Minnesota Wetland Conservation Act Notice of Decision Permit to Mine

Approving Authority
Department of Natural Resources (DNR)
Division of Lands and Minerals

Address 500 Lafayette Road N, Box 45 St. Paul, MN 55155-4045

1. PROJECT INFORMATION Applicant Name Project Name Date of Application Poly Met Mining, Inc. NorthMet Project December 13, 2017 Attach site locator maps: Large Figure 1

Wetland Boundary or Type	No-Loss	Incidental	Sequencing
🔀 Replacemen	Replacement Plan		
Technical Evaluation Panel Findings	and Recommendation	(if any):	
Approve	Approve with conditions		Deny
Summary (or attach):			

2. APPROVING AUTHORITY UNIT DECISION

Approved With conditions (include below)

Denied

Approving Authority Findings and Conclusions:

In November 2016, Poly Met Mining, Inc. and PolyMet Mining Corp. ("PolyMet") submitted an application for a non-ferrous Permit to Mine (PTM) to the DNR. This PTM application included an incomplete, proposed Wetland Replacement Plan (WRP). PolyMet revised its PTM application and proposed WRP throughout the course of 2017. Through an iterative process, the DNR reviewed and provided comments to PolyMet on this revised PTM application, including PolyMet's proposed WRP.

On December 13, 2017, PolyMet submitted a revised WRP as part of Version 3.1 of its PTM application. *See* PTM Application Appendix 18.1. This WRP proposed wetland impacts of 930.2 acres of direct and fragmented wetlands associated with the Project. The WRP identifies two areas of incidental wetland and includes a monitoring plan in order to determine if indirect wetland impacts might occur as a result of Project activities. Note that the WRP includes the "NorthMet Site Wetland Hydrology Monitoring Report Summary 2005-2016 Hydrology Report, February 2017" that was submitted along with the references.

PolyMet's WRP application proposed to mitigate wetland impacts associated with the Project through the purchase of wetland credits at a 1:1 ratio from the Lake Superior Wetland Bank (account number 1609 within the state wetland bank). This bank is located within the same watershed (St. Louis River watershed #3) and the same wetland bank service area (BSA #1) as the impacts of the Project.

On January 5, 2018, DNR determined that the WRP application was complete and sent a Notice of Application to Wetland Conservation Act (WCA) reviewers. That same day, the WRP was posted for public review and comment on the DNR's permitting web site for the Project.

The DNR received more than 14,000 public comments on the draft PTM. Given the large number of submissions and individual comments received during this public-comment process, the DNR grouped similar comments into themes and considered those themes individually in lieu of responding to each individual comment. These comments, along with comments from the WCA reviewers, were organized in a spreadsheet according to the themes and issues raised therein. Comments from BWSR were received on February 26, 2018 and addressed within the theme spreadsheet and in a separate spreadsheet. Comments regarding the wetland delineation from the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) dated August 6, 2017 were addressed separately with condition number 3 below.

PolyMet provided additional information on January 3, 2018 (Application to Withdraw Credits), on March 14, 2018 (Response to GLIFWC memo), and on October 24, 2018 (Figure 1 Proposed Culvert Extension Impacts – Unnamed Tributary to Wyman Creek).

The WRP, including references and submittals as noted above, is incorporated into this decision by reference.

DNR approves the incidental request of 1) a 0.3 acre wet meadow wetland associated with the Coal Ash Landfill on the east side of the Flotation Tailings Basin and 2) 28.56 acres of a shallow marsh wetland in the footprint of the proposed Hydromet Residue Facility.

The wetland delineations in the WRP References (9)-(14) as summarized in Large Table 1 of the Wetland Replacement Plan, are approved subject to condition 3 below. Mitigation of impacts to FPn62 - Northern Rich Spruce Swamp will be required in accordance with PTM Attachment 2.

The WRP is approved subject to the following conditions:

- 1. Prior to impacting wetlands listed in large table 1 of the WRP, PolyMet must provide documentation to the satisfaction of the Commissioner that credits have been withdrawn from the state wetland bank account 1609.
- 2. Prior to disturbing any wetlands, PolyMet must provide a single set of figures with wetland IDs and acreages corresponding to large table 1 of WRP, including any updates under condition 3.
- 3. Any revisions to the wetland delineation determined by the U.S. Army Corps of Engineers related to the Wetland Mapping at the PolyMet Mine Site, Great Lakes Indian Fish and Wildlife Memo dated August 6, 2017 will supersede the delineation(s) approved herein. If there are such revisions, PolyMet must submit a concordance table and associated maps with wetland boundaries and IDs (as in condition 2) identifying all changes and revise, if necessary, the withdrawal from the state wetland bank account 1609 accordingly.

- 4. Upon completion of installation of FTB Seepage Containment System, PolyMet must submit an as-built report verifying that the wetland impacts were as permitted and identifying any deviations from permitted impacts. Any deviations must be resolved prior to NorthMet tailings deposition or 90 days after completion of installation, whichever occurs first.
- 5. Upon completion of final designs for the drainage swale for which preliminary location and layout were provided in Drawings FTB-004, FTB-011, and FTB-012, PolyMet must submit a report verifying that the wetland impacts would be as permitted and identifying any potential deviations from permitted impacts. Any deviations must be resolved prior to start of construction of the swale.
- 6. As a best management practice, PolyMet must stake out the limits of the wetland boundaries as a visual representation of the footprints permitted for wetland impacts.
- 7. Prior to disturbance of any wetlands, PolyMet must have provided compensatory mitigation in accordance with the Takings Permit issued on November 1, 2018.
- 8. Any proposed modifications to, or replacement of, the existing FTB South Seepage Management System must be submitted to the DNR for review of potential wetland impacts. If impacts to wetlands are proposed or anticipated, a wetland replacement plan must be submitted to the DNR for review and approval prior to disturbance. Even if no wetland impacts are anticipated, a monitoring plan for potential indirect wetland impacts must be submitted to the DNR for review and approval prior to disturbance.
- 9. PolyMet must submit a revised Monitoring Plan for Potential Indirect Wetland Impacts (Attachment E of the WRP; hereinafter called the "Monitoring Plan") for review and approval by DNR within 90 days of permit issuance. The Monitoring Plan must be approved by DNR prior to wetland impacts. The Monitoring Plan must include at least the following:
 - a. Required annual reporting, including hydrologic and vegetative cumulative data reporting and analysis along with any and all unreported data. Such annual reporting must detail any changes to monitoring for the upcoming year.
 - b. Hydrology and vegetation monitoring prior to initiation of construction or any activity that would directly, indirectly, or temporarily impact wetlands. Such monitoring must include the beginning of the growing season of the year in which such disturbance is planned.
 - c. The frequency of vegetation monitoring at the Plant Site will be every two years, decreasing to every five years once the Flotation Tailings Basin has reached its final permitted height and hydrologic monitoring data has shown stabilized conditions for at least two years, as determined by the DNR.
 - d. The frequency of vegetation monitoring at the Mine Site will be every two years, decreasing to every five years once the pit limits have been reached and hydrologic monitoring data has shown stabilized conditions for at least two years, as determined by the DNR.
 - e. One of the "regulatory impact measures" must be "A change in wetland community type coincident with a change in wetland hydroperiod that is not consistent with wetland community type change documented within the reference wetland."
- 10. If the yearly monitoring or any other information shows indirect wetland impacts are likely to occur, as determined by the DNR, then the DNR will determine whether actions to avoid or minimize wetland impacts are required. If the yearly monitoring or any other information shows indirect wetland impacts have occurred, as determined by the DNR, then PolyMet must provide mitigation from the Lake Superior Wetland Bank (1609) at

a 1:1 ratio. If credits are not available, PolyMet must submit a revised or new WRP for review and approval by DNR. Mitigation for indirect impacts is required prior to any additional wetland impacts.

11. Monitoring for indirect wetland impacts of the project will occur for as long as necessary. Such monitoring may cease when it is determined by the DNR that no possibility exists for indirect impacts within or adjacent to the mining area.

See also attached Findings of Fact, Conclusions, and Order of Commissioner, which are incorporated herein by reference.

For Replacement Plans using credits from the State Wetland Bank:

Bank Account #	Bank Service Area	County	Credits Approved for Withdrawal (sq. ft. or nearest 0.01 acre)
1609	1	St. Louis	1800

Replacement Plan Approval Conditions. In addition to any conditions specified by the Approving Authority, the approval of a <u>Wetland Replacement Plan</u> is conditional upon the following:

Financial Assurance: For project-specific replacement that is not in-advance, a financial assurance specified by the LGU must be submitted to the LGU in accordance with MN Rule 8420.0522, Subp. 9 (List amount and type in LGU Findings).

Deed Recording: For project-specific replacement, evidence must be provided to the LGU that the BWSR "Declaration of Restrictions and Covenants" and "Consent to Replacement Wetland" forms have been filed with the county recorder's office in which the replacement wetland is located.

Credit Withdrawal: For replacement consisting of wetland bank credits, confirmation that BWSR has withdrawn the credits from the state wetland bank as specified in the approved replacement plan.

Wetlands may not be impacted until all applicable conditions have been met.

Approving Authority Authorized Signature:

Name Tom Landwehr	Title Commission	Title Commissioner, DNR	
Signature /s/ Tom Landwehr	Date 11/01/2018	Phone Number and E-mail 651-259-5555	
		commissioner.dnr@state.mn.us	

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT.

Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

3. APPEAL OF THIS DECISION

Pursuant to Minn. Stat., sec. 93.50, any person aggrieved by this decision may obtain judicial review under Minn. Stat. 14.63 to 14.69.

4. LIST OF ADDRESSEES

SWCD TEP member: Phil Norvitch
BWSR TEP member: David Demmer
LGU TEP member (if different than LGU Contact):
DNR TEP member: Kim Boland
DNR Regional Office: Margi Coyle
WD or WMO (if applicable):
Applicant and Landowner (if different)
Members of the public who requested notice:
Ken Powell, BWSR
Melissa Kuskie, MPCA
Jim Brist, MPCA
Jen Oknich, MPCA
Mark Lindhorst, St. Louis County
Chris Koivisto, City of Babbitt
Rebecca Burich, City of Hoyt Lakes
Corps of Engineers Project Manager: Ralph Augustin
BWSR Wetland Bank Coordinator (wetland bank plan decisions only)

5. ATTACHMENTS

In addition to the site locator map, list any other attachments:

- Large Figure 4: Wetland DelineationLarge Figure 9: Mine Site Direct and Potential Indirect Wetlands Impacts
- Large Figure 10: Plant Site Direct and Potential Indirect Wetland Impacts
 Large Figure 11: Dunka Road and Utility Corridors Direct and Potential Indirect Wetland Impacts
- PTM Attachment 2: Mitigation of impacts to FPn62 Northern Rich Spruce Swamp













County Boundaries

City Boundaries









Feet

National Hydrography Dataset (NHD) Rivers & Streams²

Areas Disturbed by Proposed Project Features

1

No Impact

3

Poly Met Mining, Inc.

Large Figure 9 Wetland Replacement Plan



- - --- FTB Seepage Containment System
- SFragmented Wetlands



Large Figure 10 Wetland Replacement Plan

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PTM Attachment 2

Mitigation of impacts to FPn62 - Northern Rich Spruce Swamp

- A. Notwithstanding the Permittee's conclusions set forth in § 12.3 of Appendix 18.1 of the Application, and based upon the best information and data currently available to the DNR, FPn62 Northern Rich Spruce Swamp is a rare natural community as determined by the DNR's natural heritage program under Minn. R. 8420.0515, subp. 3. There are 225 acres of FPn62 Northern Rich Spruce Swamp located at the Mine Site.
- B. Permittee may request that the DNR reevaluate the designation of FPn62 Northern Rich Spruce Swamp as a rare natural community through submission of additional information and data to the DNR. The DNR will not change this designation unless additional information and data submitted by the Permittee or from other sources demonstrate, to the satisfaction of the DNR, that this natural community is not rare.
- C. In order to i) mitigate any adverse effect on the FPn62 Northern Rich Spruce Swamp rare natural community and ii) to ensure that the Permittee's mining operations do not permanently adversely affect this natural community, the Permittee must demonstrate to the satisfaction of the DNR, and prior to any impact, that it has mitigated impacts through one or a combination of the following required mitigation activities:
 - i. Transfer private lands containing FPn62 Northern Rich Spruce Swamp to the United States Forest Service as part of the proposed NorthMet project land exchange. Any mitigation under this option will be at a 1:1 ratio.
 - ii. Restore previously disturbed or protect currently imperiled FPn62 Northern Rich Spruce Swamp. Any mitigation under this option will be at a 1:1 ratio.
 - iii. Permanently protect FPn62 Northern Rich Spruce Swamp through placement of a conservation easement or deed restriction over presently unprotected lands with this community type. Any mitigation under this option will be at a 2:1 ratio.
- D. The DNR will verify the acreage of impacts, including indirect impacts, to FPn62 Northern Rich Spruce Swamp. Mitigation will be required for the verified acreage through one, or a combination, of the mitigation activities identified in Section C of this Special Condition.
- E. The mitigation required to ensure that the FPn62 Northern Rich Spruce Swamp rare natural community is not permanently adversely affected is in addition to the wetland mitigation and replacement activities detailed in Appendix 18.1 of the Application.