# DEPARTMENT OF NATURAL RESOURCES

August 20, 2018

Paula Goodman Maccabee, Esq. For WaterLegacy 1961 Selby Avenue St. Paul, MN 55104

### Dear Ms. Maccabee:

The Minnesota Department of Natural Resources (DNR) received WaterLegacy's request for a Supplemental Environmental Impact Statement (EIS) for the proposed NorthMet project by mail on July 19, 2018. After careful consideration of your request and the information you provided to support your request, DNR has determined that a Supplemental EIS is not warranted. This letter serves as a "notice of denial" under Minnesota Rules part 4410.3000, subpart 4.

# WaterLegacy's Basis for Requesting a Supplemental EIS

On July 19, 2018 DNR received a request from WaterLegacy to prepare a Supplemental EIS. Having reviewed WaterLegacy's request, DNR has identified the following list of Summary Items on which the request is based:

- 1. PolyMet's 2018 Technical Report includes new information that calls into question the feasibility of the PolyMet Final EIS Proposed Action and PolyMet's ability to fulfill the Purpose and Need, and the company's ability to perform reclamation and closure.
- 2. PolyMet's 2018 Technical Report constitutes a substantial change and describes significant new circumstances that give rise unexamined environmental effects of the Project.
- 3. Disposing of flotation tailings in more than one abandoned mine pit constitutes a new alternative and is feasible.
- 4. After the Final EIS was completed, there have been significant changes to PolyMet's Proposed Action, including: A) elimination of Cement Deep Soil Mixing as a means of achieving dam stability factors of safety; B) increased water appropriation and pumping rates; C) elimination of the Mine Site Wastewater Treatment Facility.
- 5. After the Final EIS was completed, the wetlands mitigation plan changed so substantially as to be a completely different plan that was not subject to environmental review.

WaterLegacy's request is based on the NorthMet Project and Land Exchange Final EIS and Determination of EIS Adequacy as well as two other additional sources of information.

The first additional source of information is the economic projections described in the Form NI 43-101F1 Technical Report (a financial disclosure document) for the NorthMet Project. WaterLegacy cites two of the NI 43-101 Technical Reports in its request for preparation of a Supplemental EIS: one filed on October 12, 2012 (2012 Report) and another filed on March 26, 2018 (2018 Report). The reports are required by a foreign government (Canada) and are, in essence, a business plan prepared for potential investors and financial institutions as an indicator of a company's viability and potential performance.

The second source of additional information is the permit applications submitted by PolyMet for the Permit to Mine (December 13, 2017), Dam Safety Permit for Flotation Tailings Basin (July 11, 2016), and Water Appropriation Permits (April 14, 2017).

## **Criteria for Supplementing an Environmental Impact Statement**

The Minnesota Environmental Review Program Rules direct responsible governmental units (RGUs) to consider two conditions to determine whether a proposed project should undergo preparation of a Supplemental EIS after the Final EIS has been determined adequate, but before the project becomes exempt under part 4410.4600, subpart 2, item B or D. Specifically, Minnesota Rules part 4410.3000, subpart 3A, items (1) and (2), require preparation of a Supplemental EIS whenever:

- substantial changes have been made in the proposed project that affect the potential significant adverse environmental effects of the project; or
- there is substantial new information or new circumstances that significantly affect the potential environmental effects from the proposed project that have not been considered in the Final EIS or that significantly affect the availability of prudent and feasible alternatives with lesser environmental effects.

In addition, Minnesota Rules part 4410.3000, subpart 3C requires the preparation of a Supplemental EIS "whenever an EIS has been prepared for one or more phases of a phased action or one or more components of a connected action and a later phase or another component **is proposed for approval or implementation** that was not evaluated in the initial EIS" (emphasis added).

# DNR Consideration of WaterLegacy's Summary Items Relative to the Supplemental EIS Criteria

*Summary Item 1*. WaterLegacy alleges in Summary Item 1 that the 2018 Report's proposed capital outlays and predicted rates of return are sufficiently different than those presented in the 2012 Report to trigger a Supplemental EIS. According to WaterLegacy, the project described in the 2018 Report yields a lower internal rate of return than the project described in the 2012 Report, such that "an economically unfavorable result" is present and "there is a significant likelihood that the Proposed Action is no longer sufficiently profitable to sustain costs of reclamation and closure to prevent and minimize long-term environmental harm." WaterLegacy concludes that the decreased financial viability acknowledged by PolyMet in the 2018 report, relative to the 2012 report, creates "…new circumstances affect[ing] the Purpose and Need for the Project" that require preparation of a Supplemental EIS.

*DNR Consideration*. DNR notes there is no Minnesota statutory or regulatory provision requiring analysis of the purpose of a proposed action. Rather, Minnesota Rules part 4410.2300, subpart E directs that the "proposed project be described with no more detail than is absolutely necessary to allow the public to identify the purpose of the project." The Final EIS satisfies this requirement by explicitly stating that (i) the purpose of the project is to "exercise PolyMet's mineral lease to continuously mine, via open pit methods, the known ore deposits (NorthMet Deposit) containing copper, nickel, cobalt, and PGEs to

produce base and precious metal precipitates and flotation concentrates by uninterrupted utilization of the former LTVSMC processing plant," and (ii) the need for the project is "driven by domestic and global demand of these products" and "for jobs and economic development in the area."

Moreover, the purported changes in capital outlays and rates of return do not constitute significant new information or circumstances for which a Supplemental EIS is required. The petition claims that the expected rate of return for the Project has been reduced from 30.6% to 10.3%. But the petition provides no support for its assertion that "the Proposed Action is no longer sufficiently profitable to sustain costs of reclamation and closure required to prevent and minimize long-term environmental harm." Even accepting the petition's financial calculations as accurate, the Project is still projected to be profitable—even after accounting for back-end costs such as reclamation that are incurred beyond the life of the mine. *See* 2018 Technical Report at 22.2 (projecting IRR of 10.3% while factoring in "values for reclamation and taxes" for 60 years past the life of the mine). Thus, there is no basis to conclude that the changes in financial projections will entail significant changes in environmental impacts that would require preparation of a Supplemental EIS identified in Minnesota Rules part 4410.3000 subparts 3A or 3C.

*Summary Item 2*. WaterLegacy alleges in Summary Item 2 that the two production scenarios [59,000 short tons per day (STPD) and 118,000 STPD] identified in the 2018 Report "reflect significant new information, new circumstances, and a substantial change with the potential for significant environmental effects requiring a Supplemental EIS and an analysis of the cumulative impacts of these expanded mining plans." WaterLegacy further claims that the increased mining was not evaluated in the Final EIS and foreseeably affects the Proposed Action, thus resulting in unassessed cumulative impacts and a suite of new significant environmental effects not evaluated in the Final EIS. According to WaterLegacy, these changes may render specific mitigation measures identified in the Final EIS infeasible or ineffective.

*DNR Consideration*. DNR notes the 2018 Report submitted to Canadian authorities by PolyMet indicates the company is considering potential expansion in the future, typical of any mining company, and therefore is investigating the mineral resource and potential scenarios to mine it. The 2018 Report makes clear that expansion is not certain. Rather, the 2018 Report contemplates increased throughputs at two discrete levels—59,000 and 118,000 STPD (versus the currently proposed level of 32,000 STPD)— while explicitly stating that the potential expansion scenarios are only "preliminary in nature." The 2018 Report further explains:

The purpose of the additional investigations is to quantify the potential viability of identified resources at higher throughputs that are not currently permitted for development. Development of those additional resources would require additional engineering, environmental review and permitting and would require changes in infrastructure that would require significant capital investment. The economic viability of these additional resources has not been demonstrated to date. At this stage, specific information on potential mining scenarios and mineable resources that would be needed for meaningful environmental review is lacking, and an expansion remains speculative.

DNR has not received a proposal for either of the two potential expansion scenarios. Environmental review is initiated by an initial data submittal, typically a scoping EAW, or a project description from a project proposer identifying a new project or changes a company is proposing to an existing project. The DNR has received no such information from PolyMet about changes to the NorthMet project. In fact, the DNR is currently reviewing PolyMet's application for a permit to mine for the NorthMet project, and the two expansion scenarios identified by WaterLegacy are not included in the application. The DNR must review and act on the information that is before the agency, and the simple fact that PolyMet is evaluating additional mineral potential does not meet the criterion for a Supplemental EIS identified in Minnesota Rules part 4410.3000, subpart 3A.

If the Applicant conducts the "additional engineering" and determines the expansion is "economically viab[le]" and submits a proposal for expansion or modification, the DNR would subject that proposed expansion or modification to all required evaluation under Minnesota's environmental review and permitting laws.

*Summary Item 3*. WaterLegacy alleges in Summary Item 3 that a new alternative for tailings disposal into existing mine pits near the plant must be analyzed in a Supplemental EIS. WaterLegacy cites the 2018 Report's reference to placing "tailings from the 118,000 STPD flotation [or the 59,000 STPD] circuit by gravity to two existing taconite pits near the Erie plant." WaterLegacy considers the 2018 Report's tailings disposal reference to provide "substantial new information about the availability of more than one taconite mine pit on the Cliffs Erie site for in-pit tailings disposal and about PolyMet's intention to use in-pit tailings disposal in addition to the flotation tailings plan described in the FEIS, based on its cost effectiveness." WaterLegacy concludes that "this new information" requires "a hard look at alternative methods of tailings disposal for the proposed PolyMet NorthMet Project." The letter notes in-pit tailings disposal in a lined tailings facility were considered but eliminated from full analysis in the Final EIS, and that WaterLegacy objected to the lack of full analysis of these alternatives in its comments on the Final EIS.

*DNR Consideration*. As previously stated, DNR has not received a proposal for an expanded project that would require storage capacity beyond that available at the flotation tailings basin for the current Proposed Project. Absent such a notice, there is no change to the proposed project, nor are there different circumstances surrounding the project, that would alter the significant environmental effects to warrant preparation of a Supplemental EIS. The 2018 Report's citation to the availability of two existing mine pits for tailings deposition disclosed that technical and physical feasibility of any future expansion has not been demonstrated, and thus the actual availability of existing taconite mine pits is speculative and has no bearing on whether a Supplemental EIS is required by Minnesota Rules part 4410.3000 subparts 3A or 3C. The Final EIS considered in in-pit tailings disposal, but this alternative was rejected as infeasible due to insufficient volume of mine pits that would actually be available for tailings disposal.

*Summary Item 4*. WaterLegacy alleges in Summary Item 4 that three "changes in the Project design and mitigation since the PolyMet Final EIS increase the risk of dam failure, markedly increase water appropriations, and remove a critical facility intended to mitigate project adverse effects on water quality." Specifically, these changes are: elimination of cement deep soil mixing (CDSM) at the tailings basin with increased buttressing; increased water appropriations beyond the level evaluated in the Final EIS; and elimination of the wastewater treatment facility (WWTF) at the Mine Site.

WaterLegacy's contentions and DNR's considerations regarding each of these points are outlined below:

<u>Elimination of CDSM</u>. WaterLegacy believes the proposed rock buttress and underdrain fail to meet the requisite factor of safety for full liquefaction. WaterLegacy also questions whether the appropriate factor of safety can be met using the proposed "iterative design process" that includes adaptive management and contingency mitigations as measures that could be employed over the life of tailings deposition. WaterLegacy's view is that a Supplemental EIS is required "because PolyMet can't demonstrate that its changed proposal for a flotation tailings dam will meet minimum standards to prevent dam breach and failure."

*DNR Consideration*. Final EIS Section 5.2.14.2.2 identified the design criteria that must be satisfied under the Dam Safety Permit, including the Factors of Safety required for various loading scenarios. Factor of Safety is used to describe the ratio of resisting forces to driving forces along a potential failure surface. Over the course of the EIS and as part of the Draft Dam Safety Permit application, PolyMet has supplied modeling results for a number of dam stability parameters, including the Factors of Safety to meet the slope stability analysis. This modeling considered: the proposed construction on top of the existing LTVSMC Tailings Basin; the expected characteristics of the Project tailings; and similar industry standards for other large tailings dams in Minnesota.

WaterLegacy's specific interest is with modeling conducted for certain static liquefaction triggering scenarios for the Proposed Project. Regarding the "fully liquefied with unknown trigger" scenario, the factor of safety of 1.10 is satisfied. Furthermore, modeling predicts increasing stability over time and the underlying science supports this view. For the erosion-based liquefaction scenario, WaterLegacy correctly notes the value of 1.07 provided with the Draft Dam Safety Permit Application is below the Factor of Safety of 1.10, but WaterLegacy fails to acknowledge the footnote that identifies detailed analysis is available that yields a factor of safety greater than 1.10.

As part of the Dam Safety permit application review, DNR identified the 1.07 factor of safety for increased rock buttressing was below the required factor of safety of 1.10. After being informed of that deficiency, PolyMet provided a memorandum dated April 2, 2018 that explained the lower factor of safety and provided the more detailed analysis referenced in the footnote. The memorandum identifies that when the change from CDSM to increased rock buttressing was proposed it was assumed that a more simplified modeling analysis could be used for this failure scenario, instead of the more detailed modeling that was used for the other failure scenarios.

DNR has considered the more detailed analysis referenced in this footnote and the memorandum as part of the Dam Safety Permit application review, and determined that the modified design does meet the 1.10 factor of safety design criteria relied on in the Final EIS, as well as the criteria required for the Dam Safety Permit. As such, the project modification does not change the potential environmental effects related to dam safety beyond those evaluated in the Final EIS, nor does the change significantly affect the availability of prudent and feasible alternatives with lesser environmental effects. Thus, a Supplemental EIS is not required by Minnesota Rules part 4410.3000 subpart 3A.

Regarding reliance on an iterative design process, this is a standard feature for these types of facilities in Minnesota and has been assumed over the course of the EIS. It is customary for more detailed information to be available during the permitting process than is available during EIS preparation. More detailed information does not automatically equate with additional environmental effects. The Final EIS disclosed uncertainty when known and addressed the range of potential effects under that uncertainty, such that any newly discovered issues identified during the iterative design process could be addressed through the permitting process.

<u>Water Appropriations</u>. WaterLegacy alleges the volumes identified in the PolyMet draft permits greatly exceed Final EIS projections for Colby Lake withdrawals, Plant Site water movement, and Mine Site water appropriations in the Partridge River watershed. According to WaterLegacy, this increased volume of water appropriation beyond the levels projected in the Final EIS presents the potential for significant environmental effects that have not been considered in the Final EIS. WaterLegacy argues that this increased level of water appropriations and related water movement has implications for mercury impairment to the Embarrass River, reduced upper Partridge River streamflow and subsequent water quality impacts, and impacts to wetlands. WaterLegacy's more specific contentions and DNR's considerations regarding water appropriations volumes are detailed below:

<u>Colby Lake</u>. WaterLegacy identified a "discrepancy" between the water appropriations from Colby Lake cited in the Final EIS relative to the volume proposed in the Draft Water Appropriation Permit #2017-0260. Specifically, "the water appropriation proposed in the state permitting process from Colby Lake alone is 500 million gallons more than the appropriation described as the maximum in the PolyMet Final EIS."

*DNR Consideration*. The Final EIS analyzed impacts to Colby Lake and Whitewater Reservoir at a continuous 3,500 gallons per minutes (GPM), which would have an annual volume of 1,839 million gallons per year (MGY). Thus, the 1,800 MGY in the Draft Water Appropriation Permit is within the annual volumes analyzed in the Final EIS.

WaterLegacy's concern regarding the proposed level of appropriation from Colby Lake does not recognize two important factors. First, the proposed "mine processing" appropriation of 1,800 MGY is the annual *maximum* amount to be authorized under the permit. The second relevant factor is that water appropriation proposed from Colby Lake

would vary substantially over the life of the project. These factors are important because the *maximum* appropriation would occur at project start-up, with a second *maximum* peak occurring around Mine Year 7. Outside the two episodes of peak usage, use of Colby Lake water for make-up purposes would occur at moderate levels during development of the East Pit and late in the life of the West Pit, with relatively lower use levels during the early-to-middle development of the West Pit. Thus, while it is correct the draft permit establishes a maximum permitted use of 1,800 MGY from Colby Lake, actual appropriations would typically be lower than this, and substantially lower over a third of the project life, than the maximum appropriation level identified in the permit.

In addition, WaterLegacy fails to distinguish between the volume needed for stream augmentation and the total volume needed from Colby Lake. Both were analyzed in the Final EIS's assessment of proposed appropriations from Colby Lake, and the Final EIS is consistent with the use levels and patterns requested in the Draft Water Appropriation Permit Application. In terms of potential impacts, the principal environmental effects that involve Colby Lake appropriations would be associated with water supplying stream augmentation at the Plant Site and water-level fluctuations in Colby Lake. Stream augmentation was analyzed using GoldSim, with a maximum 1,300 MGY necessary based on Year 1 needs. However, the water-level fluctuations on Colby Lake were analyzed using XP-SWMM modeling and relied on a slightly higher volume than the 1,800 MGY requested in the draft permit application. For the stream augmentation analysis, the Final EIS affirmed that stream augmentation requirements could be satisfied under the proposed appropriation. The 1,300 MGY is the portion of the 1,800 MGY that would need treatment before being used for stream augmentation. Similarly, the Final EIS determined that the modeled appropriation-related water level fluctuation in Colby Lake was within the evaluation criteria. Therefore, the Final EIS has evaluated the requested volume of water and there is no change in the potentially significant effects attributed to appropriating water from Colby Lake.

<u>Plant Site</u>. WaterLegacy also focuses on what it perceives to be a significant discrepancy between total Plant Site water usage as cited in the Draft Water Appropriation Permit 2016-1369 and the amount specified in the Final EIS. WaterLegacy notes "the PolyMet Final EIS disclosed 2,697 gallons per minute of water capture near the Plant/Tailings Site in the PolyMet Final EIS. However, the Draft Water Appropriations permits identified 7,150 gallons per minute of water usage, a level that is 265% of that described in the PolyMet Final EIS and 4,453 gallon per minute more than previously disclosed in the Final EIS."

DNR Consideration. In considering this point, it is important to recognize that greater detail regarding water appropriations is typically available in the permitting phase than is available during environmental review. Particularly for relatively minor water appropriation activities, this added precision does not ordinarily rise to the level of a significant change meriting a Supplemental EIS. For the PolyMet Final EIS impact

assessment, the most significant water movement requiring detailed analysis involved the performance of the seepage capture system and volumes of water moved in conjunction with the floatation tailings basin seepage capture system.

The draft water appropriation permit #2016-1369 limits Plant Site water appropriation to 675 MGY, which would be achieved by continually pumping at a rate of 1,284 GPM. This proposed rate of pumping is less than the 2,697 GPM pumping rate that was evaluated in the Final EIS. DNR-issued water appropriation permits have both maximum rates (measured in GPM) and maximum volumes (measured in MGY). An applicant can have variable appropriation rates depending on needs, rainfall, etc., but is limited by both the maximum rate and the maximum annual volume. Draft water appropriation permit #2016-1369 would also limit the volume of water appropriated from all installations over the life of the project to 1,475 million gallons (MG), which would limit the annual appropriation to less than 675 MGY for most years. Subtracting the 6,700 GPM of temporary dewatering from WaterLegacy's total (of 7,150 GPM) results in 450 GPM for long term water management. This 450 gpm rate of appropriation from the floatation tailings basin seepage capture is returned to the floatation tailings basin or routed to the wastewater treatment system (WWTS) for stream augmentation. Pumping and gravity flows from the Hydromet Residue Facility wick drain are also routed to the WWTS. Because these latter appropriations were considered in the GoldSim water quality modeling, they do not constitute a change in the project or its associated water quality impacts, much less a significant change. Finally, similar to proposed Colby Lake water use levels, the draft permit reflects maximum potential volumes, which are typically episodic (e.g., not constant) and vary over the entire life of the project.

<u>Mine Site</u>. WaterLegacy asserts the estimated pumping rates from the Draft Water Appropriation Permit #2016-1367 are higher than the level estimated in the Final EIS. WaterLegacy maintains that adding the estimated pumping rates from PolyMet's 2017 Water Appropriation Permit Application reflects a total of 29,290 GPM, nearly 10 times the 2,990 GPM water usage described in the PolyMet Final EIS. WaterLegacy also expresses concerns regarding mercury from Colby Lake appropriations affecting the Embarrass River watershed, impacts on upper Partridge River headwaters, Partridge River streamflow reductions and potential effects to aquatic life, and impacts to wetlands.

DNR Consideration. Similar to the Plant Site water appropriations, it is necessary to distinguish between temporary appropriations versus water use over the life of the project. DNR-issued water appropriation permits have both maximum rates (GPM) and maximum volumes (MGY). An applicant can have variable appropriation rates depending on needs, rainfall, etc., but is limited by the maximum annual volume. In the comparison table provided by WaterLegacy, all construction-related appropriations (totaling 7,400 GPM) are temporary. These appropriation would vary seasonally and throughout the project life. WaterLegacy mistakenly adds all temporary appropriation rates and assumes this rate will be continual throughout the year, thereby overstating the annual water volume. Although the Category 1 Containment Operation amount is relatively high early

in the project, with amounts peaking in Mine Year 10, the value drops substantially as the stockpile is reclaimed during the latter half of the project. The draft permit appropriation rates are maximums that are not constant over the life of the project, nor over the course of a year. Extrapolating maximum rates without regard to maximum volumes, as WaterLegacy has done, substantially overstates water use. The draft water appropriation permit #2016-1367 would limit Mine Site water appropriation for Mine Site Infrastructure to 1,200 MGY, which would be achieved by continually pumping at a rate of 2,283 GPM. This proposed rate of pumping is less than the 2,990 GPM pumping rate that was evaluated in the Final EIS. Thus the proposed appropriation does not constitute a change in project that requires preparation of a Supplemental EIS as identified in Minnesota Rules part 4410.3000 subpart 3A.

Regarding WaterLegacy's other concerns, many of these result from the unfounded assumption that maximum requested appropriation values would be sustained over the life of the project. Consequently, WaterLegacy overstates the potential impact of mercury contributions from Colby Lake to the Embarrass River watershed. All water sourced from Colby Lake is either treated at the WWTS or routed through the Flotation Tailings Basin, with seepage collected and treated at the WWTS.

With respect to potential reductions in Partridge River streamflow, the most significant volumes of water associated with appropriations are from mine pit dewatering that is not projected to significantly affect the Partridge River. Likewise, because the maximum appropriation is not sustained over the project's life, WaterLegacy's assertions that Mine Site dewatering would result in more than an eight percent reduction of Partridge River flows due to loss of contributing watershed are unfounded. Potential effects to aquatic life were assessed in the Final EIS in the analysis of aquatic resources. The Final EIS provided robust estimates of both direct and indirect wetland impacts that are in line with the appropriations likely to occur if the project proceeds. None of these concerns introduce new information or circumstances that significantly alter the potential environmental effects of the proposed project, and thus do meet the criterion/criteria under Minnesota Rule part 4410.3000 subpart 3A for requiring a Supplemental EIS.

<u>Elimination of the WWTF</u>. WaterLegacy observes that elimination of the Mine Site WWTF "would eliminate any mechanical water quality treatment at the Mine Site, whether during operations, reclamation, or post-closure." WaterLegacy claims this project change would "markedly increase toxicity of materials piped" from the Mine Site to the Plant Site, "increasing the environmental concerns posed by pipeline spills or leaks." According to these claims, changes to the pumps or pipes would make no treatment "available to address contaminated groundwater seepage or overflow of wastewater from equalization basins at the mine site," and such a change promotes an early transition to passive treatment, even predetermining such an outcome "irrespective of effects on water quality." WaterLegacy asserts that elimination of the Mine Site WWTF would prevent mitigation or adaptive management for higher levels of pit contamination than predicted, if low flows or high contaminant levels jeopardize aquatic life, or if northward flow to the Rainy River watershed occurs. WaterLegacy claims that these possible consequences warrant a Supplemental EIS to analyze the environmental impacts of eliminating the WWTF.

DNR Consideration. The elimination of the Mine Site WWTF constitutes a consolidation of two originally separate treatment facilities, one at the Mine Site and one at the Plant Site, into one facility located at the Plant Site and designated as the Wastewater Treatment System. While this is a structural change in project infrastructure, there is no functional difference in the capacity of the WWTS to treat contaminated water from the Mine Site, regardless of source, relative to what was assessed in the Final EIS for the Mine Site WWTF. Combining the two treatment facilities into a single facility does not change, in any material way, the potential significant adverse environmental effects of the project. In the event treatment services were disrupted, emergency procedures would be triggered that would maintain water levels below the total capacity of the sumps and ponds. This would be a temporary situation and would not cause significant effects.

DNR acknowledges the conveyance of untreated water in a new Mine to Plant Pipeline (MPP) along the Transportation Corridor is a new project feature. However, the Final EIS' overall consideration of pipeline integrity and the potential for spills is still valid for the project and is applicable to understanding the potential for environmental effects associated with the MPP. Beyond the Final EIS assessment for the original conveyance, Section 9.1.3 of the Draft Permit to Mine Application specifies that flow meters would be in place on both ends of the MPP to provide continuous monitoring of flow differentials. Monitoring of the MPP would be incorporated into a monitoring plan, with specific spill response procedures provided in a Spill Response Plan. If any spill is classified as a release of a hazardous substance under the Comprehensive Environmental Response, Compensation & Liability Act ("CERCLA"), as detailed in Final EIS Section 5.2.13.2.3, PolyMet would have to comply with the notification requirements of federal law, specifically 40 CFR 355.60, 40 CFR 302, and the Emergency Notification Procedures in Minnesota. Because this would be a short-term impact subject to immediate reporting and subsequent control and remediation measures, potential effects, beyond what have been considered in the Final EIS are not significant, and do not warrant preparation of a Supplemental EIS as identified in Minnesota Rules part 4410.3000 subpart 3A.

Regarding potentially accelerated transition to non-mechanical water treatment methods at the Mine Site due to elimination of the Mine Site WWTF, DNR rejects this suggestion and finds there is no basis for this unfounded conclusion. The Project Timeline depicted in Permit to Mine Application Figure 3-9 continues to show construction of non-mechanical treatment as a feature of Postclosure Maintenance. This occurs after Mine Year 55, which is essentially the same timeline identified in the Final EIS. PolyMet notes in the Reclamation, Closure, and Postclosure Maintenance Plan that, although a viable non-mechanical treatment technology may be adopted, it would not be applied until after the West Pit has flooded, in-pit water quality is stabilized, and pit overflow control is in place. Without non-mechanical treatment in place, any West Pit overflow would be treated at the WWTS prior to discharge to the unnamed tributary to the Partridge River. Because this is no different than what was evaluated in the Final EIS, there is no expected difference in the potentially significant environmental effects to the Partridge

River, which is the receiving water of this discharge. Preparation of a Supplemental EIS to address this issue is not justified under Minnesota Rules part 4410.3000 subpart 3A.

Regarding implementation of potential adaptive or contingency mitigation measures to address the types of circumstances listed by WaterLegacy, consolidation of the Mine Site and Plant Site WWTFs into the WWTS does not eliminate the opportunity to pursue additional mitigation measures. The Final EIS considers the potential that West Pit water quality might be worse than projected, and Section 6.5.D.v.a of the Water Management Plan – Mine (December 2017, submitted with the Draft Permit to Mine Application) specifies "the West Pit water could be pumped to the WWTS, treated, and returned to the West Pit." Similarly, if a northward flow of Mine Site groundwater were to develop, water extracted to mitigate that flow would be treated at the WWTS. It is important to note that the Final EIS did not predict a north flow path. However, adaptive management would be used to monitor the potential for northward flow and address it needed. More broadly, because the range of water quality control features previously proposed for the Mine Site WWTF would be incorporated into the WWTS, the suite of potential adaptive or contingency mitigation measures identified in both the Final EIS and draft Permit to Mine would be available to address adverse water quality impacts through adaptive management. Thus consolidation of the treatment works into the WWTS does not constitute a project change that would give rise to potentially significant environmental effects of the Proposed Project, and as such does not require preparation of a Supplemental EIS identified in Minnesota Rules 4410.3000 subpart 3A.

*Summary Item 5*. WaterLegacy alleges in Summary Item 5 that PolyMet's wetland mitigation proposal provided in the Wetland Replacement Plan (December 2017) constitutes a project change because "PolyMet has proposed a completely different wetland mitigation plan" than what was identified in the Final EIS. WaterLegacy notes the Final EIS "detailed wetland compensation in three separate wetlands: the Aitkin Site, the Hinckley Site and the Zim Site", with "compensatory mitigation primarily in the form of wetland restoration", and specified the types of wetland communities to be restored. WaterLegacy asserts that the new plan offers a completely different alternative that "proposes that directly impacted and fragmented wetlands 'will be replaced and mitigated by credit purchase from an off-site wetland bank #1609 in the St. Louis River watershed (#3), in Bank Service Area (BSA) #1, in St. Louis County, prior to construction of the Project." WaterLegacy asserts that PolyMet's mitigation plan does not disclose: whether mitigation is for wetland restoration or preservation; how the loss of wetland functions and values due to the Project are mitigated; the stage of development of the wetland bank; and whether approval of wetland mitigation credits would be feasible prior to Project construction. WaterLegacy claims that a Supplemental EIS is required to allow public review of whether the new wetland mitigation proposal effectively remediates the adverse impacts to wetlands.

*DNR Consideration*. The agency notes WaterLegacy does not find fault with the Final EIS' analysis on the Proposed Project's wetland impacts and the state requirements for compensatory wetland mitigation. Rather, WaterLegacy focuses on the revised mitigation proposal that is based upon purchasing and using Minnesota Wetland Bank Program credits to compensate for the Project's wetland impacts. DNR notes that this approach must meet the same state regulations as identified in the Final EIS for the original mitigation proposal. This is represented in the Final EIS Section 5.2.3.3.2, which recognizes that using

wetland bank credits as mitigation is appropriate. The Final EIS notes "the Federal Mitigation Rule and 2009 USACE St. Paul District Policy specifies a preferential sequence for compensatory mitigation (i.e., **use of mitigation banking credits** [emphasis added], use of project-specific compensation that is based on a watershed approach, use of project-specific compensation that is on-site and in-kind, and/or out of kind), and aims to select mitigation sites as close as possible to the watershed of impact." Because the use of mitigation banking credits are well within State and Federal goals identified in the Final EIS as the first preferred type of wetland mitigation, PolyMet's new wetland mitigation proposal does not constitute new information or new circumstances that significantly affect the potential environmental effects of the Proposed Project evaluated in the Final EIS. As such, preparation of a Supplemental EIS under Minnesota Rules part 4410.3000 subpart 3A is not required.

Regarding WaterLegacy's concerns for the lack of specificity associated with relying on the use of mitigation banking credits as proposed by PolyMet, this is inherent to mitigation banking, a recognized and preferred method of compensating for wetlands impacts under state and federal law. While the points raised by WaterLegacy regarding the suitability of purchased mitigation credits may have relevance to the appropriateness of this type of mitigation, this is outside of the purview of Minnesota's Environmental Review Program. Rather, Minnesota Rules part 4410.2300, subpart I, only directs that an EIS include a section identifying those measures that could reasonably eliminate or minimize environmental (and other) effects of the proposed project. This was done in the Final EIS for wetlands impacts, including the appropriateness and regulatory preference for relying on mitigation banking credits as Project-specific compensation for impacting wetlands. The selection of a different, but previously identified, mitigation strategy for wetland impacts does not significantly affect the potential environmental effects from the proposed Project and does not require preparation of a Supplemental EIS as identified in Minnesota Rules part 4410.3000 subpart 3A.

### Conclusion

Based on the information before the agency at this time, DNR is denying WaterLegacy's request for a Supplemental EIS for the proposed NorthMet project.

Sincerely,

Barbara Maramore

Barb Naramore Assistant Commissioner

CC: Connie Cummins, Forest Supervisor, Superior National Forest, U.S. Forest Service Chad Konickson, Regulatory Branch Chief, St. Paul District, U.S. Army Corps of Engineers Will Seuffert, Executive Director, Environmental Quality Board Dave Frederickson, Chair, Environmental Quality Board John Linc Stine, Commissioner, Minnesota Pollution Control Agency Sherry Enzler, Minnesota Department of Natural Resources