreement with Glencore whereby the Company reimburses Glencore for NorthMet technical support costs requested under an agreed scope of work, primarily in detailed project design and mineral processing. During the eleven months ended December 31, 2017, the Company recorded \$nil (year ended January 31, 2017 - \$0.102 million) for services under this agreement. The Company had also entered into a Financing Advisory Agreement with Glencore whereby the Company reimbursed Glencore for NorthMet financing advisory support costs. During the eleven months ended December 31, 2017, the Company reimbursed Glencore for NorthMet financing advisory support costs. During the eleven months ended December 31, 2017, the Company recorded \$nil (year ended January 31, 2017 - \$0.730 million) for services under this agreement.

## **Off Balance-Sheet Arrangements**

The Company does not utilize off-balance sheet arrangements.

## Proposed Transactions

There are no proposed transactions that will materially affect the performance of the Company.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## **Critical Accounting Estimates and Judgments**

The preparation of the consolidated financial statements in conformity with IFRS requires the use of certain critical accounting estimates. These critical accounting estimates require management to make judgments and estimates that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities as at the date of the financial statements.

Critical accounting estimates and judgments used in the preparation of these consolidated financial statements are as follows:

## (i) Determination of mineral reserves

Reserves are estimates of the amount of product that can be economically and legally extracted from the Company's property. In order to estimate reserves, judgments are required about a range of geological, technical and economic factors, including quantities, production techniques, production costs, capital costs, transport costs, demand, prices and exchange rates. Estimating the quantity of reserves requires the size, shape and depth of deposits to be determined by analyzing geological data. This process may require complex and difficult geological judgments to interpret the data. In addition, management will form a view of future sales prices based on current and long-term historical price trends. Changes in proven and probable reserves estimates may impact the carrying value of property, plant and equipment, restoration provisions, recognition of deferred tax amounts and depreciation, depletion and amortization.

#### (ii) Impairment of non-financial assets

Carrying amounts of non-financial assets, including mineral property, plant and equipment, and intangibles are reviewed at each reporting date or when events or changes in circumstances occur that indicate the asset may not be recoverable to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated at the greater of its value in use and its fair value less costs of disposal. 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. An impairment loss is recognized if the carrying amount of an asset exceeds its estimated recoverable amount. An impairment loss previously recorded is reversed if there has been a change in the estimates used to determine the recoverable amount resulting in an increase in the estimated service potential of an asset.

For mineral property interests, the Company considers both external and internal sources of information in assessing whether there are indications of impairment. External sources of information include changes in the market, economic and legal environment in which the Company operates that are not within its control and affect the recoverable amount of mineral property interests. Internal sources of information include indications of economic performance of the asset. No impairment indicators were identified on the mineral property, plant and equipment or intangible for the eleven months ended December 31, 2017 or twelve months ended January 31, 2017.

## (iii) Provision for Environmental Rehabilitation Costs

Provision for environmental rehabilitation costs associated with mineral property, plant and equipment are recognized when the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax risk-free rate that reflects current market assessments of the time value of money.

It is possible estimates of ultimate environmental rehabilitation liabilities could be affected by changes in regulations, changes in the extent of environmental rehabilitation required, changes in the means of rehabilitation, changes in the extent of responsibility for the financial liability or changes in cost estimates.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

Operations of the Company may in the future be affected from time to time in varying degrees by changes in environmental regulations, including those for future removal and site restoration costs. Both the likelihood of new regulations and their overall effect upon the Company may vary greatly and are not predictable.

The Company's provision for environmental rehabilitation cost obligations represents management's estimate of the present value of the future cash outflows required to settle the liability.

## Adoption of New or Amended Accounting Standards

On February 1, 2017, the Company adopted the following new or amended accounting standards that were previously issued by the IASB. Certain other new standards and interpretations have been issued but are not expected to have a material impact on the Company's financial statements and are therefore not discussed below.

## IAS 7 – Statement of Cash Flows

IAS 7 was amended to require disclosures about changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes and amendments are effective for annual periods beginning on or after January 1, 2017.

## Future Accounting Standards

Information on new standards, amendments and interpretations effective for annual periods beginning on or after January 1, 2018 and that are expected to be relevant to the Company's financial statements is provided below. Certain other new standards and interpretations have been issued but are not expected to have a material impact on the Company's financial statements and are therefore not discussed below.

## IFRS 9 – Financial Instruments

IFRS 9 addresses the classification, measurement and recognition of financial assets and financial liabilities. This standard replaces parts of *IAS 39 - Financial Instruments: Recognition and Measurement.* 

IFRS 9 requires financial assets to be classified into two measurement categories: those measured at fair value and those measured at amortized cost. The determination is made at initial recognition. On transition, the Company's investments classified as available-for-sale (EIP receivable- Note 5) will be redesignated as FVTPL financial instruments, and its revaluation adjustments will be recorded in the statement of loss instead of through other comprehensive loss. The Company expects adoption will result in an adjustment to the opening deficit and accumulated other comprehensive loss for cumulative gains/losses on the EIP receivable (see Note 5) and that the adjustment does not have a significant impact on the Company's financial statements.

For financial liabilities, the standard retains most of the IAS 39 requirements, except as it relates to modifications of liabilities. Under IAS 39, when an entity modified a financial liability, it would decide whether this modification was significant enough to constitute an extinguishment. If the modification was considered an extinguishment of the initial debt, the new modified debt was recorded at fair value and a gain/loss recognized in income for the difference between the carrying amount of the old debt and the new debt. This extinguishment accounting remains the same under IFRS 9. However, accounting under IFRS 9 differs where the change was not significant enough to be an extinguishment. Under IAS 39 modifications would not lead to an immediate income charge as the cash flows of the modified debt would be discounted using the revised effective interest rate over the remaining term of the debt. However, under IFRS 9, the cash flows under the modified debt should be re-discounted using the original effective interest rate over the remaining term of the original effective interest rate of the instrument. The Company expects adoption will result in an adjustment to the opening deficit and carrying value of its convertible and non-convertible debt due to several prior modifications to

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

the outstanding debentures (see Notes 8 and 9). The Company is assessing the impact this adjustment will have on the Company's financial statements.

IFRS 9 also introduces a single expected credit loss impairment model, which is based on changes in credit quality since initial recognition. The Company does not expect this to have a significant impact on the Company's financial statements upon adoption.

The new standard is effective for annual periods beginning on or after January 1, 2018 and the Company will adopt IFRS 9 effective January 1, 2018.

## IFRS 16 – Leases

IFRS 16 replaces *IAS* 17 - *Leases* and eliminates the classification of leases as either operating or finance leases by the lessee. The treatment of leases by the lessee will require capitalization of all leases resulting in accounting treatment similar to finance leases under *IAS* 17 - *Leases*. Exemptions for leases of very low value or short-term leases will be applicable. The new standard will result in an increase in lease assets and liabilities for the lessee. Under the new standard the treatment of all lease expense is aligned in the statement of earnings with depreciation, and an interest expense component recognized for each lease, in line with finance lease accounting under *IAS* 17 - *Leases*. The Company expects adoption will result in identification of one qualifying office lease, which will not have a significant impact on the Company's financial statements. The Company's other leases (Note 3) are leases to explore mining rights and are excluded from IFRS 16's scope.

The new standard will be effective for annual periods beginning on or after January 1, 2019 with early adoption permitted and the Company plans to adopt IFRS 16 effective January 1, 2018.

## *IFRS 15 – Revenue from Contracts with Customers*

IFRS 15 replaces *IAS 18 - Revenue* and *IAS 11 - Construction Contracts* and provides a five-step framework for application to customer contracts: identification of customer contract, identification of the contract performance obligations, determination of the contract price, allocation of the contract price to the contract performance obligations, and revenue recognition as performance obligations are satisfied. A new requirement where revenue is variable stipulates that revenue may only be recognized to the extent that it is highly probable that significant reversal of revenue will not occur. The new standard will be effective for annual periods beginning on or after January 1, 2018. The Company does not expect IFRS 15 to have a significant impact on the Company's financial statements upon adoption.

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## Other MD&A Requirements

## **Outstanding Share Data**

Authorized Capital: Unlimited common shares without par value.

The following table summarizes the outstanding share information as at March 22, 2018:

	Number	Weighted Average			
Type of Security	Outstanding	Exe	ercise Price		
Issued and outstanding common shares	320,302,721	\$	-		
Restricted share units	2,334,971	\$	-		
Share options	21,214,002	\$	0.94		
Share purchase warrants	21,231,712	\$	0.99		
Convertible debt including capitalized interest	38,660,854	\$	1.27		

## Risks and Uncertainties

An investment in the Company's common shares is highly speculative and subject to a number of risks and uncertainties. Only those persons who can bear the risk of the entire loss of their investment should participate. An investor should carefully consider the risks described in PolyMet's Annual Information Form for the eleven months ended December 31, 2017 and other information filed with both the Canadian and United States securities regulators before investing in the Company's common shares. The risks described in PolyMet's Annual Information Form are not the only ones faced. Additional risks that the Company currently believes are immaterial may become important factors that affect the Company's business. If any of the risks described in PolyMet's Annual Information Form for the eleven months ended December 31, 2017 occur, the Company's business, operating results and financial condition could be seriously harmed and investors could lose all of their investment.

## **Evaluation of Disclosure Controls and Procedures**

The Company's Chief Executive Officer and Chief Financial Officer have evaluated the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rules 13(a)-15(e) and 15(d)-15(e) under the US Exchange Act and the rules of the Canadian Securities Administrators as at December 31, 2017 (the "Evaluation Date"). Based on such evaluation, such officers have concluded that, as of the Evaluation Date, the Company's disclosure controls and procedures are effective. Such disclosure controls and procedures are designed to ensure that the information required to be disclosed by the Company in reports that it files or submits to the US Securities and Exchange Commission and the Canadian Securities Administrators is recorded, processed, summarized and reported within the time periods specified in applicable rules and forms, and includes controls and procedures designed to ensure information relating to the Company required to be included in reports filed or submitted under Canadian and United States securities legislation is accumulated and communicated to the Company's management to allow timely decision regarding disclosure.

## Management's Responsibility for Consolidated Financial Statements

The information provided in this report and the accompanying Consolidated Financial Statements of PolyMet Mining Corp. (the "Company) are the responsibility of management. The Consolidated Financial Statements have been prepared by management in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and include certain estimates that reflect management's best judgments.

The Company's Board of Directors has approved the information contained in the Consolidated Financial Statements. The Board of Directors fulfills its responsibilities regarding the Consolidated Financial

## **Management Discussion and Analysis**

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

Statements mainly through its Audit Committee, which has a written mandate that complies with current requirements of Canadian securities legislation, United States securities legislation, and the United States Sarbanes-Oxley Act of 2002. The Audit Committee meets at least on a quarterly basis.

## Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Consolidated Financial Statements for external reporting purposes in accordance with IFRS as issued by the IASB.

Internal control over financial reporting, no matter how well designed, has inherent limitations. 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.

Management has assessed the effectiveness of the Company's internal control over financial reporting as at December 31, 2017. In making its assessment, management has used the criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") to evaluate the Company's internal control over financial reporting. Based on this assessment, management has concluded that the Company's internal control over financial reporting was effective as at that date.

The effectiveness of the Company's internal control over financial reporting as at December 31, 2017 has been audited by PricewaterhouseCoopers LLP, the Company's independent registered public accounting firm, as stated in their report, which is included with the Company's annual consolidated financial statements.

## Additional Information

Additional information related to the Company is available on SEDAR and EDGAR, respectively, at <u>www.sedar.com</u> and at <u>www.sec.gov</u>, and on the Company's website <u>www.polymetmining.com</u>.

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## POLYMET MINING CORP.

## CONSOLIDATED FINANCIAL STATEMENTS

As at December 31, 2017 and January 31, 2017 And for the 11 months ended December 31, 2017 and 12 months ended January 31, 2017

## Management's Responsibility for Consolidated Financial Statements

The accompanying Consolidated Financial Statements of PolyMet Mining Corp. (the "Company) are the responsibility of management. The Consolidated Financial Statements have been prepared by management in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and include certain estimates that reflect management's best judgments.

The Company's Board of Directors has approved the information contained in the Consolidated Financial Statements. The Board of Directors fulfills its responsibilities regarding the Consolidated Financial Statements mainly through its Audit Committee, which has a written mandate that complies with current requirements of Canadian securities legislation, United States securities legislation, and the United States Sarbanes-Oxley Act of 2002. The Audit Committee meets at least on a quarterly basis.

## Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Consolidated Financial Statements for external reporting purposes in accordance with IFRS as issued by the IASB.

Internal control over financial reporting, no matter how well designed, has inherent limitations. 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.

Management has assessed the effectiveness of the Company's internal control over financial reporting as at December 31, 2017. In making its assessment, management has used the criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") to evaluate the Company's internal control over financial reporting. Based on this assessment, management has concluded that the Company's internal control over financial reporting was effective as at that date.

The effectiveness of the Company's internal control over financial reporting as at December 31, 2017 has been audited by PricewaterhouseCoopers LLP, the Company's independent registered public accounting firm, as stated in their report, which appears herein.

/s/ Jonathan Cherry

Jonathan Cherry President and Chief Executive Officer /s/ Patrick Keenan

Patrick Keenan Chief Financial Officer

## Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of PolyMet Mining Corp.

## Opinions on the financial statements and internal control over financial reporting

We have audited the accompanying consolidated balance sheets of PolyMet Mining Corp. (the "Company") as of December 31, 2017 and January 31, 2017, and the related consolidated statements of loss and comprehensive loss, cash flows and changes in shareholders' equity for the eleven month period ended December 31, 2017 and the twelve month period ended January 31, 2017, including the related notes (collectively referred to as the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2017, 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company of December 31, 2017 and January 31, 2017 and its financial performance and its cash flows for the eleven month period ended December 31, 2017 and the twelve month period ended January 31, 2017 in conformity with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the COSO.

## **Basis for opinions**

The Company's management is responsible for these consolidated financial statements, 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 Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

PricewaterhouseCoopers LLP PricewaterhouseCoopers Place, 250 Howe Street, Suite 1400, Vancouver, British Columbia, Canada V6C 3S7 T: +1 604 806 7000, F: +1 604 806 7806, www.pwc.com/ca

"PwC" refers to PricewaterhouseCoopers LLP, an Ontario limited liability partnership.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting included obtaining an understanding of internal control over financial reporting effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

## 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

## (Signed) "PricewaterhouseCoopers LLP"

## Chartered Professional Accountants Vancouver, British Columbia, Canada March 27, 2018

We have served as the Company's auditor since 2006.

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# PolyMet Mining Corp. Consolidated Balance Sheets All figures in thousands of U.S. Dollars

		December 31,		January 31,
100770		2017		2017
ASSEIS				
Current				
Cash	¢	6 931	\$	18 674
Amounts receivable (Note 5)	Ψ	432	Ψ	7/0
Prenaid expenses		452		813
T Tepald expenses		9 174		20.236
Non-Current		0,174		20,230
Amounts receivable (Note 5)		2.533		2.012
Mineral Property Plant and Equipment (Notes 3 and 4)		395,205		364 913
Intangible (Note 5)		3.130		1,888
				,
Total Assets		409,042		389,049
LIABILITIES				
Comment				
Current		2 620		2 4 0 0
Accounts payable and accruais		3,630		3,188
Convertible debt (Notes 7 and 8)		49,067		-
Non-convertible debt ( <i>Notes 7 and 9</i> )		92,268		-
Environmental renabilitation provision (Note 6)		1,200		2 060
Non-Current		140,231		3,909
Convertible debt (Notes 7 and 8)		-		42 154
Non-convertible debt (Notes 7 and 9)		-		65 752
Environmental rehabilitation provision (Note 6)		64,136		69 845
		• 1,100		00,010
Total Liabilities		210,367		181,720
SHAREHOEDERS EQUIT				
Share Capital (Note 10)		269.516		268,895
Share Premium		1.151		1,151
Fauity Reserves		60,505		59 682
Deficit		(132.497)		(122,399)
		(10_,101)		(,,
Total Shareholders' Equity		198,675		207,329
Total Liabilities and Shareholders' Equity	\$	409,042	\$	389,049
Noture of Pusiness and Liquidity (Note 1)				
Nature of Business and Liquidity (Note 1)				
Commitments and Contingencies (Note 14)				
Subsequent Event (Note 16)				
/s/ Jonathan Cherry . Director	/s/ Dr. Dav	vid Dreisinger		Director
,				,

WL SEIS Exhibit 8

## PolyMet Mining Corp. Consolidated Statements of Loss and Comprehensive Loss All figures in thousands of U.S. Dollars, except for shares and per share amounts

	For the 11 months ended December 31, 2017		For the 12 months ended January 31, 2017
General and Administrative Expenses			
Salaries, directors' fees and related benefits	\$ 2.209	\$	2,199
Share-based compensation (Note 10)	1,318	·	1,808
Professional fees	784		432
Regulatory fees	137		154
Investor and public relations	1,036		1,227
Office and administration	637		756
Amortization	4		18
Total General and Administration Expenses	6.125		6.594
Other Expenses (Income)			-,
Finance costs - net <i>(Note 11)</i>	2,233		2,672
(Gain) / loss on foreign exchange	6		(7)
Gain on disposal of financial instrument (Note 5)	(36)		(8)
Loss on disposal of intangible <i>(Note 5)</i>	1,324		-
Loss on disposal of lands <i>(Note 5)</i>	469		-
Other income	(23)		(22)
Total Other Expenses	3,973		2,635
Loss for the Period	10,098		9,229
Other Comprehensive Loss (Income)			
Reclassified gain on disposal of financial instrument ( <i>Note 5</i> ) Items that may be subsequently reclassified to profit or loss:	36		8
Unrealized gain on financial instrument (Note 5)	166		(221)
Other Comprehensive Income for the Period	202		(213)
Total Comprehensive Loss for the Period – Net of Tax	\$ 10,300	\$	9,016
Basic and Diluted Loss per Share	\$ (0.03)	\$	(0.03)
Weighted Average Number of Shares	318.891.961		288.998.010

# PolyMet Mining Corp. Consolidated Statements of Changes in Shareholders' Equity All figures in thousands of U.S. Dollars, except for shares

	Share Capital (	authorized = un	limited)	E	quity Reserves				
					Accumulated				Total
	Issued	Share	Share	Contributed	Other Comp	Equity		Shar	eholders'
	Shares	Capital	Premium	Surplus	Inc / (Loss)	Reserves	Deficit	E	Equity
Balance - January 31, 2016	277,557,082	\$ 242,917	\$ 1,151	\$ 53,560	\$ 199	\$ 53,759	\$ (113,170)	\$	184,657
Total comprehensive loss for the period	-	-	-	-	213	213	(9,229)		(9,016)
Private placement and issuance costs (Note 10)	40,074,418	25,091	-	3,444	-	3,444	-		28,535
Refinance of debentures (Notes 7, 8 and 9)	-	-	-	250	-	250	-		250
Payment of land purchase options (Note 10)	241,376	200	-	-	-	-	-		200
Vesting of restricted shares and RSU's (Note 10)	537,481	575	-	(694)	-	(694)	-		(119)
Share-based compensation (Note 10)	135,162	112	-	2,406	-	2,406	-		2,518
Bonus share cost amortization (Note 10)	-	-	-	304	-	304	-		304
Balance - January 31, 2017	318,545,519	\$ 268,895	\$ 1,151	\$ 59,270	\$ 412	\$ 59,682	\$ (122,399)	\$	207,329
Total comprehensive loss for the period	-	-	-	-	(202)	(202)	(10,098)		(10,300)
Payment of land purchase options (Note 10)	396,616	256	-	-	-	-	-		256
Vesting of restricted shares and RSU's (Note 10)	360,963	365	-	(365)	-	(365)	-		-
Share-based compensation (Note 10)	-	-	-	1,111	-	1,111	-		1,111
Bonus share cost amortization (Note 10)	-	-	-	279	-	279	-		279
Balance – December 31, 2017	319,303,098	\$ 269,516	\$ 1,151	\$ 60,295	\$ 210	\$ 60,505	\$ (132,497)	\$	198,675

# PolyMet Mining Corp. Consolidated Statements of Cash Flows All figures in thousands of U.S. Dollars

		For the 11		For the 12
		months ended		months ended
		December 31, 2017		January 31, 2017
Operating Activities		2011		2017
Loss for the period	\$	(10.098)	\$	(9,229)
Items not involving cash:	Ŧ	(10,000)	Ŧ	(0,0)
Amortization		4		18
Environmental rehabilitation provision accretion (Note 6)		1.776		1.465
Share-based compensation (Note 10)		1.318		1.808
Unrealized loss on foreign exchange		<sup>′</sup> 1		4
Loss on disposal of intangible (Note 5)		1,324		-
Loss on disposal of lands (Note 5)		469		-
Gain on disposal of financial instruments (Note 5)		(36)		(8)
Changes in non-cash working capital:		. ,		
Amounts receivable		23		(40)
Prepaid expenses		2		472 <sup>´</sup>
Accounts payable and accruals		227		47
Net cash used in operating activities		(4,990)		(5,463)
Financing Activities				
Share issuance proceeds, net of costs (Note 10)		-		28,535
Debenture funding, net of costs (Notes 7 and 9)		14,917		13,943
Debenture repayment (Notes 7 and 9)		-		(5,111)
Cash settled RSU's (Note 10)		-		(119)
Net cash provided by financing activities		14,917		37,248
lana sina Asinisian				
Investing Activities		(04.000)		(00.445)
Property, plant and equipment purchases (Note 4)		(21,030)		(23,445)
Financial instrument disposal proceeds ( <i>Note 5</i> )		1/1		82
		(810)		-
Net cash used in investing activities		(21,669)		(23,363)
Net Increase (Decrease) in Cash		(11 742)		8 4 2 2
Effect of foreign exchange on Cash		(11,742)		(4)
Cash - Beginning of period		18.674		10.256
Cash - End of period	\$	6.931	\$	18.674
	*	-,	Ŧ	
Supplemental information – non-cash investing and financing				
Accounts payable and accruals	\$	(60)	\$	(207)
Transfer from PP&E to intangible (Note 5)		2,320		-
Debt accretion and capitalized interest (Notes 7, 8 and 9)		18,512		15,103
Share-based compensation (Note 10)		232		710
Bonus share amortization (Note 10)		279		304
Fair value of shares issued for land options (Note 10)	\$	256	\$	200

## PolyMet Mining Corp. Notes to Consolidated Financial Statements

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## 1. Nature of Business and Liquidity

PolyMet Mining Corp. was incorporated in British Columbia, Canada on March 4, 1981 under the name Fleck Resources Ltd. and changed its name to PolyMet Mining Corp. on June 10, 1998. Through its 100%-owned subsidiary, Poly Met Mining, Inc. ("PolyMet US" and, together with PolyMet Mining Corp., "PolyMet" or the "Company"), the Company is engaged in the exploration and development of natural resource properties. The Company's primary mineral property is the NorthMet Project ("NorthMet" or "Project"), a polymetallic project in northeastern Minnesota, United States of America, which comprises the NorthMet copper-nickel-precious metals ore body and the Erie Plant, a processing facility located approximately six miles from the ore body. The realization of the Company's investment in NorthMet and other assets is dependent upon various factors, including the existence of economically recoverable mineral reserves, the ability to obtain permits necessary to construct and operate NorthMet, the ability to obtain financing necessary to complete the development of NorthMet, and generate future profitable operations or alternatively, disposal of the investment on an advantageous basis.

The corporate address and records office of the Company are located at 100 King Street West, Suite 5700, Toronto, Ontario, Canada M5X 1C7, and 700 West Georgia, 25<sup>th</sup> Floor, Vancouver, British Columbia, Canada, V7Y 1B3, respectively. The executive office of PolyMet US is located at 444 Cedar Street, Suite 2060, St. Paul, Minnesota, United States of America, 55101.

On December 7, 2017, the Board of Directors approved a resolution to change the year end from January 31 to December 31. Accordingly, these financial statements are prepared as at December 31, 2017 and January 31, 2017 and for the eleven months ended December 31, 2017 and twelve months ended January 31, 2017.

The consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities in the normal course of operations.

Liquidity risk is the risk the Company will not be able to meet its financial obligations as they become due and arises through the excess of financial obligations over financial assets due at any point in time.

As a result of the extension to all outstanding debentures and agreement to make available additional debenture funding as described further in Note 16, the Company has secured sufficient financing to meet its current obligations, as well as fund ongoing development and administration expenses in accordance with the Company's spending plans through December 31, 2018. Management believes, based upon the underlying value of the NorthMet Project, the advanced stage of permitting, the history of support from its shareholders (see Notes 7, 8, 9 and 16) and the ongoing discussions with investment banks and investors, that financing will continue to be available allowing the Company to obtain financing necessary to complete the development of NorthMet and generate future profitable operations. While in the past the Company has been successful in closing financing agreements, there can be no assurance it will be able to do so again. Factors that could affect the availability of financing include the state of debt and equity markets, investor perceptions and expectations, and the metals markets.

## PolyMet Mining Corp. Notes to Consolidated Financial Statements

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## 2. Summary of Significant Accounting Policies

## a) Statement of Compliance

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). The financial statements were approved by the Board of Directors on March 27, 2018.

## b) Basis of Consolidation and Presentation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary. Intercompany balances and transactions have been eliminated on consolidation.

The consolidated financial statements have been prepared under the historical cost convention, as modified for the revaluation of financial assets classified as available-for-sale. All dollar amounts presented are in United States ("U.S.") dollars unless otherwise specified.

## c) Critical Accounting Estimates and Judgments

The preparation of consolidated financial statements in conformity with IFRS requires the use of certain critical accounting estimates. These critical accounting estimates require management to make judgments and estimates that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities as at the date of the financial statements.

Critical accounting estimates and judgments used in the preparation of the consolidated financial statements are as follows:

## (i) <u>Determination of mineral reserves</u>

Reserves are estimates of the amount of product that can be economically and legally extracted from the Company's property. In order to estimate reserves, estimates are required about a range of geological, technical and economic factors, including quantities, production techniques, production costs, capital costs, transport costs, demand, prices and exchange rates. Estimating the quantity of reserves requires the size, shape and depth of deposits to be determined by analyzing geological data. This process may require complex and difficult geological judgments to interpret the data. In addition, management will form a view of forecast sales prices, based on current and long-term historical average price trends. Changes in the proven and probable reserves estimates may impact the carrying value of property, plant and equipment, rehabilitation provisions, recognition of deferred tax amounts and depreciation, depletion and amortization.

## (ii) Impairment of non-financial assets

The carrying amounts of the Company's non-financial assets, including mineral property, plant and equipment, and intangible are reviewed at each reporting date or when events or changes in circumstances occur that indicate the asset may not be recoverable to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated at the greater of its value in use and its fair value less costs of disposal. 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. An impairment loss is recognized if the carrying amount of an asset exceeds its estimated recoverable amount. An impairment loss previously recorded is reversed if there has been a change in the estimates used to determine the recoverable amount resulting in an increase in the estimated service potential of an asset.

## PolyMet Mining Corp. Notes to Consolidated Financial Statements

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## 2. Summary of Significant Accounting Policies - Continued

## c) Critical Accounting Estimates and Judgments - Continued

For its mineral property interest, the Company considers both external and internal sources of information in assessing whether there are any indications of impairment. External sources of information the Company considers include changes in the market, economic, and legal environment in which the Company operates that are not within its control and affect the recoverable amount of mineral property interests. Internal sources of information the Company considers include indications of economic performance of the asset.

The carrying value of mineral property, plant, and equipment, and intangible at the balance sheet date is described in Notes 4 and 5, respectively. No impairment indicators were identified on the mineral property, plant and equipment or intangible for the eleven months ended December 31, 2017 or twelve months ended January 31, 2017.

## (iii) Provision for Environmental Rehabilitation Costs

Provisions for environmental rehabilitation costs associated with mineral property, plant and equipment, are recognized when the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax risk-free rate that reflects current market assessments of the time value of money.

The Company's estimates of its ultimate environmental rehabilitation liabilities could be affected by changes in regulations, changes in the extent of environmental rehabilitation required, changes in the means of rehabilitation, changes in the extent of responsibility for the financial liability or changes in cost estimates. The operations of the Company may in the future be affected from time to time in varying degrees by changes in environmental regulations, including those for future removal and site restoration costs. Both the likelihood of new regulations and their overall effect upon the Company may vary greatly and are not predictable.

The Company's provision for environmental rehabilitation cost obligations represents management's best estimate of the present value of the future cash outflows required to settle the liability. See additional discussion in Note 6.

## d) Foreign Currency Translation

The U.S. dollar is the functional currency of the Company and its wholly-owned subsidiary. Amounts in the consolidated financial statements are expressed in U.S. dollars unless otherwise stated. Transactions in foreign currencies are translated into the functional currency at the exchange rates at the date of the transactions. Monetary assets and liabilities of the Company's operations denominated in a currency other than the U.S. dollar are translated using exchange rates prevailing at the balance sheet date. Revenue and expense items are translated at the exchange rates in effect at the date of the underlying transaction. Exchange differences are recognized in net loss in the year in which they arise.

## e) Cash and Cash Equivalents

The Company considers cash and cash equivalents to include amounts held in banks and highly liquid investments with original maturities of three months or less.
As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

# 2. Summary of Significant Accounting Policies - Continued

## f) Financial Assets

All financial assets are initially recorded at fair value and designated upon inception as one of the following four categories: held to maturity, available for sale, loans and receivables or at fair value through profit or loss ("FVTPL"). Financial assets classified as FVTPL are measured at fair value with unrealized gains and losses recognized through profit and loss. Financial assets classified as loans and receivables and held to maturity are measured at amortized cost using the effective interest method less any allowance for impairment. The effective interest method is a method of calculating the amortized cost of a financial asset and of allocating interest income over the relevant period. The effective interest rate is the rate that discounts estimated future cash receipts through the expected life of the financial asset, or, where appropriate, a shorter period. Financial assets classified as available for sale are measured at fair value with unrealized gains and losses recognized in other comprehensive income or loss that had been recognized shall be reclassified from equity to profit or loss as a reclassification adjustment. Transaction costs associated with FVTPL financial assets are included in the initial carrying amount of the asset. See additional discussion in Note 15.

## g) Mineral Property, Plant and Equipment

#### Mineral Property

Exploration and evaluation costs incurred prior to a Definitive Feasibility Study ("DFS") are expensed as incurred. Development costs incurred subsequent to a DFS and mineral property acquisition costs are capitalized until the property is placed into production, sold, allowed to lapse or abandoned. As a result of the DFS, NorthMet entered the development stage effective October 1, 2006. The Company has capitalized development expenditures related to NorthMet from that date.

Upon commencement of production, related property acquisition and development costs are amortized on a unit of production basis over the estimated proven and probable mineral reserves not to exceed the assets' useful lives.

#### Plant and Equipment

Plant and equipment are recorded at historical cost less accumulated depreciation and if applicable, accumulated impairment losses. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, if it is probable that the future economic benefits of the expenditure will flow to the Company and its cost can be measured reliably. The carrying amount of a replaced part is derecognized. All other repairs and maintenance are charged to the statement of loss and comprehensive loss during the period in which they are incurred.

Depreciation of plant and equipment is calculated using the cost of the asset, less its residual value, over the estimated useful life of the asset on a unit of production or straight-line basis, as appropriate.

#### h) Intangible

Intangible costs and related acquisition costs are capitalized until the wetland credits are used, sold, or abandoned. Wetland credits are used to offset and mitigate wetlands disturbed during construction and operation of NorthMet. As such, costs will be transferred to Mineral Property, Plant and Equipment once placed into service and amortized on a unit of production basis over the estimated proven and probable mineral reserves not to exceed the assets' useful lives. See additional discussion in Note 5.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## 2. Summary of Significant Accounting Policies - Continued

## i) Financial Liabilities

All financial liabilities are initially recorded at fair value and designated upon inception as FVTPL or other financial liabilities. Financial liabilities classified as other financial liabilities are initially recognized at fair value less directly attributable transaction costs. After initial recognition, other financial liabilities are subsequently measured at amortized cost using the effective interest method. The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash payments through the expected life of the financial liability, or, where appropriate, a shorter period. Financial liabilities classified as FVTPL include financial liabilities held for trading and financial liabilities designated upon initial recognition as FVTPL. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Transaction costs on financial liabilities classified as FVTPL are expensed as incurred. At the end of each reporting period subsequent to initial recognized directly in profit or loss in the period in which they arise. See additional discussion in Note 15.

## j) Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset are capitalized as part of the cost of that asset until such time as the asset is substantially complete and ready for its intended use or sale. Where funds have been borrowed specifically to finance an asset, the amount capitalized is the actual borrowing costs incurred. Where the funds used to finance an asset form part of general borrowings, the amount capitalized is calculated using a weighted average of rates applicable to relevant borrowings of the Company during the period. Other borrowing costs not directly attributable to a qualifying asset are expensed in the year incurred. Classification in the cash flow statement is in accordance with the classification of the underlying asset to which those payments were capitalized.

#### k) Share-Based Compensation

All share-based compensation awards made to directors, employees and non-employees are measured and recognized using a fair value based method. For directors and employees, or those providing services similar to employees, the fair value of options is determined using the Black-Scholes pricing model. The fair value of the bonus shares, restricted shares, and restricted share units is calculated using the intrinsic value of the shares at issuance, and is amortised over the vesting period.

The fair value of the award is accrued and charged over the vesting period either to operations or mineral property plant and equipment, with the offsetting credit to equity reserves for equity settled awards or liabilities for cash settled awards. If and when share options are ultimately exercised or bonus shares, restricted shares, and restricted share units vest, the applicable amounts are transferred to share capital.

Certain awards vest upon achievement of non-market performance conditions. On a quarterly basis, management assesses the probability of achieving those performance conditions using the best available information, and estimates the appropriate vesting period.

When the Company amends the terms of share options, the incremental change in the fair value of the options due to the amendment, as determined using the Black-Scholes pricing model, is recognized over the vesting period in the statement of loss or capitalized as appropriate.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## 2. Summary of Significant Accounting Policies - Continued

## I) Share Purchase Warrants

The Company issues share purchase warrants in connection with certain equity transactions. The fair value of the warrants, as determined using the Black-Scholes pricing model or fair value of goods or services received, is credited to equity reserves. The recorded value of share purchase warrants is transferred to share capital upon exercise.

#### m) Loss Per Share

Loss per share is computed by dividing the loss for the year by the weighted average number of common shares outstanding during the year. Basic and diluted loss per share for each year presented are the same due to the effect of potential issuances of shares under warrant or share option agreements being, in total, anti-dilutive.

## n) Income Taxes and Deferred Taxes

The income tax expense or benefit for the year consists of two components: current and deferred.

Current tax is the expected tax payable or receivable on the taxable profit or loss for the year. Current tax is calculated using tax rates and laws that were enacted or substantively enacted at the balance sheet date in each of the jurisdictions and include any adjustments for taxes payable or recovery in respect of prior periods.

Taxable profit or loss differs from profit or loss as reported in the Consolidated Statements of Loss and Comprehensive Loss because of items of income or expense that are taxable or deductible in other years, and items that are never taxable or deductible.

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax basis used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences not eligible for offset. Deferred tax assets are generally recognized for all deductible temporary differences, loss carry forwards and tax credit carry forwards to the extent that it is probable that taxable profits will be available against which they can be utilized. To the extent that the Company does not consider it to be probable that taxable profits will be available against which deductible temporary differences, loss carry forwards, and tax credit carry forwards can be utilized, a deferred tax asset is not recognized.

# o) Adoption of New or Amended Accounting Standards

On February 1, 2017, the Company adopted the following new or amended accounting standards that were previously issued by the IASB. Certain other new standards and interpretations have been issued but are not expected to have a material impact on the Company's financial statements and are therefore not discussed below.

#### IAS 7 – Statement of Cash Flows

IAS 7 was amended to require disclosures about changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes and amendments are effective for annual periods beginning on or after January 1, 2017.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## 2. Summary of Significant Accounting Policies - Continued

## p) Future Accounting Standards

Information on new standards, amendments and interpretations effective for annual periods beginning on or after January 1, 2018 and that are expected to be relevant to the Company's financial statements is provided below. Certain other new standards and interpretations have been issued but are not expected to have a material impact on the Company's financial statements and are therefore not discussed below.

#### IFRS 9 – Financial Instruments

IFRS 9 addresses the classification, measurement and recognition of financial assets and financial liabilities. This standard replaces parts of *IAS 39 - Financial Instruments: Recognition and Measurement*.

IFRS 9 requires financial assets to be classified into two measurement categories: those measured at fair value and those measured at amortized cost. The determination is made at initial recognition. On transition, the Company's investments classified as available-for-sale (EIP receivable- Note 5) will be re-designated as FVTPL financial instruments, and its revaluation adjustments will be recorded in the statement of loss instead of through other comprehensive loss. The Company expects adoption will result in an adjustment to the opening deficit and accumulated other comprehensive loss for cumulative gains/losses on the EIP receivable (see Note 5) and that the adjustment does not have a significant impact on the Company's financial statements.

For financial liabilities, the standard retains most of the IAS 39 requirements, except as it relates to modifications of liabilities. Under IAS 39, when an entity modified a financial liability, it would decide whether this modification was significant enough to constitute an extinguishment. If the modification was considered an extinguishment of the initial debt, the new modified debt was recorded at fair value and a gain/loss recognized in income for the difference between the carrying amount of the old debt and the new debt. This extinguishment accounting remains the same under IFRS 9. However, accounting under IFRS 9 differs where the change was not significant enough to be an extinguishment. Under IAS 39 modifications would not lead to an immediate income charge as the cash flows of the modified debt would be discounted using the revised effective interest rate over the remaining term of the debt. However, under IFRS 9, the cash flows under the modified debt should be re-discounted using the original effective interest rate of the instrument. The Company expects adoption will result in an adjustment to the opening deficit and carrying value of its convertible and non-convertible debt due to several prior modifications to the outstanding debentures (see Notes 8 and 9). The Company is assessing the impact this adjustment will have on the Company's financial statements.

IFRS 9 also introduces a single expected credit loss impairment model, which is based on changes in credit quality since initial recognition. The Company does not expect this to have a significant impact on the Company's financial statements upon adoption.

The new standard is effective for annual periods beginning on or after January 1, 2018 and the Company will adopt IFRS 9 effective January 1, 2018.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 2. Summary of Significant Accounting Policies - Continued

#### p) Future Accounting Standards - Continued

#### IFRS 16 – Leases

IFRS 16 replaces *IAS 17 - Leases* and eliminates the classification of leases as either operating or finance leases by the lessee. The treatment of leases by the lessee will require capitalization of all leases resulting in accounting treatment similar to finance leases under *IAS 17 - Leases*. Exemptions for leases of very low value or short-term leases will be applicable. The new standard will result in an increase in lease assets and liabilities for the lessee. Under the new standard the treatment of all lease expense is aligned in the statement of earnings with depreciation, and an interest expense component recognized for each lease, in line with finance lease accounting under *IAS 17 - Leases*. The Company expects adoption will result in identification of one qualifying office lease, which will not have a significant impact on the Company's financial statements. The Company's other leases (Note 3) are leases to explore mining rights and are excluded from IFRS 16's scope.

The new standard will be effective for annual periods beginning on or after January 1, 2019 with early adoption permitted and the Company plans to adopt IFRS 16 effective January 1, 2018.

#### IFRS 15 – Revenue from Contracts with Customers

IFRS 15 replaces *IAS 18 - Revenue* and *IAS 11 - Construction Contracts* and provides a five-step framework for application to customer contracts: identification of customer contract, identification of the contract performance obligations, determination of the contract price, allocation of the contract performance obligations, and revenue recognition as performance obligations are satisfied. A new requirement where revenue is variable stipulates that revenue may only be recognized to the extent that it is highly probable that significant reversal of revenue will not occur. The new standard will be effective for annual periods beginning on or after January 1, 2018. The Company does not expect IFRS 15 to have a significant impact on the Company's financial statements upon adoption.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## 3. Mineral Property Agreements

## NorthMet, Minnesota, U.S.A.

Pursuant to an agreement dated January 4, 1989, subsequently amended and assigned, the Company leases certain property in St. Louis County, Minnesota from RGGS Land & Minerals Ltd., L.P. The Company can indefinitely extend the term by continuing to make \$150,000 annual lease payments on each successive anniversary date or can, at its option, terminate the lease at any time by giving written notice to the lessor not less than 90 days prior to the effective termination date. All lease payments have been paid to December 31, 2018. The next payment is due in January 2019.

Pursuant to an agreement effective December 1, 2008, the Company leases certain property in St. Louis County, Minnesota from LMC Minerals. The initial term of the renewable lease is 20 years and calls for minimum annual lease payments of \$3,000 for the first four years after which the minimum annual lease payment increased to \$30,000. The initial term may be extended for up to four additional five-year periods on the same terms. All lease payments have been paid to December 31, 2017. The next payment is due in November 2018.

The lease payments are considered advance royalty payments and will be deducted from future production royalties payable to the lessor, which range from 3% to 5% based on the net smelter return per ton received by the Company. The Company's recovery of \$2.825 million in advance royalty payments to RGGS Land & Minerals Ltd., L.P. is subject to the lessor receiving an amount not less than the amount of the annual lease payment due for that year. The Company's recovery of \$0.189 million in advance royalty payments to LMC Minerals is subject to the lessor receiving an amount not less than the amount of the annual lease payment due for that year.

Pursuant to the leases, the Company holds mineral rights and the right to mine upon receiving the required permits. The Company has proposed to acquire surface rights through a land exchange with the United States Forest Service ("USFS") using land the Company currently owns. The land exchange was authorized by the USFS on January 9, 2017 and is pending execution.

# 4. Mineral Property, Plant and Equipment

		Other fixed	
Net Book Value	NorthMet	assets	Total
Balance at January 31, 2016	\$ 321,559	90	321,649
Additions	38,767	89	38,856
Changes to rehabilitation provision (Note 6)	4,467	-	4,467
Amortization	-	(59)	(59)
Balance at January 31, 2017	364,793	120	364,913
Additions	39,474	32	39,506
Disposals (Note 5)	(2,789)	-	(2,789)
Changes to rehabilitation provision (Note 6)	(6,363)	-	(6,363)
Amortization	-	(62)	(62)
Balance at December 31, 2017	\$ 395,115	\$ 90	\$ 395,205

Details of Mineral Property, Plant, and Equipment are as follows:

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 4. Mineral Property, Plant and Equipment - Continued

NorthMet	ſ	December 31, 2017	January 31, 2017
Mineral property acquisition and interest costs Mine plan and development Environmental Consulting and wages Reclamation and remediation <i>(Note 6)</i> Site activities Mine equipment	\$	86,863 50,250 122,396 52,965 60,289 21,403 949	\$ 68,352 47,833 111,421 49,715 66,652 19,871 949
Total	\$	395,115	\$ 364,793

#### Erie Plant, Minnesota, U.S.A.

In February 2004, the Company entered into an option agreement with Cliffs Erie LLC, a subsidiary of Cleveland Cliffs Inc. (together "Cliffs") to purchase 100% ownership of large parts of the former LTV Steel Mining Company ore processing plant in northeastern Minnesota (the "Erie Plant"). The Company exercised this option in November 2005 under the Asset Purchase Agreement with Cliffs.

In December 2006, the Company acquired from Cliffs property and associated rights sufficient to provide it with a railroad connection linking the mine development site and the Erie Plant. The transaction also included a railcar fleet, locomotive fueling and maintenance facilities, water rights and pipelines, administrative offices on site and an additional 6,000 acres of land to the east and west of the existing tailings storage facilities.

The consideration paid for the Erie Plant and associated infrastructure was \$18.9 million in cash and 9,200,547 shares at a fair market value of \$13.953 million.

The Company indemnified Cliffs for reclamation and remediation obligations as a result of the above purchases (see Note 6). These obligations are contractual in nature under the terms of the purchase agreements with Cliffs. Once the Company obtains its permit to mine and Cliffs is released from its obligations by State agencies, the Company's obligations will be directly with the governing bodies.

During the eleven months ended December 31, 2017, the Company capitalized 100% of the borrowing costs on the convertible debt (see Note 8) and non-convertible debt (see Note 9) in the amount of \$18.512 million (twelve months ended January 31, 2017 - \$15.103 million) as part of the cost of NorthMet assets. As NorthMet assets are not in use or capable of operating in a manner intended by management, no depreciation or amortization of these assets has been recorded to December 31, 2017.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## 5. Intangible and EIP Receivable

In March 2012, the Company acquired a secured interest in land owned by AG for Waterfowl, LLP ("AG") that is permitted for wetland restoration. AG subsequently assigned the agreement to EIP Minnesota, LLC ("EIP") in September 2012. EIP will restore the wetlands and, upon completion, wetland credits are to be issued by the proper government authorities. As part of the initial consideration, AG received warrants to purchase 1,249,315 common shares at \$1.3007 per share. These warrants expired on December 31, 2015.

In April 2015, the Company entered into a revised agreement with EIP whereby EIP will seek to sell credits the Company is unable to use for the NorthMet Project to third parties and, over time, reimburse the Company for its costs. The Company's right to purchase remaining credits under the April 2015 agreement expired on February 28, 2017 and EIP will seek to sell these credits and reimburse the Company for its costs under the terms of the agreement. The Company initially recognized the February 2017 receivable at fair value calculated using a 9.75% discount rate and 15-year term resulting in a receivable of \$0.564 million and a non-cash loss of \$1.324 million. Subsequent fair value changes are accounted for through other comprehensive income or loss.

On October 27, 2017, an agreement was entered into with EIP Credit Co., LLC to reserve wetland bank credits for the NorthMet Project for a minimum of five years in exchange for an initial down payment applicable to the purchase price, contractual transfer of certain lands, and annual option payments not applicable to the purchase price. The initial consideration paid was \$0.810 million in cash and \$2.320 million in lands valued using unobservable inputs (Level 3 measurements) and resulted in a non-cash loss of \$0.469 million. Annual option payments of \$0.250 million will be expensed as incurred whereas option exercise payments will be recorded to Intangible and transferred to Mineral Property, Plant and Equipment once placed into service.

	11 months ended		12 months ended	
	Decem	ber 31, 2017		January 31, 2017
Intangible – beginning of period	\$	1,888	\$	1,888
Additions		3,130		-
Disposals		(1,888)		-
Intangible – end of period	\$	3,130	\$	1,888

Details of the Intangible are as follows:

Details of the EIP receivable are as follows:

	11 m Decem	onths ended ber 31, 2017	12 months ended January 31, 2017
EIP Receivable – beginning of period	\$	2,656 \$	2,517
Initial recognition		564	-
Collections		(171)	(82)
Gain (Loss) on re-measurement		(166)	221
EIP Receivable – end of period		2,883	2,656
Less current portion		(350)	(644)
Non-current portion	\$	2,533 \$	2,012

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 6. Environmental Rehabilitation Provision

Details of Environmental Rehabilitation Provision are as follows:

	11 months ended		12 months ended
	Decer	nber 31, 2017	January 31, 2017
Environmental Rehabilitation Provision – beginning of period	\$	70,626	\$ 65,684
Change in estimate		(6,363)	4,467
Liabilities discharged		(637)	(990)
Accretion expense		1,776	1,465
Environmental Rehabilitation Provision – end of period		65,402	70,626
Less current portion		(1,266)	(781)
Non-current portion	\$	64,136	\$ 69,845

Federal, state and local laws and regulations concerning environmental protection affect the NorthMet assets. As part of the consideration for the Cliffs Purchase Agreements (see Note 4), the Company indemnified Cliffs for reclamation and remediation obligations of the acquired property. The Company's provisions are based upon existing laws and regulations. It is not currently possible to estimate the impact on operating results, if any, of future legislative or regulatory developments.

In April 2010, Cliffs entered into a consent decree with the Minnesota Pollution Control Agency ("MPCA") relating to alleged violations on the Cliffs Erie Property. This consent decree required both short-term and long-term mitigation. Field studies were completed in 2010 and 2011 and short-term mitigations approved by the MPCA were initiated in 2011. In April 2012, long-term mitigation plans were submitted to the MPCA and, in October 2012, the MPCA approved plans for pilot tests of various treatment options to determine the best course of action. Although there is substantial uncertainty related to applicable water quality standards, engineering scope, and responsibility for the financial liability, the October 2012 response from the MPCA, subsequent communications amongst the MPCA, Cliffs and the Company, and closure plans reflected in the Permit to Mine application provide increasing clarification of the potential liability for long-term mitigation included in the Company's environmental rehabilitation provision.

The Company's estimate of the environmental rehabilitation provision under IFRS at December 31, 2017 was \$65.402 million (January 31, 2017 - \$70.626 million) based on estimated cash flows required to settle this obligation in present day costs of \$73.301 million (January 31, 2017 - \$79.249 million), a projected inflation rate of 2.00% (January 31, 2017 – 2.00%), a market risk-free interest rate of 2.58% (January 31, 2017 – 2.78%) and expenditures expected to occur over a period of approximately 30 years. The decrease during the eleven months ended December 31, 2017 was due to revisions to estimated cash flows as a result of closure plans reflected in the Permit to Mine application.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 7. Glencore Financing

Since October 2008, the Company and Glencore have entered into a series of financing and other agreements comprising:

- Equity five separate agreements comprising \$25.0 million placement of PolyMet common shares in calendar 2009 in two tranches; a \$30.0 million placement of PolyMet common shares in calendar 2010 in three tranches; a \$20.0 million placement of PolyMet common shares in calendar 2011 in one tranche; a \$20.960 million purchase of PolyMet common shares in the 2013 Rights Offering; and a \$10.583 million purchase of PolyMet common shares in the 2016 Private Placement (see Note 10);
- Convertible debt ("Glencore Convertible Debt") agreement comprising \$25.0 million initial principal secured convertible debentures drawn in four tranches (see Notes 8 and 16);
- Non-convertible debt ("Glencore Non-Convertible Debt") four separate agreements comprising \$30.0 million initial principal secured debentures in calendar 2015 drawn in four tranches; an \$11.0 million initial principal secured debenture in calendar 2016 drawn in one tranche; \$14.0 million initial principal secured debenture in calendar 2016 drawn in four tranches; and a \$20.0 million initial principal secured debenture in calendar 2017 drawn and to be drawn in two tranches (see Note 9). Subsequent to December 31, 2017, a fifth separate agreement was entered into comprising up to \$80.0 million initial principal secured debentures in calendar 2018 to be drawn in five tranches at the Company's option (see Note 16);
- Marketing Agreement whereby Glencore committed to purchase all of the Company's production
  of concentrates, metal, or intermediate products on market terms at the time of delivery for at
  least the first five years of production; and
- Corporate Governance Agreement whereby from January 1, 2014 as long as Glencore holds 10% or more of PolyMet's shares (on a fully diluted basis), Glencore has the right, but not obligation, to nominate at least one director and not more than the number of directors proportionate to Glencore's fully diluted ownership of PolyMet, rounded down to the nearest whole number, such number to not exceed 49% of the total board.

As a result of these financing transactions and the purchase by Glencore of PolyMet common shares previously owned by Cliffs, Glencore's ownership and ownership rights of PolyMet as at December 31, 2017 comprises:

- 92,836,072 shares representing 29.1% of PolyMet's issued shares (January 31, 2017 -92,836,072 shares);
- Glencore Convertible Debt exchangeable through the exercise of an exchange warrant ("Exchange Warrant") at \$1.2696 per share into 38,660,854 common shares of PolyMet (including capitalized and accrued interest as at December 31, 2017), and where the exercise price and the number of shares issuable are subject to conventional anti-dilution provisions. See Notes 8 and 16 for additional details;
- Warrants to purchase 7,055,626 common shares at \$1.00 per share at any time until October 28, 2021, subject to acceleration on the earlier of receipt of permits necessary to construct NorthMet or the twelve month anniversary of the issue date provided the 20-day VWAP of PolyMet common shares is equal to or greater than \$1.50 ("Acceleration Triggering Event"), and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions. See 2016 Agreements below for additional details; and
- Warrants to purchase 625,000 common shares at \$0.7797 per share at any time until October 28, 2021, and where the exercise price and the number of warrants are subject to conventional antidilution provisions. See 2016 Agreements below for additional details.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

## 7. Glencore Financing - Continued

If Glencore were to exercise all of its rights and obligations under these agreements, it would own 139,177,552 common shares of PolyMet, representing 38.1% on a partially diluted basis, that is, if no other options or warrants were exercised or 34.4% on a fully diluted basis, if all other options and warrants were exercised, whether they are in-the-money or not. Subsequent to December 31, 2017, warrants to purchase 6,458,001 common shares at \$0.8231 per share at any time until March 31, 2019 were issued to Glencore. See Note 16 for additional details.

## 2016 Agreements

On June 3, 2016, the Company issued \$3.0 million Tranche K secured debenture, on July 1, 2016 it issued \$5.0 million Tranche L-1 secured debenture, on July 26, 2016 it issued \$3.0 million Tranche L-2 secured debenture, and on August 5, 2016 it issued \$3.0 million Tranche M secured debenture to Glencore. Each of these debentures bears interest at 12 month U.S. dollar LIBOR plus 15.0%. The Company provided security on these debentures covering all of the assets of PolyMet, including a pledge of PolyMet's 100% ownership of Poly Met Mining, Inc. The due date of these debentures was initially the earlier of (i) March 31, 2017 or (ii) the availability of at least \$100 million of debt or equity financing or (iii) when it is prudent for PolyMet to repay the debt, on which date all principal and interest accrued to such date will be due and payable. See additional details below and in Note 9.

On September 14, 2016, the Company extended the term of the Glencore Non-Convertible Debt, the term of the Glencore Convertible Debt and the expiration date of the associated Exchange Warrant to the earlier of (i) March 31, 2018 or (ii) the availability of at least \$100 million of debt or equity financing or (iii) when it is prudent for PolyMet to repay the debt, on which date all principal and interest accrued to such date will be due and payable. In connection with this extension, the Company issued warrants to purchase 625,000 common shares at \$0.7797 per share at any time until October 28, 2021, and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions. All other terms of the debt were unchanged. The transaction has been accounted for as a modification of the existing debentures with the \$0.250 million fair value of the warrants allocated pro rata on the basis of the Glencore Non-Convertible Debt and Glencore Convertible Debt and an offsetting entry to equity reserves. See additional details in Notes 8 and 9.

On October 28, 2016, the Company issued 14,111,251 units ("Glencore Units") to Glencore for gross proceeds of \$10.583 million pursuant to Glencore's right to maintain its pro rata ownership following the private placement which closed on October 18, 2016. Each Glencore Unit consists of one common share and one half of one common share purchase warrant, each whole warrant exercisable for one common share at a price of \$1.00 per share for a period beginning 6 months following the issue date and ending 60 months after the issue date, subject to the Acceleration Triggering Event (see Note 7), and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions. See additional details in Note 10.

# 2017 Agreements

On September 14, 2017, the Company agreed to issue to Glencore secured debentures with a total principal amount of \$20.0 million. The debentures bear interest at twelve month US dollar LIBOR plus 15.0% and are due on the earlier of (i) March 31, 2018 or (ii) the availability of at least \$100 million of debt or equity financing or (iii) when it is prudent for PolyMet to repay the debt, on which date all principal and interest accrued to such date will be due and payable. The Tranche N Debenture in the amount of \$15.0 million was issued on September 18, 2017. The Tranche O Debenture in the amount of \$5.0 million was issued subsequent to December 31, 2017 on January 18, 2018. Transaction costs for the financing were \$0.083 million. See additional details in Note 9.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 8. Convertible Debt

Details of the Convertible Debt are as follows:

	11 months ended	12 months ended
	December 31, 2017	January 31, 2017
Convertible Debt – beginning of period	\$ 42,154	\$ 35,986
Accretion and capitalized interest	6,913	6,168
Convertible Debt – end of period	49,067	42,154
Less current portion	(49,067)	-
Non-current portion	\$ -	\$ 42,154

Since October 2008, the Company has issued \$25.0 million of secured convertible debentures to Glencore. The Company has provided security on these debentures covering all of the assets of PolyMet.

These debentures bear interest at twelve month U.S. dollar LIBOR plus 4.0% through July 31, 2015, twelve month U.S. dollar LIBOR plus 8.0% through December 31, 2015, and twelve month U.S. dollar LIBOR plus 15.0% beginning January 1, 2016. Interest is compounded quarterly and payable in cash or by increasing the principal amount of the debentures, at Glencore's option. Since inception, \$24.067 million of interest has been accreted and capitalized to the principal amount of the debenture. All borrowing costs were eligible for capitalization and 100% of these costs were capitalized during the eleven months ended December 31, 2017.

The due date of these debentures was the earlier of (i) March 31, 2018 or (ii) the availability of at least \$100 million of debt or equity financing or (iii) when it is prudent for PolyMet to repay the debt, on which date all principal and interest accrued to such date will be due and payable. Upon receipt of ten days notice of PolyMet's intention to repay the debentures Glencore can exercise the Exchange Warrant and exchange the initial principal and capitalized interest into common shares of PolyMet at \$1.2696 per share. Glencore has the right to exchange some or all of the debentures at any time under the same conversion terms. The Company has the right to require exchange of all of the debentures upon receipt of permits required to commence construction of NorthMet and construction finance acceptable to Glencore under the same conversion terms.

Subsequent to December 31, 2017, PolyMet and Glencore agreed to extend the maturity date of the secured convertible debt to March 31, 2019 and reduce the interest rate on the secured convertible debt. See Note 16 for additional details.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 9. Non-Convertible Debt

Details of Non-Convertible Debt are as follows:

	11 Dece	months ended ember 31, 2017	12 months ended January 31, 2017
IRRRB – beginning of period	\$	-	\$ 4,962
Accretion and capitalized interest		-	149
Repayment		-	(5,111)
IRRRB – end of period (Note 9a)		-	-
Glencore – beginning of period		65,752	43,023
Accretion and capitalized interest		11,599	8,786
Funding, net of costs		14,917	13,943
Glencore – end of period (Note 9b)		92,268	65,752
Total Non-Convertible Debt		92,268	65,752
Less current portion		(92,268)	-
Non-current portion	\$	-	\$ 65,752

## a) **IRRRB**

During the year ended January 31, 2017, the Company fully repaid a \$4.0 million initial principal loan, drawn in June 2011 from the Iron Range Resources & Rehabilitation Board ("IRRRB"). The loan was used to exercise the Company's options to acquire land as part of the proposed land exchange with the USFS authorized by the USFS on January 9, 2017. The loan was secured by the land acquired and carried a fixed interest rate of 5%, compounded annually. Warrants giving the IRRRB the right to purchase 461,286 shares of its common shares at \$2.1678 per share expired on June 30, 2016. All borrowing costs were eligible for capitalization and 100% of these costs were capitalized during the year ended January 31, 2017.

# b) Glencore

Since January 2015, the Company has issued \$70.0 million of secured non-convertible debentures to Glencore, including \$15.0 million during the eleven months ended December 31, 2017. Subsequent to December 31, 2017, \$5.0 million was issued as called for under the 2017 Agreements (see Note 7). The Company has provided security on these debentures covering all of the assets of PolyMet.

These debentures bear interest at twelve month U.S. dollar LIBOR plus 8.0% through December 31, 2015, and twelve month U.S. dollar LIBOR plus 15.0% beginning January 1, 2016. Interest is compounded quarterly and payable in cash or by increasing the principal amount of the debentures, at Glencore's option. Since inception, \$22.268 million of interest has been accreted and capitalized to the principal amount of the debenture. All borrowing costs were eligible for capitalization and 100% of these costs were capitalized during the eleven months ended December 31, 2017.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 9. Non-Convertible Debt - Continued

#### b) Glencore - Continued

The due date of these debentures was the earlier of (i) March 31, 2018 or (ii) the availability of at least \$100 million of debt or equity financing or (iii) when it is prudent for PolyMet to repay the debt, on which date all principal and interest accrued to such date will be due and payable.

Subsequent to December 31, 2017, PolyMet and Glencore agreed to extend the maturity date of the secured non-convertible debt to March 31, 2019, reduce the interest rate on the secured non-convertible debt, and issue secured debentures with a total principal amount of up to \$80.0 million. See Note 16 for additional details.

#### 10. Share Capital

#### a) Issuances for Cash and Land Acquisition

On October 18, 2016, the Company issued 25,963,167 units ("Placement Units") in a private placement to subscribers for gross proceeds of \$19.472 million. Each Placement Unit consists of one common share and one half of one common share purchase warrant, each whole warrant exercisable for one common share at a price of \$1.00 per share for a period beginning 6 months following the issue date and ending 60 months after the issue date, subject to the Acceleration Triggering Event, and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions. A total of 25,963,167 common shares and 13,641,586 purchase warrants were issued under this transaction, including 660,005 broker warrants issued to the underwriters. The amount attributable to common shares was \$15.881 million and the amount attributable to warrants was \$2.174 million, which includes the broker warrant fair value of \$0.151 million. Transaction costs for the issuance were \$1.568 million. The closing triggered customary anti-dilution provisions for the Exchange Warrant. See Note 8 for additional details.

On October 28, 2016, the Company issued 14,111,251 units ("Glencore Units") to Glencore for gross proceeds of \$10.583 million pursuant to Glencore's right to maintain its pro rata ownership following the private placement which closed on October 18, 2016. Each Glencore Unit consists of one common share and one half of one common share purchase warrant, each whole warrant exercisable for one common share at a price of \$1.00 per share for a period beginning 6 months following the issue date and ending 60 months after the issue date, subject to the Acceleration Triggering Event, and where the exercise price and the number of warrants are subject to conventional anti-dilution provisions. A total of 14,111,251 common shares and 7,055,626 purchase warrants were issued under this transaction. The amount attributable to common shares was \$9.210 million and the amount attributable to warrants was \$1.270 million. Transaction costs for the issuance were \$0.103 million.

During the eleven months ended December 31, 2017 the Company issued 396,616 shares (January 31, 2017 – 241,376 shares) related to land purchase options valued at \$0.256 million (January 31, 2017 - \$0.200 million).

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 10. Share Capital - Continued

#### b) Share-Based Compensation

The Omnibus Share Compensation Plan ("Omnibus Plan") was created to align the interests of the Company's employees, directors, officers and consultants with those of shareholders. Effective May 25, 2007, the Company adopted the Omnibus Plan, which was approved by the Company's shareholders on June 27, 2007, modified and further ratified and reconfirmed by the Company's shareholders most recently on July 15, 2015. The Omnibus Plan restricts the award of share options, restricted shares, restricted share units, and other share-based awards to 10% of the common shares issued and outstanding on the grant date, excluding 2,500,000 common shares pursuant to an exemption approved by the Toronto Stock Exchange.

During the eleven months ended December 31, 2017, the Company recorded \$1.550 million for share-based compensation (January 31, 2017 - \$2.518 million) with \$1.318 million expensed to share-based compensation (January 31, 2017 - \$1.808 million) and \$0.232 million capitalized to mineral property, plant and equipment (January 31, 2017 - \$0.710 million). The offsetting entries were to equity reserves for \$1.111 million (January 31, 2017 - \$2.518 million) and payables for \$0.439 million (January 31, 2017 - \$nil). Total share-based compensation for the eleven months ended December 31, 2017 comprised \$0.368 million for share options (January 31, 2017 - \$1.490 million), \$1.182 million for restricted shares and restricted share units (January 31, 2017 - \$0.916 million), and \$nil for issuance of unrestricted shares (January 31, 2017 - \$0.112 million). Vesting of restricted share units during the eleven months ended December 31, 2017 resulted in \$0.365 million being transferred from equity reserves to share capital (January 31, 2017 - \$0.694 million).

#### c) Share Options

Share options granted may not exceed a term of ten years and are forfeited if the grantee ceases to be an eligible person under the Omnibus Plan. Details of share options are as follows:

	11 months ended		12 months	ended
	December	31, 2017	January 31	l, 2017
		Weighted		Weighted
		Average		Average
	Number of	Exercise	Number of	Exercise
	Options	Price	Options	Price
Outstanding – beginning of period	20,962,002	1.10	18,975,002	1.29
Granted	2,142,000	0.62	5,502,000	0.76
Expired	(1,445,000)	2.19	(3,515,000)	1.64
Outstanding – end of period	21,659,002	0.98	20,962,002	1.10

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 10. Share Capital - Continued

#### c) Share Options - Continued

The fair value of share options granted was estimated at the date of grant using the Black-Scholes pricing model with the following weighted average assumptions:

	11 months ended December 31, 2017	12 months ended January 31, 2017
Risk-free interest rate	1.42% to 1.82%	1.01% to 1.30%
Expected dividend yield	-	-
Expected forfeiture rate	-	-
Expected volatility	53.91% to 57.06%	55.88% to 59.17%
Expected life in years	2.50 to 5.00	2.50 to 5.00
Weighted average fair value of each option	\$0.22 to \$0.32	\$0.26 to \$0.38

The expected volatility reflects the Company's expectation that historical volatility over a period similar to the life of the option is indicative of future trends, which may or may not necessarily be the actual outcome.

Details of share options outstanding as at December 31, 2017 are as follows:

Range of Exercise Prices	Number of options outstanding	Number of options exercisable	Weighted Average Exercise Price	Weighted Average Remaining Life
0.7110 to 0.7977	11,754,000	10,020,667	0.73	3.92
0.8200 to 0.9972	3,839,000	3,789,000	0.97	5.89
1.0058 to 1.5000	4,096,002	4,096,002	1.15	2.78
1.7689 to 2.4886	1,665,000	1,465,000	2.01	2.15
2.6273 to 3.0695	305,000	182,500	2.81	0.74
	21,659,002	19,553,169	0.98	3.87

As at December 31, 2017 all outstanding share options had vested and were exercisable, with the exception of 2,105,833, which were scheduled to vest upon completion of specific targets or dates (Permits - 883,333; Construction - 62,500; Production - 200,000; June 2018 - 300,000; June 2019 - 300,000; June 2020 - 300,000; Other - 60,000). The outstanding share options have expiry periods between 0.03 and 9.56 years.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 10. Share Capital - Continued

#### d) Restricted Shares and Restricted Share Units

Restricted shares and restricted share units granted are forfeited if the grantee ceases to be an eligible person under the Omnibus Plan. Details of restricted shares and restricted share units are as follows:

	11 months ended	12 months ended
	December 31, 2017	January 51, 2017
Outstanding - beginning of period	2,618,020	990,471
Issued	1,077,869	2,303,239
Forfeited	(8,896)	-
Vested	(405,963)	(675,690)
Outstanding - end of period	3,281,030	2,618,020

During the eleven months ended December 31, 2017, the Company issued 1,077,869 restricted share units which had a fair value of \$0.657 million to be expensed and capitalized over the vesting periods.

During the eleven months ended December 31, 2017, there were 8,896 restricted share units forfeited upon individuals ceasing to be eligible persons under the Plan.

As at December 31, 2017 outstanding restricted shares and restricted share units were scheduled to vest upon completion of specific targets or dates (Permits - 134,891; Construction Finance - 750,000; Production - 134,890; February 2018 - 1,050,837; January 2019 - 697,353; Other - 513,059).

#### e) Bonus Shares

The bonus share incentive plan was established for the Company's directors and key employees and was approved by the disinterested shareholders at the Company's shareholders' meeting held in May 2004. The Company has authorized 3,640,000 bonus shares for the achievement of Milestone 4 representing commencement of commercial production at NorthMet at a time when the Company has not less than 50% ownership interest in NorthMet. At the Company's Annual General Meeting of shareholders held in June 2008, the disinterested shareholders approved the bonus shares for Milestone 4. Regulatory approval is required prior to issuance of these shares. Details of bonus shares are as follows:

	11 months ended		12 months ended		
	December 31, 2017		<b>2017</b> January 31, 2		
		Authorized		Authorized	
	Allocated	& Unissued	Allocated	& Unissued	
Outstanding – beginning of period	3,150,000	3,640,000	3,150,000	3,640,000	
Outstanding – end of period	3,150,000	3,640,000	3,150,000	3,640,000	

The fair value of these unissued bonus shares is being amortized until the estimated date of issuance. During the eleven months ended December 31, 2017, the Company recorded 0.279 million amortization related to Milestone 4 bonus shares (January 31, 2017 – 0.304 million), which was capitalized to Mineral Property, Plant and Equipment.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 10. Share Capital - Continued

#### f) Share Purchase Warrants

Details of share purchase warrants are as follows:

	11 month	s ended	12 months ended			
	December	31, 2017	January 31, 2017			
		Weighted		Weighted		
	Number of	Average	Number of	Average		
	Purchase	Exercise	Purchase	Exercise		
	Warrants	Price	Warrants	Price		
Outstanding – beginning of period	27,780,213	\$ 0.95	6,919,287	\$ 0.91		
Issued	-	-	21,322,212	0.99		
Expiration	(6,458,001)	(0.82)	(461,286)	(2.17)		
Outstanding – end of period	21,322,212	\$ 0.99	27,780,213	\$ 0.95		

The outstanding share purchase warrants have expiry periods between 3.80 years and 3.83 years, subject to acceleration in certain circumstances.

Issuances during the prior period related to the October 18, 2016 and October 28, 2016 financing. See Notes 7 and 10a for additional details.

Expirations during the prior period related to the IRRRB non-convertible debt. See Note 9a for additional details. Expirations during the current period related to Glencore financing which give Glencore the right to purchase 6,458,001 shares of its common shares at \$0.8231 per share until December 31, 2017. Subsequent to December 31, 2017, warrants to purchase 6,458,001 common shares at \$0.8231 per share at any time until March 31, 2019 were issued to Glencore. See Note 16 for additional details

The fair value of share purchase warrants granted were estimated at the date of grant using the Black-Scholes pricing model with the following weighted average assumptions:

	11 months ended December 31, 2017	12 months ended January 31, 2017
Risk-free interest rate	-	0.98% to 1.33%
Expected dividend yield	-	-
Expected forfeiture rate	-	-
Expected volatility	-	55.58% to 58.47%
Expected life in years	-	2.50 to 5.00
Weighted average fair value of each warrant <sup>(1)</sup>	-	\$0.19 to \$0.40

<sup>(1)</sup> The fair value of share purchase warrants was used in determining the allocation of net proceeds under the relative fair value method for Placement Units on October 18, 2016 and Glencore Units on October 28, 2016. See Notes 7 and 10a for additional details.

The expected volatility reflects the Company's expectation that historical volatility over a period similar to the life of the warrant is indicative of future trends, which may or may not necessarily be the actual outcome.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 11. Finance Costs - Net

Details of net finance costs are as follows:

	11 months ended December 31, 2017	12 months ended January 31, 2017				
Debt accretion and capitalized interest:						
Convertible debt (Notes 7 and 8)	\$ 6,913	\$ 6,168				
Non-convertible debt (Notes 7 and 9)	11,599	8,935				
Environmental rehabilitation provision accretion (Note 6)	1,776	1,465				
Other finance costs	562	1,261				
Less: amounts capitalized on qualifying assets	(18,512)	(15,103)				
Finance costs	2,338	2,726				
Interest income:						
Bank deposits	(105)	(54)				
Finance income	(105)	(54)				
Finance costs - net	\$ 2,233	\$ 2,672				

#### 12. Related Party Transactions

The Company conducted transactions with senior management, directors and persons or companies related to these individuals, and paid or accrued amounts, as follows:

	11 mont	12 months ended				
	Decembe	January 31, 2017				
Salaries and other short-term benefits	\$	1,898	\$	1,828		
Other long-term benefits		42		44		
Share-based payment <sup>(1)</sup>		836		1,709		
Total	\$	2,776	\$	3,581		

<sup>(1)</sup> Share-based payment represents the amount capitalized or expensed during the period (see Note 10).

There are agreements with key employees containing severance provisions for termination without cause or in the event of a take-over. Other than the President and Chief Executive Officer, PolyMet directors do not have agreements providing for benefits upon termination of their engagement.

As a result of Glencore's ownership of 29.1% it is also a related party. In addition to the transactions described in Notes 7, 8, 9 and 16, the Company has entered into a Technical Services Agreement with Glencore whereby the Company reimburses Glencore for NorthMet technical support costs requested under an agreed scope of work, primarily in detailed project design and mineral processing. During the eleven months ended December 31, 2017, the Company recorded \$nil (year ended January 31, 2017 - \$0.102 million) for services under this agreement. The Company had also entered into a Financing Advisory Agreement with Glencore whereby the Company reimbursed Glencore for NorthMet financing advisory support costs. During the eleven months ended December 31, 2017 - \$0.730 million) for services under this agreement.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 13. Income Taxes

#### a) Effective tax rate

The effective tax rate differs from the cumulative Canadian federal and provincial income tax rate due to the following:

	11 months ended	12 months ended
	December 31, 2017	January 31, 2017
Loss for the year before taxes	\$ (10,098)	\$ (9,229)
Canadian statutory tax rate	27.0%	26.0%
Expected tax recovery	(2,726)	(2,400)
Difference in foreign tax rates	(84)	(413)
Non-deductible items	356	470
Change in tax rate	5,025	-
Change in unrecognized deferred tax and other items	(2,571)	2,343
Income Tax Expense / (Recovery)	\$ -	\$ -

In December 2017 tax reform was enacted in the United States. The significant changes include a reduction to corporate income tax rates from 35% to 21% effective January 1, 2018 which resulted in a decrease in the Company's deferred income tax asset by \$5.025 million in the current year period.

#### b) Deferred income tax assets and liabilities

Deferred income tax assets and liabilities have been recognized in respect of the following items:

	_1	1 months ended	12	months ended
	De	cember 31, 2017	Jar	nuary 31, 2017
Non-capital loss carry forward assets	\$	27,799	\$	35,992
Mineral property acquisition, exploration and development costs		(27,799)		(35,992)
Other		-		-
Net deferred income tax liabilities	\$	-	\$	-

Deferred income tax assets have not yet been recognized in respect of the following items:

	11 n Decei	nonths ended nber 31, 2017	12 mor Januar	nths ended y 31, 2017
Non-capital loss carry forward assets	\$	22,786	\$	25,619
Capital loss carry forward assets		360		347
Intercompany receivable assets		2,109		2,031
Other assets		1,159		1,059
Unrecognized deferred income tax assets	\$	26,414	\$	29,056

As of December 31, 2017, the Company has Canadian non-capital loss carry forwards of approximately \$42.8 million (January 31, 2017 - \$37.8 million) and US non-capital loss carry forwards of approximately \$136.4 million (January 31, 2017 - \$125.6 million). The non-capital loss carry forwards are available to reduce future income for tax purposes and expire between 2019 and 2037, except for US state non-capital loss carry forwards which expire between 2018 and 2032.

The Company is not recognizing these deferred tax assets because they relate to entities with a history of losses and there is not convincing evidence that future taxable income will enable timely offset.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 14. Commitments and Contingencies

In addition to items described elsewhere in these financial statements, as at December 31, 2017, the Company had firm commitments related to the environmental permitting process, wetland credits, land options, and rent of approximately \$1.5 million with \$0.4 million due over the next year and the remainder due over five years.

The following table lists the known contractual obligations as at December 31, 2017:

Contractual Obligations		Carrying C Value C		Contractual Less the Cash flows 1 year		Contractual Cash flows		Contractual Cash flows		Less than 1 vear		Less than 1 year		Less than 1 year		Less than 1 year		Less than 1 year		– 3 ears	3 Ve	– 5 ars	More 5 ve	than ars
Accounts payable and accruals	\$	3,630	\$	3,630	\$	3,630	\$	-	\$	-	\$	-												
Convertible debt (Note 8)		49,067		51,183		51,183		-		-		-												
Non-convertible debt (Note 9)		92,268		96,294		96,294		-		-		-												
Firm commitments		-		1,529		448		581		500		-												
Total	\$	144,965	\$	152,636	\$ ´	151,555	\$	581	\$	500	\$	-												

#### 15. Financial Instruments and Risk Management

The Company's financial instruments are classified as loans and receivables, available for sale, and other financial liabilities.

The carrying values of each classification of financial instrument as at December 31, 2017 are:

						Other		
	Loa	ans and	Av	ailable	fir	nancial		Total
	rece	eivables	fo	r sale	lia	abilities	car	rying value
Financial assets								
Cash	\$	6,931	\$	-	\$	-	\$	6,931
Amounts receivable		82		2,883		-		2,965
Total financial assets	\$	7,013	\$	2,883	\$	-	\$	9,896
Financial liabilities								
Accounts payable and accruals	\$	-	\$	-	\$	3,630	\$	3,630
Convertible debt		-		-		49,067		49,067
Non-convertible debt		-		-		92,268		92,268
Total financial liabilities	\$	-	\$	-	\$	144,965	\$	144,965

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 15. Financial Instruments and Risk Management - Continued

The carrying values of each classification of financial instrument as at January 31, 2017 are:

						Other		
	Lo	ans and	Av	ailable	fi	nancial		Total
	rec	eivables	fo	r sale	lia	abilities	car	rying value
Financial assets								
Cash	\$	18,674	\$	-	\$	-	\$	18,674
Amounts receivable		105		2,656		-		2,761
Total financial assets	\$	18,779	\$	2,656	\$	-	\$	21,435
Financial liabilities								
Accounts payable and accruals	\$	-	\$	-	\$	3,188	\$	3,188
Convertible debt		-		-		42,154		42,154
Non-convertible debt		-		-		65,752		65,752
Total financial liabilities	\$	-	\$	-	\$	111,094	\$	111,094

#### Fair Value Measurements

The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

- Level 1 Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 Inputs for the asset or liability that are not based on observable market data.

The fair values of cash, current amounts receivable, accounts payable and accruals approximate their carrying amounts due to their short-term nature. The fair value of convertible debt and non-convertible debt approximates the carrying amount at amortized cost using the effective interest method. The Company believes this is appropriate as the maturity date is less than twelve months.

#### Risks Arising from Financial Instruments and Risk Management

The Company's activities expose it to a variety of financial risks: market risk (including currency and interest rate), credit risk, and liquidity risk. Reflecting the current stage of development of the Company's NorthMet Project, the overall risk management program focuses on facilitating the Company's ability to continue as a going concern and seeks to minimize potential adverse effects on the Company's ability to execute its business plan.

Risk management is the responsibility of executive management. Material risks are identified and monitored and are discussed with the Audit Committee and the Board of Directors.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 15. Financial Instruments and Risk Management - Continued

#### Currency Risk

The Company incurs expenditures in Canada and in the United States. The functional and reporting currency of the Company and its subsidiary is the U.S. dollar. Foreign exchange risk arises because the amount of Canadian dollar cash, amounts receivable, or accounts payable and accruals will vary in U.S. dollar terms due to changes in exchange rates.

As the majority of the Company's expenditures are in U.S. dollars, the Company has kept a significant portion of its cash in U.S. dollars. The Company has not hedged its exposure to currency fluctuations as the exposure to currency risk is currently insignificant.

#### Interest Rate Risk

Interest rate risk arises from interest paid on floating rate debt and interest received on cash and short-term deposits. The Company has not hedged any of its interest rate risk. The Company currently capitalizes to qualifying assets the majority of interest charges, and therefore the risk exposure is primarily on cash interest payable and net earnings in relation to the subsequent depreciation of capitalized interest charges.

The Company was exposed to interest rate risk through the following assets and liabilities:

	December 31,			nuary 31,
		2017		2017
Cash	\$	6,931	\$	18,674
Convertible debt		49,067		42,154
Non-convertible debt	\$	92,268	\$	65,752

Based on the above net exposures, as at December 31, 2017, a 1% change interest rates would have impacted the Company's loss by approximately \$0.069 million and carrying value of convertible and non-convertible debt by approximately \$1.413 million.

#### Credit Risk

Credit risk arises on cash held with banks and financial institutions, as well as credit exposure on outstanding amounts receivable. The maximum exposure to credit risk is equal to the carrying value of the financial assets of \$9.896 million.

The Company's cash is primarily held through a large Canadian financial institution.

#### Liquidity Risk

Liquidity risk is the risk the Company will not be able to meet its financial obligations as they become due and arises through the excess of financial obligations over available financial assets due at any point in time. The Company's objective in managing liquidity risk is to maintain sufficient readily available reserves in order to meet its liquidity requirements at any point in time and is achieved by maintaining sufficient cash and managing convertible and non-convertible debt. See additional discussion in Note 1.

As at December 31, 2017 and January 31, 2017 and for the 11 months and 12 months then ended *Tabular amounts in thousands of U.S. Dollars, except for shares and per share amounts* 

#### 15. Financial Instruments and Risk Management - Continued

#### Capital Management

The Company's capital management objective is to safeguard the Company's ability to continue as a going concern in order to pursue the development of its mineral property. In the management of capital, the Company includes the components of shareholders' equity, convertible debt and non-convertible debt. The Company manages the capital structure and makes adjustments to it depending on economic conditions and the rate of anticipated expenditures. To maintain or adjust the capital structure, the Company may attempt to issue new shares, issue new debt, acquire or dispose of assets. The Company has no externally imposed capital requirements.

In order to assist in management of its capital requirements, the Company prepares budgets that are updated as necessary depending on various factors. The budgets are approved by the Company's Board of Directors.

Although the Company has the necessary resources to carry out its plans and operations through December 31, 2018, it does not currently have sufficient capital to complete the development of NorthMet and generate future profitable operations and is in discussions to arrange sufficient capital to meet these requirements. See additional discussion in Note 1.

#### 16. Subsequent Event

On March 23, 2018, the Company amended its previous financing arrangement with Glencore. The maturity date of the Convertible Debt and the Non-Convertible Debt was extended to the earlier of March 31, 2019, or the earlier of the availability of at least \$100 million of debt or equity financing, or when it is prudent for PolyMet to repay the debt. The interest rate was reduced from 12-month US dollar LIBOR plus 15.0% to 12-month US dollar LIBOR plus 10.0% effective April 1, 2018. The convertibility of the Convertible Debt was extended to March 31, 2019 and 6,458,001 purchase warrants were reissued with an expiration date of March 31, 2019 and an exercise price of \$0.8231 per share, both of which were approved by the NYSE American and TSX. All other terms of both the debentures and the warrants described above remain unchanged. In addition, the Company agreed to issue to Glencore secured debentures with a total principal amount of up to \$80.0 million at the Company's option. The debentures bear interest at twelve month US dollar LIBOR plus 10.0% and if issued, are due on the earlier of (i) March 31, 2019 or (ii) the availability of at least \$100 million of debt or equity financing or (iii) when it is prudent for PolyMet to repay the debt, on which date all principal and interest accrued to such date will be due and payable. The Tranche P Debenture in the amount of \$20.0 million may be issued on or before May 1, 2018. The Tranche Q Debenture in the amount of \$15.0 million may be issued on or before August 1, 2018. The Tranche R Debenture in the amount of \$20.0 million may be issued on or before September 18, 2018. The Tranche S Debenture in the amount of \$15.0 million may be issued on or before November 1, 2018. The Tranche T Debenture in the amount of \$10.0 million may be issued on or before December 31, 2018.

## Form 62-103F1 REQUIRED DISCLOSURE UNDER THE EARLY WARNING REQUIREMENTS

State if the report is filed to amend information disclosed in an earlier report. Indicate the date of the report that is being amended.

This report amends information disclosed in an earlier report dated September 19, 2016.

## Item 1 - Security and Reporting Issuer

1.1 State the designation of securities to which this report relates and the name and address of the head office of the issuer of the securities.

Debentures and warrants of the following issuer:

PolyMet Mining Corp. ("**PolyMet**") 100 King Street West, Suite 5700 Toronto, Ontario M5X 1C7

1.2 State the name of the market in which the transaction or other occurrence that triggered the requirement to file this report took place.

The event that triggered the requirement to file this report occurred pursuant to the amendment to the purchase agreement described at Item 2.2.

#### Item 2 - Identity of the Acquiror

2.1 State the name and address of the acquiror.

Glencore plc (the "**Parent**") Glencore AG ("**Glencore**" and together with Parent, the "**acquiror**") Baarermattstrasse 3 CH-6340 Baar Switzerland

2.2 State the date of the transaction or other occurrence that triggered the requirement to file this report and briefly describe the transaction or other occurrence.

On March 23, 2018, Glencore and PolyMet entered into an amendment to purchase agreement pursuant to which Glencore agreed to extend the term of US\$51.183 million of outstanding secured convertible and US\$100.591 million outstanding secured non-convertible debentures (including principal and interest to be capitalized through March 31, 2018) to the earlier of (i) the availability of at least US\$100 million of debt and/or equity financing, (ii) March 31, 2019, or (iii) such earlier date determined by PolyMet if it is prudent to do so. The interest rate on the secured convertible and secured non-convertible debentures has been reduced from 12-month US\$ LIBOR plus 15 percent to 12-month US\$ LIBOR plus 10 percent. All other terms and conditions of the outstanding debentures remain the same.

Glencore has also agreed to lend up to an additional US\$80 million to PolyMet over the 12 month period ending March 31, 2019 in five separate tranches on the same terms as the existing non-convertible debentures, subject to the terms and conditions of the amendment to purchase agreement.

As partial consideration for the amendments referred to above, PolyMet agreed to issue an aggregate of 6,458,001 warrants to purchase common shares of PolyMet, with each such consideration warrant entitling Glencore to acquire one common share of PolyMet at a price of US\$0.8321 per share until March 31, 2019. These consideration warrants replace 6,458,001 warrants that expired December 31, 2017.

2.3 State the names of any joint actors.

Not applicable.

# Item 3 - Interest in Securities of the Reporting Issuer

3.1 State the designation and number or principal amount of securities acquired or disposed of that triggered the requirement to file the report and the change in the acquiror's securityholding percentage in the class of securities.

Glencore currently holds 92,836,072 common shares of PolyMet, representing approximately 29.1% of PolyMet's issued and outstanding common shares. In addition, pursuant to the provisions of the exchange warrant issuable upon conversion of the convertible debenture, the number of common shares issuable to Glencore under the exchange warrant would increase by 5,356,281 to 45,670,560 as at March 31, 2019 (assuming US\$ LIBOR at 2.67138%), and which, if exercised, would result in Glencore holding 138,506,632 common shares representing approximately 38.0% of the outstanding common shares of PolyMet (assuming no other shares committed under existing compensation arrangements were issued by PolyMet).

Pursuant to the transaction described at Item 2.2 above, Glencore will acquired an aggregate of 6,458,001 warrants to purchase common shares of PolyMet. Glencore holds an additional 7,680,626 warrants to purchase common shares of PolyMet, which will result in a total of 14,138,627 common shares being issuable to Glencore upon exercise of outstanding warrants. Assuming exercise of all such warrants, but excluding issuance of shares committed under existing compensation arrangements, Glencore would hold a total of 152,645,259 common shares representing approximately 40.3 % of PolyMet's common shares on a partially diluted basis (again assuming no other shares committed under existing compensation arrangements were issued by PolyMet).

3.2 State whether the acquiror acquired or disposed ownership of, or acquired or ceased to have control over, the securities that triggered the requirement to file the report.

The acquiror acquired ownership of the warrants that triggered the requirement to file this report.

3.3 If the transaction involved a securities lending arrangement, state that fact.

Not applicable.

3.4 State the designation and number or principal amount of securities and the acquiror's securityholding percentage in the class of securities, immediately before and after the transaction or other occurrence that triggered the requirement to file this report.

See Item 3.1 above.

3.5 State the designation and number or principal amount of securities and the acquiror's securityholding percentage in the class of securities referred to in Item 3.4 over which

(a) the acquiror, either alone or together with any joint actors, has ownership and control,

See Item 3.1 above.

(b) the acquiror, either alone or together with any joint actors, has ownership but control is held by persons or companies other than the acquiror or any joint actor, and

Not applicable.

(c) the acquiror, either alone or together with any joint actors, has exclusive or shared control but does not have ownership.

Not applicable.

3.6 If the acquiror or any of its joint actors has an interest in, or right or obligation associated with, a related financial instrument involving a security of the class of securities in respect of which disclosure is required under this item, describe the material terms of the related financial instrument and its impact on the acquiror's securityholdings.

#### Not applicable.

3.7 If the acquiror or any of its joint actors is a party to a securities lending arrangement involving a security of the class of securities in respect of which disclosure is required under this item, describe the material terms of the arrangement including the duration of the arrangement, the number or principal amount of securities involved and any right to recall the securities or identical securities that have been transferred or lent under the arrangement.

Not applicable.

State if the securities lending arrangement is subject to the exception provided in section 5.7 of NI 62-104.

Not applicable.

3.8 If the acquiror or any of its joint actors is a party to an agreement, arrangement or understanding that has the effect of altering, directly or indirectly, the acquiror's economic exposure to the security of the class of securities to which this report relates, describe the material terms of the agreement, arrangement or understanding.

Not applicable.

#### Item 4 - Consideration Paid

4.1 State the value, in Canadian dollars, of any consideration paid or received per security and in total.

Not applicable.

4.2 In the case of a transaction or other occurrence that did not take place on a stock exchange or other market that represents a published market for the securities, including an issuance from treasury, disclose the nature and value, in Canadian dollars, of the consideration paid or received by the acquiror.

Not applicable.

4.3 If the securities were acquired or disposed of other than by purchase or sale, describe the method of acquisition or disposition.

Not applicable.

#### Item 5 - Purpose of the Transaction

State the purpose or purposes of the acquiror and any joint actors for the acquisition or disposition of securities of the reporting issuer. Describe any plans or future intentions which the acquiror and any joint actors may have which relate to or would result in any of the following:

- (a) the acquisition of additional securities of the reporting issuer, or the disposition of securities of the reporting issuer;
- (b) a corporate transaction, such as a merger, reorganization or liquidation, involving the reporting issuer or any of its subsidiaries;
- (c) a sale or transfer of a material amount of the assets of the reporting issuer or any of its subsidiaries;
- (d) a change in the board of directors or management of the reporting issuer, including any plans or intentions to change the number or term of directors or to fill any existing vacancy on the board;
- (e) a material change in the present capitalization or dividend policy of the reporting issuer;
- (f) a material change in the reporting issuer's business or corporate structure;
- (g) a change in the reporting issuer's charter, bylaws or similar instruments or another action which might impede the acquisition of control of the reporting issuer by any person or company;
- (h) a class of securities of the reporting issuer being delisted from, or ceasing to be authorized to be quoted on, a marketplace;
- (i) the issuer ceasing to be a reporting issuer in any jurisdiction of Canada;

- (j) a solicitation of proxies from securityholders;
- (k) an action similar to any of those enumerated above.

Glencore's decision to enter into the transactions described above was made in the context of its overall investment purposes. Glencore will continue to review its investment alternatives from time to time and may determine to increase or decrease its equity ownership in PolyMet through the acquisition or sale of additional outstanding common shares or other securities of PolyMet through open market or privately negotiated transactions in accordance with applicable securities laws.

# Item 6 - Agreements, Arrangements, Commitments or Understandings With Respect to Securities of the Reporting Issuer

Describe the material terms of any agreements, arrangements, commitments or understandings between the acquiror and a joint actor and among those persons and any person with respect to securities of the class of securities to which this report relates, including but not limited to the transfer or the voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, guarantees of profits, division of profits or loss, or the giving or withholding of proxies. Include such information for any of the securities that are pledged or otherwise subject to a contingency, the occurrence of which would give another person voting power or investment power over such securities, except that disclosure of standard default and similar provisions contained in loan agreements need not be included.

Not applicable.

# Item 7 - Change in material fact

If applicable, describe any change in a material fact set out in a previous report filed by the acquiror under the early warning requirements or Part 4 in respect of the reporting issuer's securities.

The maturity date of the convertible and non-convertible debentures has been extended and the interest rate has been reduced, as described in Item 2.2 above.

#### Item 8 - Exemption

If the acquiror relies on an exemption from requirements in securities legislation applicable to formal bids for the transaction, state the exemption being relied on and described the facts supporting that reliance.

Not applicable.

#### Item 9 - Certification

The acquiror must certify that the information is true and complete in every respect. In the case of an agent, the certification is based on the agent's best knowledge, information and belief but the acquiror is still responsible for ensuring that the information filed by the agent is true and complete.

This report must be signed by each person on whose behalf the report is filed or his authorized representative.

It is an offence to submit information that, in a material respect and at the time and in the light of the circumstances in which it is submitted, is misleading or untrue.

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# Certificate

The certificate must state the following:

I, as the acquiror, certify, or I, as the agent filing the report on behalf of an acquiror, certify to the best of my knowledge, information and belief, that the statements made in this report are true and complete in every respect.

## **GLENCORE PLC**

28 March 2018

Date

/s/ "John Burton"

Signature

John Burton, Company Secretary

Name/Title

I, as the acquiror, certify, or I, as the agent filing the report on behalf of an acquiror, certify to the best of my knowledge, information and belief, that the statements made in this report are true and complete in every respect.

# **GLENCORE AG**

28 March 2018

Date

/s/ "Stephan Huber"

Signature

Stephan Huber, Officer

Name/Title

28 March 2018

Date

/s/ "Georgios Tourkolias"

Signature

Georgios Tourkolias, Officer

Name/Title

## GLENCORE RESTRUCTURES LOANS TO POLYMET AND ACQUIRES COMMON SHARE PURCHASE WARRANTS

Baar, Switzerland, March 28, 2018 – Glencore AG ("Glencore"), a wholly-owned subsidiary of Glencore plc, has entered into an amendment to the purchase agreement with PolyMet Mining Corp. ("PolyMet") and Poly Met Mining Inc. pursuant to which (i) the maturity of an aggregate of US\$152 million of outstanding secured convertible and non-convertible debentures has been extended by 12 months, to March 31, 2019, repayable at any time by PolyMet if it is prudent to do so, and (ii) the interest rate on the debentures has been reduced from 12-month US\$ LIBOR plus 15 percent to 12-month US\$ LIBOR plus 10 percent. Glencore has also agreed to lend up to an additional US\$80 million to PolyMet over the next 12 month in five tranches on the same terms as the existing non-convertible debentures, subject to the terms and conditions of the amendment to purchase agreement.

As partial consideration for the amendments referred to above, PolyMet has agreed to issue an aggregate of 6,458,001 warrants to purchase common shares of PolyMet, with each warrant entitling Glencore to acquire one common share of PolyMet at a price of US\$0.8321 per share until March 31, 2019. These warrants replace an aggregate of 6,458,001 warrants that expired December 31, 2017.

Glencore currently holds 92,836,072 common shares of PolyMet, representing approximately 29.1% of PolyMet's issued and outstanding common shares. Following the extension of maturity and reduction in interest rate referred to above, the number of common shares issuable to Glencore under the exchange warrant issuable upon conversion of the convertible debenture would increase to 45,670,560, which would result in Glencore holding 138,506,632 common shares representing approximately 38.0% of the outstanding common shares of PolyMet (assuming no other shares committed under existing compensation agreements were issued by PolyMet).

Including a total of 14,138,627 shares issuable upon exercise of warrants held by Glencore (including the consideration warrants referred to above), but excluding issuance of shares committed under existing compensation arrangements, Glencore would hold a total of 152,645,259 common shares representing approximately 40.3% of PolyMet's common shares on a partially diluted basis (again assuming no other shares committed under existing compensation arrangements, be a start of the shares committed under existing compensation areas approximately 40.3% of PolyMet's common shares on a partially diluted basis (again assuming no other shares committed under existing compensation arrangements were issued by PolyMet).

Glencore's decision to enter into the transactions described in this news release was made for investment purposes. Glencore will continue to review its investment alternatives from time to time and may determine to increase or decrease its equity ownership in PolyMet through the acquisition or sale of additional outstanding common shares or other securities of PolyMet through open market or privately negotiated transactions in accordance with applicable securities laws.

The head office of PolytMet is located at 100 King Street West, Suite 5700, Toronto, Ontario, M5X 1C7.

The head office of Glencore is located at Baarermattstrasse 3, CH-6340 Baar, Switzerland.

Persons who wish to obtain a copy of the early warning report to be filed by Glencore in connection with this transaction may obtain a copy of such report from <u>www.sedar.com</u> or by contacting the persons named below.

## For further information, please contact:

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#### **Notes for Editors**

Glencore is one of the world's largest global diversified natural resource companies and a major producer and marketer of more than 90 commodities. The Group's operations comprise around 150 mining and metallurgical sites, oil production assets and agricultural facilities.

With a strong footprint in both established and emerging regions for natural resources, Glencore's industrial and marketing activities are supported by a global network of more than 90 offices located in over 50 countries.

Glencore's customers are industrial consumers, such as those in the automotive, steel, power generation, oil and food processing sectors. We also provide financing, logistics and other services to producers and consumers of commodities. Glencore's companies employ around 146,000 people, including contractors.

Glencore is proud to be a member of the Voluntary Principles on Security and Human Rights and the International Council on Mining and Metals. We are an active participant in the Extractive Industries Transparency Initiative.