

# NORTHMET PROJECT

## ENVIRONMENTAL IMPACT STATEMENT OCTOBER 2009

DRAFT



US Army Corps  
of Engineers  
St. Paul District

SUMMARY COPY

---

## COVER SHEET

---

Summary  
NorthMet Project  
PolyMet Mining, Inc.

The Minnesota Department of Natural Resources and the U.S. Army Corps of Engineers have jointly prepared the Draft Environmental Impact Statement (DEIS) to evaluate the NorthMet Project in accordance with the National Environmental Policy Act 42 USC 4321-4347, and the Minnesota Environmental Policy Act, *Minnesota Statutes, section 116D*.

**State Co-Lead Agency and RGU:**  
Minnesota Department of Natural Resources

**Federal Co-Lead Agency:**  
U.S. Army Corps of Engineers

**MnDNR Contact:**  
Stuart Arkley, EIS Project Manager  
Environmental Review Unit  
Division of Ecological Resources  
Minnesota Department of Natural Resources  
500 Lafayette Road  
St. Paul, Minnesota 55155-4025  
651.259.5089  
651.297.1500 (FAX)  
[Environmentalrev.Dnr@state.mn.us](mailto:Environmentalrev.Dnr@state.mn.us)  
(reference NorthMet in the subject line)

**USACE Contact:**  
Jon K. Ahlness  
Regulatory Branch, St. Paul District  
U.S. Army Corps of Engineers  
190 Fifth Street East, Suite 401  
St. Paul, Minnesota 55101-1638  
651.290.5381  
651.290.5330 (FAX)  
[jon.k.ahlness@usace.army.mil](mailto:jon.k.ahlness@usace.army.mil)

**Project Proposer:** PolyMet Mining, Inc.

**Proposer Contact:** Jim Scott  
PolyMet Mining, Inc.  
P.O. Box 475  
County Road 666  
Hoyt Lakes, Minnesota 55750  
218.225.4417  
[jrscott@frontiernet.net](mailto:jrscott@frontiernet.net)

**Abstract:** This Summary highlights the analysis of potential impacts associated with the proposed PolyMet Mining, Inc. NorthMet Project. The Project includes open pit mining operations with ore processed at a refurbished and modified taconite processing facility (formerly the LTV Steel Mining Company Erie Plant). The flotation process will generate flotation tailings that are proposed for disposal on top of a portion of an existing taconite tailings disposal facility. This document is a summary of the complete DEIS and serves to highlight the results of the analyses within the DEIS, which is included on a CD accompanying this document. Persons wishing to comment on the Project should provide their comments on the complete DEIS, and not this Summary. In addition to the electronic version included with this document, the DEIS is also available on the MnDNR Project Website (<http://www.dnr.state.mn.us/input/environmentalreview/polymet/index.html>).

Please refer to Chapter IV of the Summary for the procedure to submit comments on the DEIS.

## **TABLE OF CONTENTS**

<b>I.</b>	<b>INTRODUCTION</b>	<b>S-1</b>
I.A	BACKGROUND AND LOCATION OF THE NORTHMET PROJECT	S-1
I.B	PROJECT PURPOSE AND NEED	S-1
I.C	REGULATORY FRAMEWORK	S-3
I.D	AGENCY ROLES AND RESPONSIBILITIES	S-4
<b>II.</b>	<b>SCOPING PROCESS</b>	<b>S-5</b>
II.A	SUMMARY OF THE SCOPING PROCESS	S-5
II.B	ISSUES IDENTIFIED DURING THE EIS SCOPING PROCESS	S-5
II.C	CUMULATIVE EFFECTS CONSIDERED IN THE DEIS	S-5
<b>III.</b>	<b>NORTHMET PROJECT</b>	<b>S-6</b>
III.A	INTRODUCTION	S-6
III.B	PROPOSED ACTION	S-8
	III.B.1 Proposed Action Description	S-8
	III.B.2 Impacts of the Proposed Action	S-12
III.C	MINE SITE ALTERNATIVE	S-15
	III.C.1 Mine Site Alternative Description	S-15
	III.C.2 Impacts of the Mine Site Alternative	S-15
III.D	TAILINGS BASIN ALTERNATIVE	S-16
	III.D.1 Tailings Basin Alternative Description	S-16
	III.D.2 Impacts of the Tailings Basin Alternative	S-17
III.E	NO ACTION ALTERNATIVE	S-18
	III.E.1 No Action Alternative Description	S-18
	III.E.2 Impacts of the No Action Alternative	S-18
III.F	MITIGATION MEASURES FOR THE PROJECT	S-18
III.G	AREAS OF MAJOR DIFFERENCES OF OPINION CONCERNING SIGNIFICANT IMPACTS	S-21
<b>IV.</b>	<b>NEXT STEPS</b>	<b>S-23</b>
IV.A	PUBLIC COMMENT PROCEDURES AND PUBLIC MEETING INFORMATION	S-23
IV.B	FINAL EIS/ROD PROCEDURES	S-23
IV.C	AGENCY CONTACT INFORMATION	S-23

## **LIST OF TABLES**

Table III-1	Summary of Mitigation Measures	S-19
-------------	--------------------------------	------

## **LIST OF FIGURES**

Figure S-1	Project Vicinity Map	S-2
Figure S-2	Project Area Map	S-7
Figure S-3	Mine Site Layout Map (Proposed Action)	S-10
Figure S-4	Plant Site Layout Map (All Actions)	S-11

## **TABLE OF CONTENTS**

<b>I.</b>	<b>INTRODUCTION</b>	<b>S-1</b>
I.A	BACKGROUND AND LOCATION OF THE NORTHMET PROJECT	S-1
I.B	PROJECT PURPOSE AND NEED	S-1
I.C	REGULATORY FRAMEWORK	S-3
I.D	AGENCY ROLES AND RESPONSIBILITIES	S-4
<b>II.</b>	<b>SCOPING PROCESS</b>	<b>S-5</b>
II.A	SUMMARY OF THE SCOPING PROCESS	S-5
II.B	ISSUES IDENTIFIED DURING THE EIS SCOPING PROCESS	S-5
II.C	CUMULATIVE EFFECTS CONSIDERED IN THE DEIS	S-5
<b>III.</b>	<b>NORTHMET PROJECT</b>	<b>S-6</b>
III.A	INTRODUCTION	S-6
III.B	PROPOSED ACTION	S-8
	III.B.1 Proposed Action Description	S-8
	III.B.2 Impacts of the Proposed Action	S-12
III.C	MINE SITE ALTERNATIVE	S-15
	III.C.1 Mine Site Alternative Description	S-15
	III.C.2 Impacts of the Mine Site Alternative	S-15
III.D	TAILINGS BASIN ALTERNATIVE	S-16
	III.D.1 Tailings Basin Alternative Description	S-16
	III.D.2 Impacts of the Tailings Basin Alternative	S-17
III.E	NO ACTION ALTERNATIVE	S-18
	III.E.1 No Action Alternative Description	S-18
	III.E.2 Impacts of the No Action Alternative	S-18
III.F	MITIGATION MEASURES FOR THE PROJECT	S-18
III.G	AREAS OF MAJOR DIFFERENCES OF OPINION CONCERNING SIGNIFICANT IMPACTS	S-21
<b>IV.</b>	<b>NEXT STEPS</b>	<b>S-23</b>
IV.A	PUBLIC COMMENT PROCEDURES AND PUBLIC MEETING INFORMATION	S-23
IV.B	FINAL EIS/ROD PROCEDURES	S-23
IV.C	AGENCY CONTACT INFORMATION	S-23

### **LIST OF TABLES**

Table III-1	Summary of Mitigation Measures	S-19
-------------	--------------------------------	------

### **LIST OF FIGURES**

Figure S-1	Project Vicinity Map	S-2
Figure S-2	Project Area Map	S-7
Figure S-3	Mine Site Layout Map (Proposed Action)	S-10
Figure S-4	Plant Site Layout Map (All Actions)	S-11

## **I. INTRODUCTION**

This Draft Environmental Impact Statement Summary (Summary DEIS) contains an overview of the NorthMet Project and the regulatory framework for the preparation of the DEIS. It presents in summary form the Proposed Action, Project alternatives, major findings, and areas of controversy regarding significant impacts.

The DEIS provides a more thorough discussion of the Project, background data, major findings, Project alternatives, and a detailed description of the differing opinions regarding significant impacts.

### **I.A BACKGROUND AND LOCATION OF THE NORTHMET PROJECT**

The Minnesota Department of Natural Resources (MnDNR) and the U.S. Army Corps of Engineers (USACE) have prepared a joint state and federal DEIS to analyze the potential environmental consequences of the proposed NorthMet Mine and Ore Processing Facilities Project (NorthMet Project or Project). PolyMet Mining, Inc (PolyMet) proposes to construct and operate an open pit mine and processing facility to process low-grade disseminated sulfide-bearing ore into finished copper metal and various copper, nickel, cobalt, and precious metal concentrates and precipitates.

The proposed Project, including the Mine Site, Plant Site, and connecting infrastructure, would be located on the south flank of the Mesabi Iron Range in St. Louis County, Minnesota (Figure S-1). The Mine Site would be located at a previously unmined area in the Superior National Forest approximately six miles south of the City of Babbitt. The Plant Site would be approximately six miles north of the City of Hoyt Lakes at a currently inactive taconite processing facility.

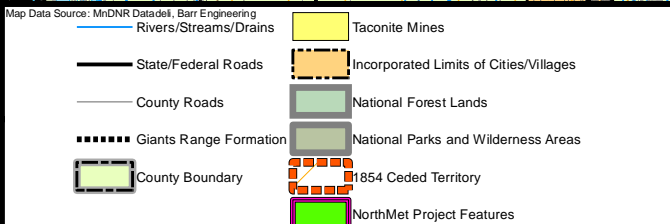
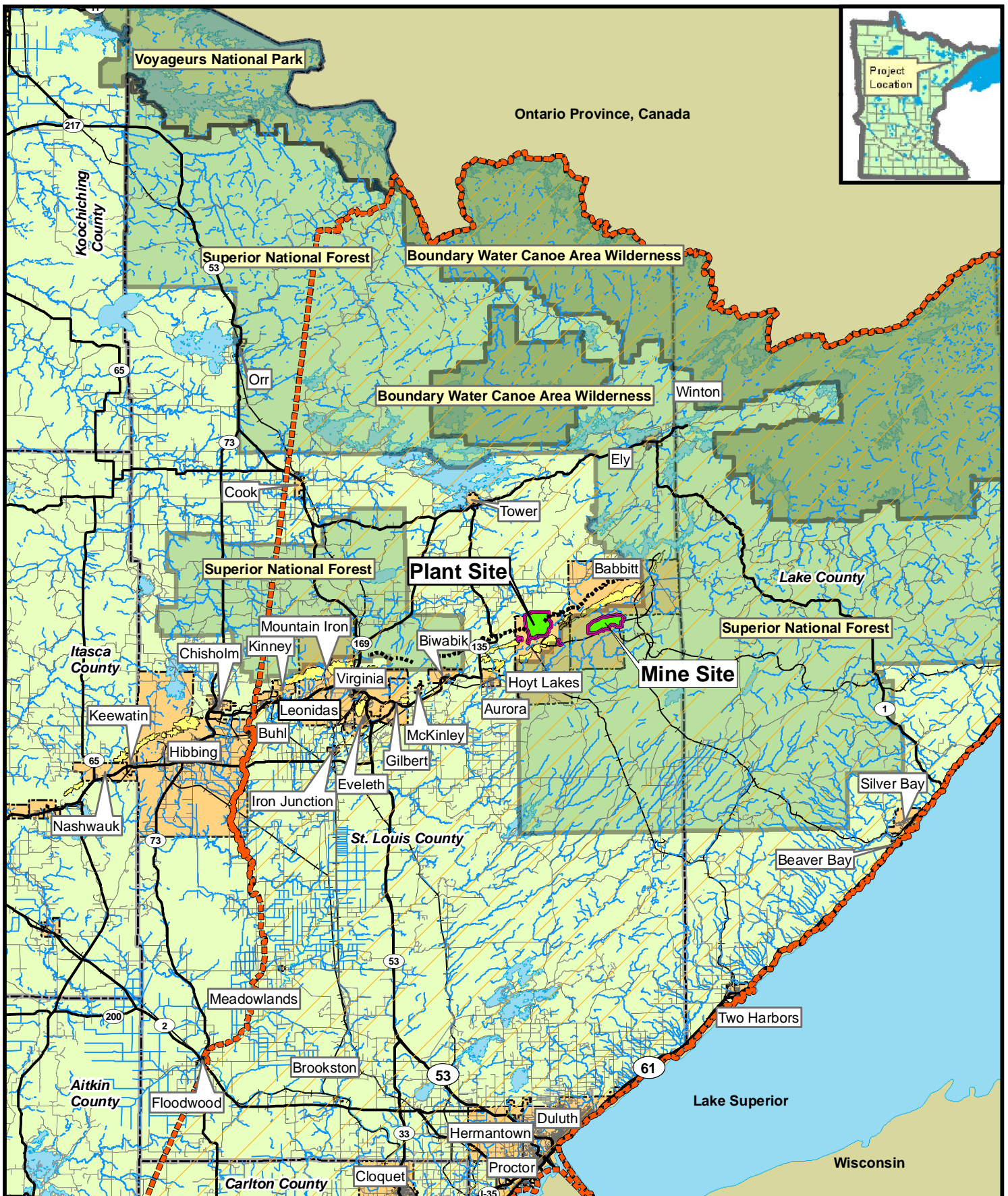
The Mine Site is located on National Forest System lands; however, the mineral rights are privately held and under lease to PolyMet. It is the position of the United States that the mineral rights leased by PolyMet do not include the right to open pit mine the National Forest System land. PolyMet disagrees with the U.S. Forest Service (USFS) interpretation of the deed language and argues that the mineral rights it seeks to utilize provide for access to the minerals by any mining method including open pit or surface mining.

The USFS and PolyMet are exploring the feasibility of a land exchange to consolidate the surface ownership and mineral rights to PolyMet and thereby remove all National Forest System lands from the proposed Project. The USFS will be initiating its own EIS to evaluate the proposed land exchange, while this NorthMet Project DEIS assumes the successful completion of a land exchange.

The Plant Site would be located at the former LTV Steel Mining Company (LTVSMC) taconite processing facility, which would be refurbished and modified to include a beneficiation plant and a hydrometallurgical plant.

### **I.B PROJECT PURPOSE AND NEED**

The purpose and need of the proposed Project is to produce base and precious metal, precipitates, and flotation concentrates from ore mined at the NorthMet deposit by uninterrupted operation of the former LTVSMC processing plant site. The processed resources would help meet domestic and global demand by sale of these products to domestic and world markets.



**Figure S-1** **DRAFT**  
**Project Vicinity Map**

NorthMet Project  
 PolyMet Mining, Inc.  
 St. Louis County, Minnesota

October 2009

## I.C REGULATORY FRAMEWORK

The proposed Project is subject to both federal and state regulations to protect human health and the environment. The DEIS evaluates the proposed Project in accordance with the National Environmental Policy Act (NEPA) and the Minnesota Environmental Policy Act (MEPA).

NEPA requires that federal agencies consider the potential environmental consequences of proposed actions in their decision-making process and mandates that the lead federal agency must prepare a “detailed statement for legislation and other major federal actions significantly affecting the quality of the human environment.” Such actions include projects subject to federal permits. The USACE, during its review of PolyMet’s Section 404 Individual Permit application, determined that the proposed Project would require preparation of an EIS.

The MEPA environmental review process is a decision-making tool for the Minnesota permitting and approval processes and to describe available mitigation measures. The state body responsible for the review is the Responsible Governmental Unit (RGU). The MnDNR is the RGU for the proposed Project and determined an EIS shall be prepared because the proposed Project exceeds the threshold for construction of a new metallic mineral mining and processing facility (*Minnesota Rules*, part 4410.4400, subpart 8).

In addition, the proposed Project may require the following federal, state, and local permits or approvals:

### **Federal Agencies**

#### *USACE*

- Section 404 Individual Permit
- National Historic Preservation Act Consultation

#### *U.S. Fish and Wildlife Service*

- Endangered Species Act Consultation

#### *USFS*

- Land exchange to resolve split estate

### **State Agencies**

#### *MnDNR*

- Permit to Mine
- Endangered Species Taking Permit
- Water Appropriations Permit
- Dam Safety Permit
- Permit for Work in Public Waters
- Wetland Replacement Plan
- Burning Permit

#### *Minnesota Pollution Control Agency*

- Section 401 Water Quality Certification/Waiver
- National Pollutant Discharge Elimination System (NPDES) / State Disposal System (SDS) Permit(s)
- Solid Waste Permit
- Air Emissions (Part 70) Permit
- Waste Tire Storage Permit
- General Storage Tank Permit

#### *Minnesota Department of Health*

- Radioactive Material Registration
- Non-Community Public Water Supply System Permit and Wellhead Protection Plan
- Public On-site Sewage Disposal System Permit

### **Local Permits**

#### *City of Hoyt Lakes*

- Zoning Permit

#### *City of Babbitt*

- Building Permit

#### *St. Louis County*

- Zoning Permit

## I.D AGENCY ROLES AND RESPONSIBILITIES

The MnDNR and USACE are serving as co-lead agencies in preparation of this DEIS, with MnDNR serving as the RGU under MEPA and the USACE serving as the lead federal agency under NEPA. The Mine Site for the Project is currently located on National Forest System lands; therefore, the USFS is participating as a cooperating agency as it is the current federal land manager. The Mine and Plant Sites are also located within the 1854 Treaty Ceded Territory where the Bois Forte Band of Chippewa, Fond du Lac Band of Lake Superior Chippewa, and Grand Portage Band of Chippewa retain hunting, fishing, and gathering rights under the Treaty of 1854. For this reason, the Bois Forte Band and Fond du Lac Band are also participating as cooperating agencies. A memorandum of understanding (last amended in May 2008) defines the roles and responsibilities of these parties. The Grand Portage Band is not currently a cooperating agency or signatory to the memorandum of understanding; however, they have been involved in the DEIS preparation process and recently requested formal confirmation of cooperating agency status for the Project.

The Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Health (MDH) are assisting the MnDNR, but are not party to the memorandum of understanding.

The U.S. Environmental Protection Agency (USEPA) has an oversight role over the NEPA process and has participated in the review of draft documents leading up to the DEIS.



## II. SCOPING PROCESS

### II.A SUMMARY OF THE SCOPING PROCESS

The federal and state scoping efforts were conducted jointly, led by MnDNR, following the process outlined by *Minnesota Rules*, part 4410.2100 to define a reasonable scope for the EIS. The process involved the preparation of three documents: the Scoping Environmental Assessment Worksheet (EAW); the Draft Scoping Decision Document (Draft SDD); and the Final Scoping Decision Document (Final SDD). The Scoping EAW and Draft SDD provided information about the proposed Project, identified potentially significant environmental effects, and determined what issues and alternatives will be addressed in the EIS and the required level of analysis. Key dates in the scoping process were:

- May 10, 2005: USACE issued the Section 404 Permit Public Notice.
- June 6, 2005: MnDNR, with USACE and USFS, issued the Scoping EAW and Draft SDD for a 30-day comment period.
- June 29, 2005: Public Meeting in Hoyt Lakes.
- July 1, 2005: USACE issued the Notice of Intent to Prepare an EIS.

The comments received during the scoping process were considered by the MnDNR and the USACE prior to the issuance of the Final SDD on October 25, 2005. The scoping process ended and DEIS preparation began upon the publication of a DEIS preparation notice in the Minnesota Environmental Quality Board (EQB) Monitor on April 24, 2006.

### II.B ISSUES IDENTIFIED DURING THE EIS SCOPING PROCESS

Based on the results of the scoping process defined above, the DEIS considered the potential environmental impacts of the proposed Project on the following 12 resources:

- Water Resources
- Wetlands
- Vegetation
- Wildlife
- Fish and Macroinvertebrates
- Air Quality
- Noise
- Cultural Resources
- Compatibility with Land Use Plans and Regulations
- Socioeconomics
- Visual Resources
- Hazardous Materials

Subsequent to scoping, geotechnical stability and integrated cumulative effects analyses were added to the DEIS in response to federal, state, and tribal cooperating and consulting agency comments.

### II.C CUMULATIVE EFFECTS CONSIDERED IN THE DEIS

The DEIS also addresses the potential cumulative effects associated with the combined resource-level environmental effects of the proposed Project with past, present, and reasonably foreseeable future actions relative to:

- Air Quality - Hoyt Lakes area projects and air concentration in Class II areas, Class I areas PM<sub>10</sub> increment, ecosystem acidification resulting from deposition of air pollutants, and visibility impairment;
- Biological Resources - loss of wetlands, loss of threatened and endangered plant species, loss or fragmentation of wildlife habitat, and mercury deposition and bioaccumulation in fish;
- Water Quality – streamflow, lake level, and water quality changes;
- Economic Impacts; and
- Social Impacts.

### III. NORTHMET PROJECT

#### III.A INTRODUCTION

The NorthMet Project proposes the surface mining and mineral processing of approximately 228 million tons of Copper-Nickel-Platinum Group Element (PGE) ore over an approximately 20-year mine life. The Project would develop a new surface mine and reactivate/develop portions of the existing Processing Plant and Tailings Basin at the former LTVSMC site. To accomplish this, PolyMet proposes to:

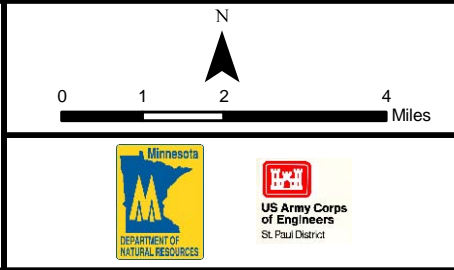
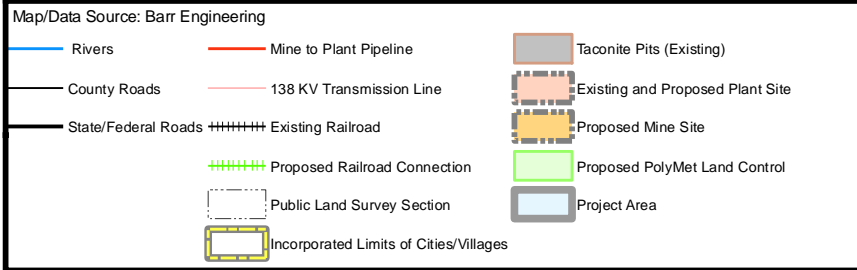
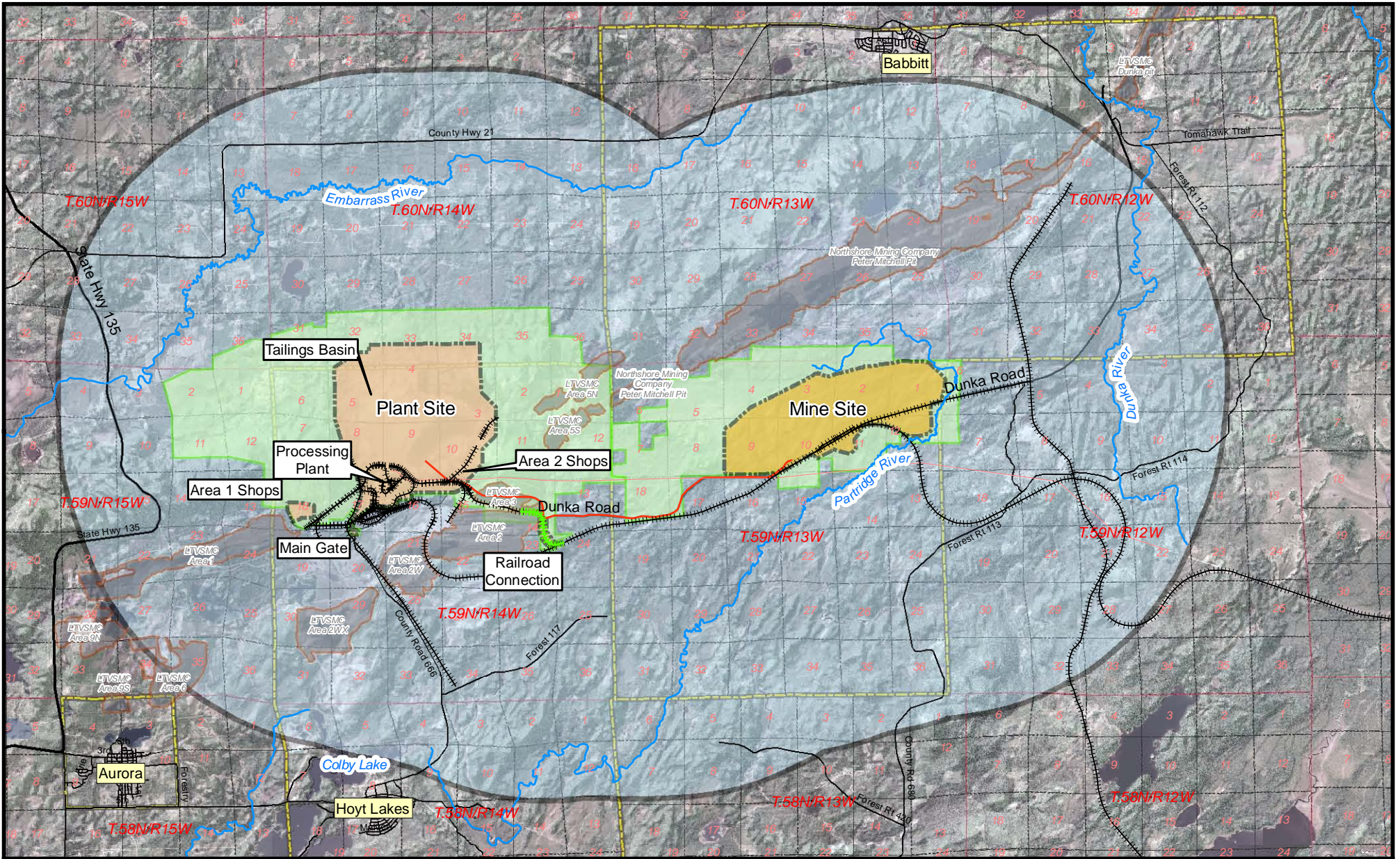
- Open-pit mine an average of approximately 91,200 tons per day (tpd) of rock, including up to 32,000 tpd of ore from a surface mine with three pits (i.e., East, Central, and West Pits).
- Generate approximately 394 million tons of waste rock and lean ore over the life of the mine.
- Transport the ore to the proposed processing plant via 100-ton side-dumping train cars.
- Process the ore through beneficiation and hydrometallurgical plants.
- Construct and operate a Tailings Basin and hydrometallurgical residue facility to dispose of flotation tailings from the beneficiation plant and residues from the hydrometallurgical plant, respectively.
- Close and reclaim the Project components including vegetative and watershed restoration of the waste rock stockpiles and Tailings Basin, building and infrastructure demolition, and post-closure monitoring and maintenance of the closure activities.

For the purposes of the DEIS, the proposed Project consists of the following major components (Figure S-2):

- Mine Site – the mine pits, stockpiles, lean ore surge pile, overburden storage and laydown area, waste water treatment facility (WWTF), and central pumping station (CPS);
- Plant Site – the Processing Plant, Tailings Basin, Area 1 and 2 Shops, Main Gate, and the railroad connection; and
- Transportation Corridor – the Dunka Road segment, railroad segment, the pipelines and transmission lines between the Mine Site and the Plant Site, and the pipeline between the Plant Site and Colby Lake.

An approximately five-mile radius around these major components is identified in the DEIS as the Project area and generally served as the basis for the impact evaluation.

The major elements and potential effects of the Proposed Action as well as two action alternatives (i.e., the Mine Site Alternative and Tailings Basin Alternative) and the No Action Alternative are evaluated in the DEIS and are discussed individually in the following sections.



**DRAFT**

**Figure S-2**  
**Project Area Map**

**NorthMet Project**  
**PolyMet Mining, Inc.**  
**St. Louis County, Minnesota**

**October 2009**

### III.B PROPOSED ACTION

The Proposed Action is described in the January 2007 revised Project Description (updated in July 2007) and supporting documents submitted by PolyMet between 2006 and 2009.

#### III.B.1 Proposed Action Description

The specific elements of the Proposed Action at the Mine Site, Plant Site, and during Project Closure are discussed below.

##### *Mine Site*

The proposed Project would develop three separate open mine pits (East, Central, and West pits) with the East and Central pits combined into one large pit (East Pit) by Year 13. The ore, waste rock, and overburden would be transported within the Mine Site along a series of haul roads and the extracted ore would be transported to the Plant Site via railroad.

The waste rock from the mine pits would be sorted into four categories from least reactive (Category 1) to most reactive (Category 4) according to its geochemical, acid-producing, and metal-leaching properties. Category 3 and Category 4 lean ore would also be separated. Lean ore cannot be economically processed at the time of mining, but could be in the foreseeable future. The rock would be hauled to the following waste rock stockpiles at the Mine Site:

- Category 1 and 2 Waste Rock Stockpile;
- Category 3 Waste Rock Stockpile;
- Category 3 Lean Ore Stockpile;
- Category 4 Waste Rock Stockpile; or
- Category 4 lean ore would be hauled to the Lean Ore Surge Pile or the Rail Transfer Hopper.

Once mining of the East Pit is completed, some of the Category 1 and 2 waste rock

would be used to fill in the East Pit and thereby stored subaqueously; however, the majority of the waste rock stockpiles would be permanent surface features with liner and cover systems to prevent metals from leaching to the surrounding landscape.

The mine pit surface overburden would be sorted into organic soils (peat), unsaturated overburden, and saturated overburden. The peat and unsaturated overburden would be stockpiled in the Overburden Storage and Laydown Area and the remaining material would be placed in the Category 1 and 2 Waste Rock Stockpile.

A series of dikes and ditches would capture and convey most of the surface runoff and process water to the WWTF by the CPS. This treated water would then be pumped to the Plant Site Tailings Basin for use as processing makeup water or used to backfill the East Pit once mining is completed. The Mine Site features are shown in Figure S-3.

##### *Plant Site*

The proposed Project would produce the copper concentrates and metallic precipitates at the former LTVSMC Processing Plant. The existing infrastructure at the Plant Site includes roads, railroads, electrical transmission lines, sanitary and potable water treatment facilities, and the beneficiation plant. The hydrometallurgical plant would be constructed during the mine development.

Beginning in the beneficiation plant, the bulk ore would be ground into a slurry and transferred to the flotation area where the base and precious metal sulfide minerals would be chemically separated from the non-metallic waste (tailings), cleaned, and sent to the hydrometallurgical plant. The tailings would be transferred as a slurry to Cell 2E in the Tailings Basin north of the Processing Plant (and expand into Cell 1E over the life of the Project). The slurry

solids would settle over time within the Tailings Basin pond and the pond water would be reused in the beneficiation plant. Prior to the completion of the hydrometallurgical plant, or during routine maintenance periods, the beneficiation plant would operate in a “concentrate only” mode. In this mode, the bulk copper/nickel concentrates would be separated for resale.

The hydrometallurgical process would separate the PGE, precious metals, and base metals from the beneficiation concentrates. Copper metal would be produced using solvent extraction and electrowinning processes; nickel, cobalt, and precious metals would be refined into metal concentrates and sent offsite for final processing. The hydrometallurgical wastes (residues) would be transferred to the hydrometallurgical residue cells, a series of four lined cells in the southwest corner of Cell 2W. The Plant Site features are shown in Figure S-4.

#### *Closure*

In general, Project facilities would be progressively reclaimed during the life of the Project such that only a portion would need to be reclaimed at Closure. The general components of the Project Closure Plan are:

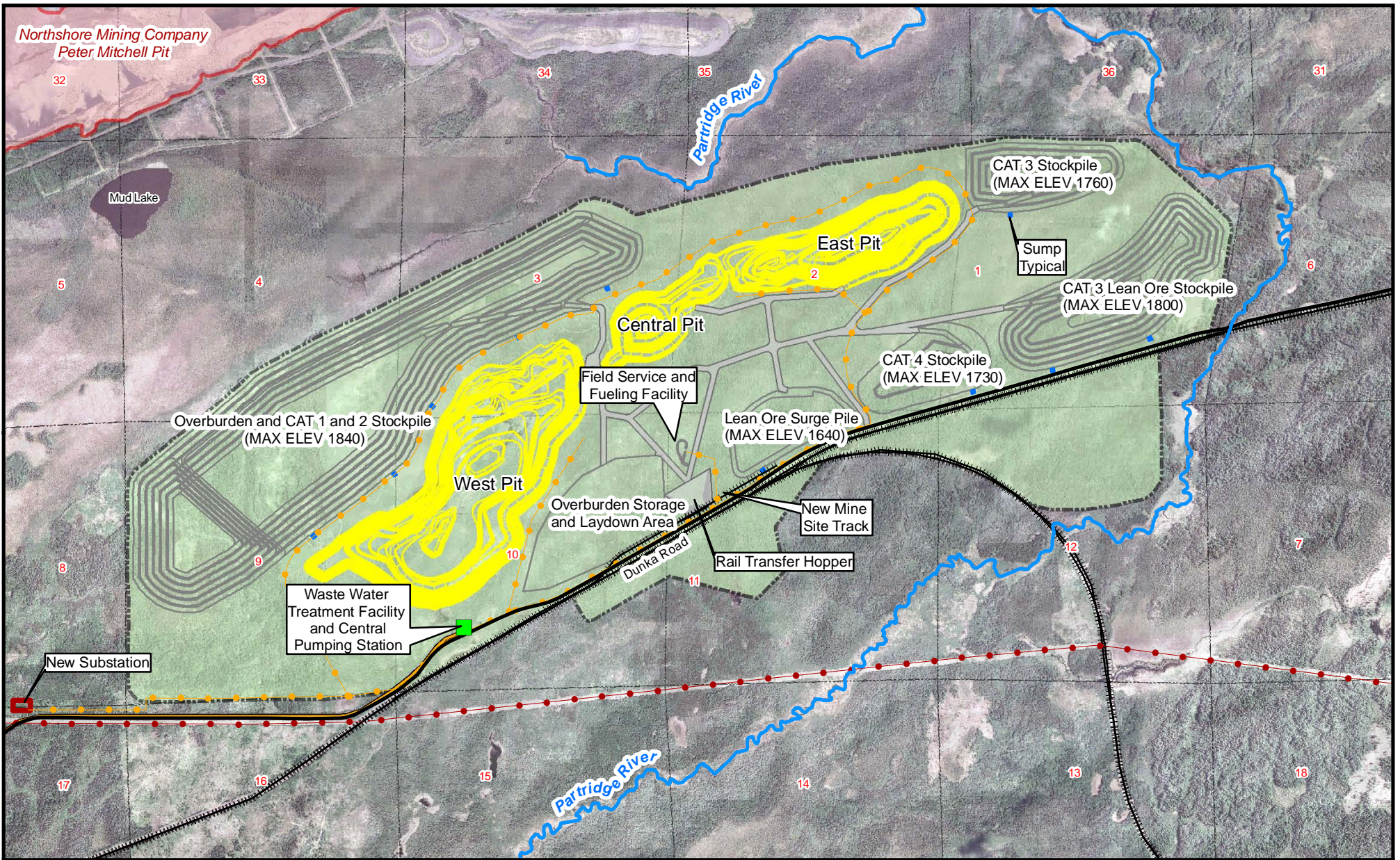
#### Mine Site

- Demolition and reclamation of the mine pit and Mine Site infrastructure, including the waste rock stockpiles.
- Wetland creation in the East Pit and West Pit outflow (partially as passive treatment systems). The West Pit overflow would ultimately be directed to the Partridge River.
- Collection and treatment of drainage from the waste rock stockpiles until water quality discharge limits are met.

- Reconfiguration of the dike and ditch system to convey runoff to the mine pits and restore natural flow paths.
- Construction of a gated entrance and perimeter fence.
- Inspection, maintenance, and reporting as required by the MPCA and the MnDNR.

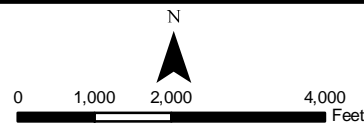
#### Plant Site

- Demolition and reclamation of Plant Site infrastructure.
- Maintenance and construction of surface water and groundwater controls in the Tailings Basin, including emergency channels and/or outfall structures for extreme precipitation events.
- Bentonite augmentation of the surface pond and wetland creation in the Tailings Basin.
- Inspection, maintenance, and reporting as required by the MPCA and the MnDNR.



Map/Data Source: Barr Engineering

- Dunka Road
- Railroad
- Mine to Plant Pipeline
- Pit Contours
- Stockpile Contours
- Powerlines**
- New 13.8KV Mine Power Distribution
- Existing 138KV Transmission Line
- Public Land Survey Section
- Stockpile Sumps
- Mine Site

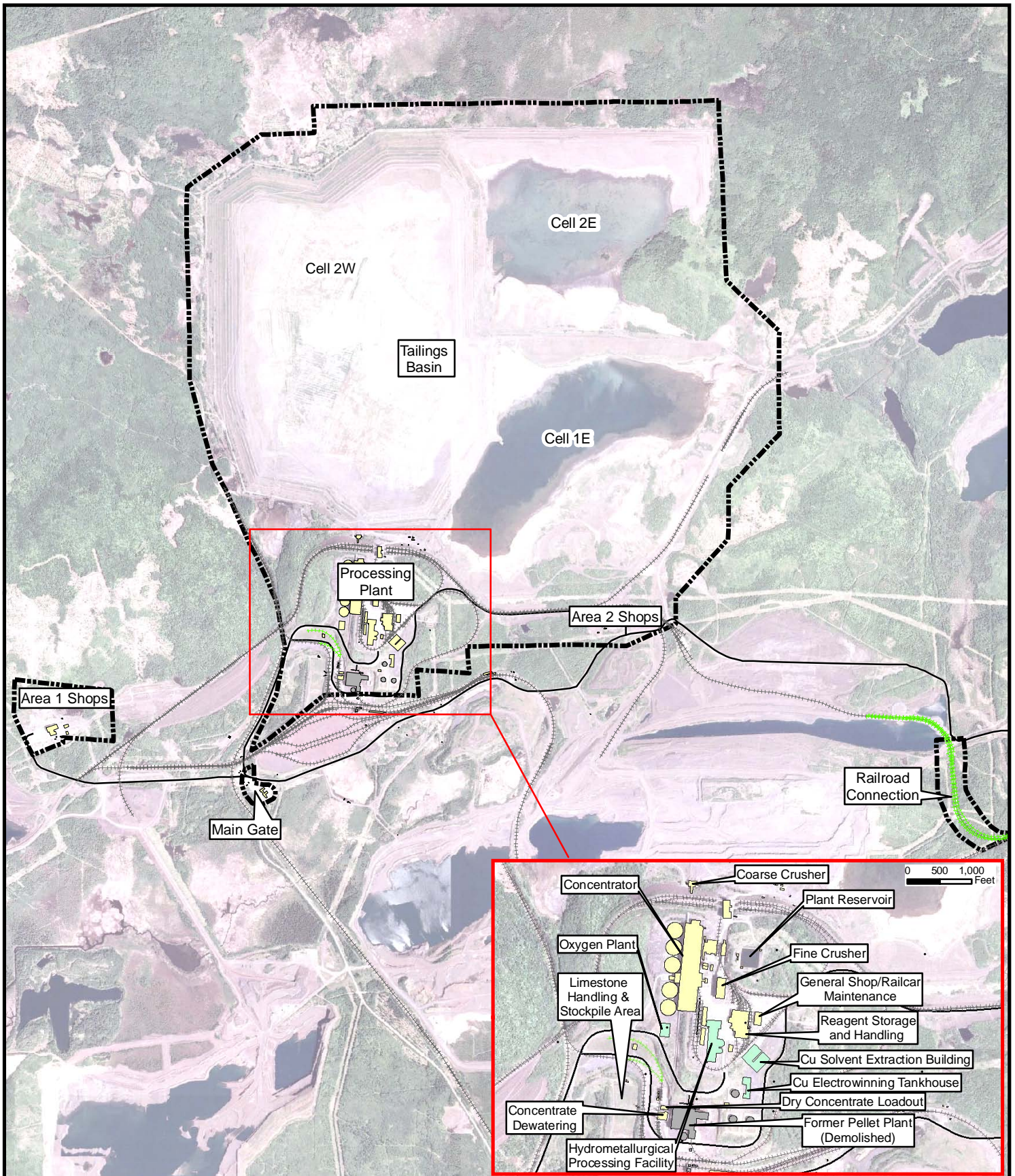


**Figure S-3**  
**Mine Site Layout Map (Proposed Action)**

**DRAFT**

**NorthMet Project**  
**PolyMet Mining, Inc.**  
**St. Louis County, Minnesota**

**October 2009**

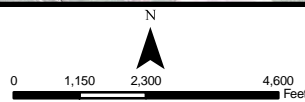


Map Source: Barr Engineering

- Private Roads
- New Railroad
- Existing Railroad
- Plant Site

**Buildings**

- Proposed Plant Structures (Reuse of Existing)
- Proposed Plant Structures
- Demolished Structures



**Figure S-4 DRAFT Plant Site Layout (All Actions)**

NorthMet Project  
PolyMet Mining, Inc.  
St. Louis County, Minnesota

October 2009

### III.B.2 Impacts of the Proposed Action

The DEIS considered the impacts of the proposed Project on 14 resources (see Section II.B) and determined that the proposed Project would have no effect or negligible effects related to noise, compatibility with plans and land use regulations, visual resources, and hazardous materials. The potential effects of the Proposed Action on the remaining ten resources are summarized below. Section III.G of this summary describes Native American tribal cooperating agency differences of opinion with the MnDNR and USACE conclusions. These differences are also presented within the full DEIS.

#### *Water Resources*

- Groundwater levels at the Mine Site – Drawdown expected during mine operations and filling of the West Pit until Year 65.
- Mine Site Groundwater Quality – Antimony, manganese, and nickel predicted to exceed USEPA primary Maximum Contaminant Levels (MCLs) or MDH Health Risk Limits, potentially for the long term at the Mine Site. Sulfate would exceed the groundwater evaluation criteria of 250 mg/L.
- Flows in the Upper Partridge River - Reduce average flow by approximately 1.5 cubic foot per second (cfs). Minimal absolute reduction in annual 7-day low flow (~0.1 cfs, or about 22%). No significant effect on river morphology or 100-year floodplain.
- Water Quality in the Upper Partridge River - All parameters predicted to meet all surface water quality standards at all locations during all flow conditions for all mine years. West Pit overflow in Closure is predicted to initially exceed standards for such parameters, but water quality is expected to improve over time and exceedances could be mitigated.
- Water levels in Colby Lake and Whitewater Reservoir - Negligible increase (0.03 ft) in average water level drawdown and improvement in maximum annual fluctuation and percentage days below critical elevation in Colby Lake. Water level fluctuations and average drawdown would increase at Whitewater Reservoir relative to existing conditions, but would be no greater than when LTVSMC was operating.
- Water Quality in Colby Lake – All parameters predicted to meet all surface water quality standards during all flow conditions for all mine years.
- Flows in the Lower Partridge River – Reduce average flows by as much 10.5 cfs (9%) and increase the frequency, but not the magnitude of low flows.
- Water Quality in the Lower Partridge River - All parameters predicted to meet all surface water quality standards during all flow conditions for all mine years.
- Groundwater Levels Downgradient of the Tailings Basin – Groundwater seepage would exceed aquifer flux capacity resulting in significant seepage upwelling and wetland impacts.
- Groundwater Quality Downgradient of the Tailings Basin – Groundwater seepage from the Tailings Basin would generally meet groundwater evaluation criteria with the exception of aluminum. Aluminum would exceed the USEPA secondary MCL standard for managing aesthetic considerations (not to protect human health), and is naturally found in elevated concentrations in the Project area.



- Flows in the Embarrass River - Net 6% increase in average flow during operations and net 1% decrease during Closure would have a negligible effect on flows in the Embarrass River.
- Water Quality in the Embarrass River – All parameters predicted to meet surface water quality standards during all flow conditions for all mine years.
- Waters that Contain Wild Rice - Increase in hydrologic variability and a 1 to 2 mg/L increase in sulfate concentrations in the Lower Partridge River, although sulfate concentrations are already elevated in this area (>100 mg/L). Negligible effect on seasonal hydrology of the Embarrass River, but an increase in sulfate concentrations under average flows of 20 mg/L predicted at PM-13, although sulfate concentrations are already somewhat elevated in this area (33 mg/L).
- Mercury in Water - Relatively high sulfate concentrations in seepage from the Tailings Basin would be released to wetlands north of the Tailings Basin and lakes downstream on the Embarrass River that represent “high risk situations” for mercury methylation. There is some uncertainty as to whether the West Pit overflow would meet the Lake Superior mercury standard, but this impact could be mitigated if it would occur.

In some cases there was a high degree of uncertainty regarding key input assumptions to the deterministic models for the West Pit flooding and water quality, groundwater quality downgradient of the Tailings Basin, waste rock stockpiles, and Partridge River surface water quality. In these cases, the DEIS used a probabilistic simulation, or Uncertainty Analysis, to assess whether the deterministic modeling produced conservative values for the release of

selected contaminants. The Uncertainty Analysis used probability to estimate a range of predicted water quality values, as opposed to the single value predictions from the deterministic simulations. The Uncertainty Analysis simulated virtually all possible combinations of input parameter values and their associated likelihood of occurrence. The Uncertainty Analysis was not applied to all water quality parameters, but only to a subset of parameters determined to be the most critical by the resource agencies and are discussed further in the DEIS.

The Uncertainty Analysis generally confirmed the results of the deterministic modeling; however, in some cases the results conflicted, which makes it difficult to draw firm conclusions regarding groundwater quality. Although the conservatism of some of the Uncertainty Analysis assumptions can be argued, it is clear that the Proposed Action would exceed groundwater evaluation criteria at the Mine Site for at least several parameters.

#### *Wetlands*

- Direct impacts to 804.3 acres at the Mine Site, 39.4 acres at the Plant Site and 10.5 acres along the transportation corridor, primarily consisting of coniferous and open bogs.
- Indirect impacts to 318.6 acres at the Mine Site and 349.3 acres at the Plant Site due to wetland fragmentation, noise, dust, and hydrologic effects.

#### *Vegetation*

- Loss of 269 acres of vegetative cover at the Plant Site and 1,454 acres of vegetative cover at the Mine Site.
- Revegetation would introduce non-native, invasive species.
- Direct impacts to the following endangered, threatened, or special

concern (ETSC) species: prairie moonwort (*Botrychium campestre*), pale moonwort (*B. pallidum*), least grapefern (*B. simplex*), neat spikerush, (*Eleocharis nitida*), lapland buttercup (*Rununculus lapponicus*), clustered bur-reed (*Spartinum glomeratum*), and Torrey's manna-grass (*Torreyochloa pallida*).

- Indirect impacts to pale moonwort, ternate grapefern (*B. regulosum*), least grapefern, floating marsh mallow (*Caltha natans*), neat spikerush, lapland buttercup, and clustered bur-reed due to changes in hydrology or other surface conditions.

#### *Wildlife*

- Overall loss of wildlife habitat including a potential loss of critical habitat for the Canada lynx and gray wolf (federally-listed species) and increased risk of vehicle strikes to Canada lynx and gray wolf at the Mine Site. No anticipated effects to other ETSC wildlife species.

#### *Fish and Macroinvertebrates*

- Increased duration and frequency of low flows on the Lower Partridge River could degrade aquatic habitat.
- Potential to increase methylmercury availability to fish. Discharge of sulfates from the Tailings Basin could increase methylmercury production in downgradient wetlands and the downstream Embarrass River chain of lakes.

#### *Air Quality*

- Project facilities and operations would result in additional greenhouse gas (GHG) emissions in the Arrowhead region.

#### *Cultural Resources*

- Adverse effects from the demolition of the Concentrator Building and facility

railroad spur at the Plant Site, both of which are eligible for inclusion on the National Register of Historic Places. The Building and railroad spur would be documented in accordance with the Minnesota Historic Preservation Office procedures prior to demolition.

- Potential loss of access to public lands for tribal use due to the land exchange; however PolyMet intends to propose private lands within the 1854 Ceded Territory for exchange.

#### *Socioeconomics*

- Beneficial effect through a local increase in employment, tax revenues, and spending.

#### *Geotechnical Stability*

- The NorthMet Tailings Basin and hydrometallurgical residue facility embankments would have a low margin of safety due to fines and underlying soils in the existing LTVSMC Tailings Basin.

#### *Cumulative Effects*

- General increase in air emissions; however, no significant effect on regional air quality. Cumulative increase in emission of CO<sub>2</sub> and other greenhouse gases (GHGs).
- Minimal effects on the hydrology of the St. Louis River Basin.
- Minimal effects on overall water quality in the St. Louis River Basin due to increased concentrations of metals and other water quality parameters; however, concentrations would remain below surface water standards.
- Cumulative increase in sulfate loadings to the Partridge, Embarrass, and St. Louis River.

- Cumulative loss of wildlife habitat and migration routes throughout the Iron Range.
- Overall Tribal loss of access to lands and natural resources within the 1854 Ceded Territory.

### III.C MINE SITE ALTERNATIVE

The Mine Site Alternative consists of a modified design or layout to reduce the Proposed Action's potential impacts to surface and ground water quality at the Mine Site. This alternative only applies to the Mine Site and no changes would be made to the Plant Site or the transportation corridor relative to the Proposed Action.

#### III.C.1 Mine Site Alternative Description

The fundamental difference in this alternative relative to the Proposed Action is the long-term treatment and disposal of the waste rock at the Mine Site. This alternative would subaqueously dispose of the most-reactive waste rock (Category 2, 3 and 4) in the East Pit while the least reactive waste rock (Category 1 and overburden) would remain as a permanent surface stockpile. The backfilling design capacity of the East Pit would be 125 million tons. Therefore, the pit can accommodate all the Category 2, 3, and 4 waste rock (<100 million tons). Since Category 2, 3, and 4 waste rock is more reactive, it may be preferable to dispose of this rock subaqueously to prevent oxidation.

The Category 2, 3, and 4 waste rock would be stored in temporary surface stockpiles until mining of the East Pit is completed (Year 11) and it becomes available for subaqueous waste rock disposal. The temporary surface stockpiles would be constructed with the same liner and cover systems and located within the footprint of the permanent Category 3 and 4 surface stockpiles described under the Proposed

Action. Limestone or lime may be added to the temporary stockpiles to neutralize acid formation. Once the East Pit is mined out, the Category 2, 3, and 4 waste rock would be placed into the pit and the temporary Category 3 Waste Rock Stockpile would be converted to a permanent Category 1 Waste Rock Stockpile. The Category 4 Waste Rock Stockpile would be permanently eliminated.

The Category 4 lean ore would be processed as it is mined, while the Category 3 lean ore would be temporarily stockpiled to determine whether current market conditions dictate it should be processed or disposed in the East Pit as waste rock. The temporary lean ore stockpiles would be located as described under the Proposed Action.

#### III.C.2 Impacts of the Mine Site Alternative

The Mine Site Alternative would have similar effects on all resources at the Mine Site as the Proposed Action; however, the subaqueous disposal of the most-reactive waste rock would affect the following resources at the Mine Site relative to the Proposed Action:

##### *Water Resources*

- Groundwater Quality at the Mine Site – Antimony (only) may exceed USEPA primary MCL and MDH Health Risk Limits.

It is clear that, relative to the Proposed Action, the Mine Site Alternative would ultimately result in reduced surface water and groundwater quality impacts in the Partridge River watershed for most parameters.

##### *Wetlands*

- Elimination of the permanent Category 4 Waste Rock Stockpile and Lean Ore Surge Pile would reduce direct wetland impacts at the Mine Site by 7.6 acres.

No change to the indirect wetland effects.

#### *Vegetation*

- Elimination of the permanent Category 4 Waste Rock Stockpile and Lean Ore Surge Pile would reduce permanent vegetative cover impacts at the Mine Site by 33 acres.

#### *Wildlife*

- Elimination of the permanent Category 4 Waste Rock Stockpile and Lean Ore Surge Pile would reduce permanent wildlife habitat impacts at the Mine Site by 33 acres.

#### *Fish and Macroinvertebrates*

- Surface water quality in the Partridge River watershed would experience less impact relative to the Proposed Action.

#### *Air Quality*

- Additional transport of the waste rock for subaqueous disposal in the East Pit would increase transportation emissions relative to the Proposed Action; however, this alternative would still comply with all ambient air quality standards.

### III.D TAILINGS BASIN ALTERNATIVE

The Tailings Basin Alternative consists of a modified design or layout to reduce the Proposed Action's potential impacts to surface and ground water quality at the Tailings Basin. This alternative is the combination of several potentially viable individual mitigation measures and resulted from the comprehensive mitigation planning efforts of the participating federal, state, and tribal agencies.

Under this alternative, no changes would be made to the Mine Site or the transportation corridor relative to the Proposed Action.

#### III.D.1 Tailings Basin Alternative Description

The fundamental difference of this alternative relative to the Proposed Action is the management of seepage and geotechnical stability in the Tailings Basin. The basic components of this Alternative are as follows:

- Prior to NorthMet operations, ground water pumping wells would be installed on the northern embankment of the Tailings Basin to capture seepage. There are two options for water management. The "Maximum Recycle Option" would return nearly the maximum amount of reusable seepage as make up water at the Plant Site and discharge the remaining seepage to the Partridge River. The "No Recycle Option" would pump all the seepage directly to the Partridge River. The discharge point for both options is downstream of the Colby Lake Outlet Structure. During Closure, the water would discharge directly to the Partridge River until water quantity, water quality, passive treatment, or other conditions indicate that collection of seepage is no longer needed.
- During Closure, a partial dry cap of either bentonite clay-amended or geomembrane plastic would be installed over the crest of the perimeter dams and the inner beach areas of the NorthMet Tailings Basin. Similar to the Proposed Action, the basin interior would receive bentonite augmentation to reduce infiltration and maintain a partial wet cap (pond). Surface runoff from the partial dry cap would flow to the central area of the basin to maintain the pond and dilute pond water. Emergency overflow structures would be

constructed to maintain the desired maximum pond elevations.

- Increased rock buttress material would be placed along the toe of the northern embankment of Cell 2E to improve geotechnical stability.

This alternative also includes demonstration testing of a Permeable Reactive Barrier (PRB) at a representative location north of the Tailings Basin during operations. The PRB test would assess whether such a passive treatment method would be effective in reducing constituents of concern (sulfate, antimony, and arsenic) in the Tailings Basin seepage. If successful, a permanent PRB could be built as a vertical unit and/or a horizontal surface unit (i.e., constructed wetland) through the flow path of the seepage from the Tailings Basin.

Further, if water quality monitoring demonstrated the need, treatment of the pumped seepage could be provided prior to discharge to the Partridge River. Based on current water quality modeling, the discharge of seepage would meet all surface water quality standards and no treatment would be needed.

### III.D.2 Impacts of the Tailings Basin Alternative

The Tailings Basin Alternative would have similar effects on all resources as the Proposed Action; however, the water quality management measures at the Tailings Basin would change the potential effects on the following resources relative to the Proposed Action:

#### *Water Resources*

- Water Levels in Colby Lake and Whitewater Reservoir - The Maximum Recycle Option should maintain higher water levels in Colby Lake and reduce water level fluctuations in Whitewater Reservoir by limiting the make-up water

withdrawals. The No Recycle Option would have negligible effects relative to the Proposed Action.

- Flows in the Lower Partridge River – Average flows would reduce by 3.4 (4%) to 5.4 (5%) cfs but should have negligible effects on river morphology.
- Water Quality in Lower Partridge River – Discharge of Tailings Basin seepage would reduce the assimilative capacity of the Lower Partridge River, but is not predicted to result in any exceedance of surface water standards.
- Groundwater Levels Downgradient of the Tailings Basin - Pumping by vertical wells would reduce the amount of unrecovered NorthMet seepage by approximately 95% during operations and Closure relative to existing conditions.
- Flows in the Embarrass River – Average flow reduced by 1.7 cfs (2%) during operations and 1.9 cfs (2%) during closure, which should have a negligible effect on river morphology.
- Waters that Contain Wild Rice – Reduced water level fluctuations but increased (1 to 9 mg/L) sulfate concentrations in the Lower Partridge River, although sulfate concentrations are already elevated (>100 mg/L) in this area.
- Mercury in Water – Significant reduction in mercury methylation risk in the wetlands north of the Tailings Basin by reducing sulfate loadings over 70% relative to existing conditions.

#### *Wetlands*

- The discharge pipeline corridor and East Basin and buttress expansions would directly affect 41.2 acres of scrub/shrub and open water wetlands.

- No indirect wetland impacts north of the Tailings Basin are expected due to seepage capture and discharge to the Lower Partridge River. This represents a reduction of 349.3 acres of indirect impacts relative to the Proposed Action.

#### *Vegetation*

- Loss of 45.4 acres of uplands along the water discharge pipeline right-of-way.
- Potential emigration of invasive species through natural migration and seed dispersal due to disturbance within the corridor.

#### *Fish and Macroinvertebrates*

- Reduced water level fluctuations and higher average flow rates in the Lower Partridge River relative to the Proposed Action.
- Potential reduction in methylmercury formation in wetlands north of the Tailings Basin and the Embarrass River.

#### *Geotechnical Stability*

- Increased stability of the Tailings Basin embankment due to increased buttress.

#### *Cumulative Effects*

- The Tailings Basin Alternative would discharge most Tailings Basin seepage to the Partridge River downstream of Colby Lake (not a high risk area for sulfate) and would reduce sulfate loading below existing conditions in the Embarrass River watershed.
- Cumulative decrease in the indirect wetland losses in the region.

### III.E NO ACTION ALTERNATIVE

The No Action Alternative was analyzed in the DEIS pursuant to the requirements of NEPA and MEPA.

#### III.E.1 No Action Alternative Description

Under the No Action Alternative, the proposed Project would not be constructed and open pit mining operations would not occur. At the greenfield Mine Site, PolyMet would reclaim the surface disturbance from the exploratory and development activities and existing surface uses (e.g., logging) would continue. At the brownfield Plant Site, Cliffs-Erie LLC would complete Closure and reclamation activities required under the existing Closure program. Additional Tailings Basin water quality impact measures may also be required.

#### III.E.2 Impacts of the No Action Alternative Impacts

This alternative would avoid the environmental and social impacts associated with the Proposed Action, Mine Site Alternative, and Tailings Basin Alternative; however, the social and economic benefits from the proposed Project (increased employment and economic revenue) would not occur.

### III.F MITIGATION MEASURES FOR THE PROJECT

The mitigation measures identified during scoping were analyzed, revised or eliminated, and additional mitigation measures were identified to create the agency-recommended mitigation measures (Table III-1).

**Table III-1 Summary of Mitigation Measures**

<b>Resource</b>	<b>Mitigation Measures</b>	<b>Applicability<sup>1</sup></b>
Water Resources	Increase the stockpile overliner buffer thickness to 24 to 36 inches	PA, MSA
	Provide chemical modification of Category 3 and 4 waste rock and Category 3 lean ore stockpiles	PA, MSA
	Enhance the Category 1 stockpile liner	PA, MSA
	Revise overburden management for sulfate, mercury and other heavy metals, if sampling indicated significant leaching concerns	PA, MSA
	Treat drainage from the Overburden Storage and Laydown Area as process water at the WWTF.	PA, MSA
	Increase the backfill of the East Pit to allow for a geomembrane cover over the entire exposed Virginia Formation	PA, MSA
	Expedite flooding of the West Pit	PA, MSA
	Treat West Pit overflows by various methods, if needed	PA, MSA
	Provide stormwater management at the Plant Site to control runoff from the Processing Plant area	PA, TBA
	Use alternative embankment material at the Tailings Basin	PA, TBA
	Provide an enhanced bentonite cap at the Tailings Basin	PA, TBA
	Provide enhanced Tailings Basin geomembrane cap	PA, TBA
Retain the seepage barrier to Second Creek after Closure	PA, TBA	
Install a Permeable Reactive Barrier north of the Tailings Basin, if needed	PA, TBA	
Provide Tailings Basin effluent treatment prior to discharge, if needed	TBA	
Wetlands	Complete compensatory wetland mitigation on-site, at the Aitkin Site, Hinckley Site, and others as determined through the Section 404 permit process with the USACE	All
	Maximize the elevation of the Category 1 and 2 stockpile	PA, MSA
	Implement a wetland monitoring plan to identify any additional indirect effects on wetlands and provide mitigation, as needed	All
Vegetation	Use a native species seed mix to stabilize disturbed areas during site reclamation	All
	Fence/Flag ETSC plant species along Dunka Road	PA, MSA
	Maximize the elevation of the Category 1 and 2 Waste Rock Stockpile	PA, MSA
	Add organic amendments to the Tailings Basin	PA, TBA
Wildlife	Vehicular prevention and avoidance techniques including speed limits and driver instructions for Dunka Road users	PA, MSA
	Limit access to the Mine Site during reclamation through signage, barriers, berms to facilitate habitat restoration and wildlife use	PA, MSA
Fish and Macroinvertebrates	Develop a mercury monitoring plan for the Mine Site	PA, MSA
Air Quality	No specific mitigation measures are identified at this time; however, additional mitigation could be considered during permitting and operational monitoring, as necessary, including in-state equivalent reductions, cross-sector partnerships, product collections, public owned treatment works, and research.	All

<b>Resource</b>	<b>Mitigation Measures</b>	<b>Applicability<sup>1</sup></b>
Noise	Adjust blast hole pattern and add delay weights to mitigate vibrations	PA, MSA
	Maintain air overpressure levels through delay weight reductions, appropriate stemming depth, use of shock tubes, and depth of burden	PA, MSA
	Avoid unfavorable atmospheric conditions during blasting	PA, MSA
	Blast on a consistent daily schedule	PA, MSA
Cultural Resources	Develop recordation plan for the Concentrator Building and portions of the facility railroad spur	PA, MSA
	PolyMet intends to propose private lands within the 1854 Ceded Territory for exchange with the USFS	All
Compatibility with Plans and Land Use Regulations	Use a native species seed mix during reclamation	All
Socioeconomics	No mitigation measures identified	All
Visual Resources	Direct operating lights downward to shield light sources	All
Hazardous Materials	No mitigation measures identified.	All
Geotechnical Stability	No specific mitigation measures identified at this time; however, additional mitigation to be considered during permitting and operational monitoring, as necessary, include increasing rock buttresses, dewatering LTV slimes, reducing stockpile height, and modifying benches to reduce slopes.	All

<sup>1</sup> PA - Proposed Action; MSA - Mine Site Alternative; TBA - Tailings Basin Alternative; All - All Alternatives.



### III.G AREAS OF MAJOR DIFFERENCES OF OPINION CONCERNING SIGNIFICANT IMPACTS

*Minnesota Rules*, part 4410.2300, subpart H requires that the RGU identify and briefly discuss major differences of opinion concerning significant impacts of the proposed project on the environment within the EIS. Similarly, CEQ regulations (40 C.F.R. Section 1502.9(a)) require the lead federal agency to “make every effort to disclose and discuss at appropriate points in the draft statement all major points of view on the environmental impacts of the alternatives including the proposed action.”

While the lead agencies assess resources of tribal concern in this document, and the USACE will continue to do so through the Section 106 consultation process, differences of opinion remain between the lead agencies and the tribal cooperating agencies. The tribal representatives view themselves as uniquely impacted by mining activities in the 1854 Ceded Territory and it has not been possible to reach agreement on a number of conclusions within the DEIS.

Rather than limiting inclusion of conflicting conclusions to those that are “major differences of opinion concerning significant impacts,” this DEIS includes almost all of the tribal position statements submitted in response to the July 2009 preliminary DEIS (Appendix D of the DEIS). This is in recognition that the document is a joint state and federal DEIS and that the tribal cooperating agencies have participated in the DEIS development through a memorandum of understanding.<sup>1</sup>

The differing opinions are included in footnotes throughout the DEIS. To the extent possible the DEIS uses the position

---

<sup>1</sup> *Revised Memorandum of Understanding* dated May 19, 2008 (Appendix C of the DEIS).

statements as received after tribal cooperating agency review of the July 2009 preliminary DEIS. Some of the tribal positions received led to a revision of the text to incorporate the position, in which case the original position is no longer needed and is not footnoted.

The main differences of opinion are summarized below:

- Potential groundwater quantity and quality impacts in the St. Louis River Basin including the impacts of drawdown from mine pit dewatering on groundwater quantity, the assumptions and results of the groundwater quality and quantity modeling in the DEIS, and the ability of the Project to meet long-term closure requirements relative to groundwater quantity and quality.
- Potential surface water quantity and quality impacts in the St. Louis River Basin including the potential to increase mercury concentrations, potential sulfate impacts to wild rice, applicability of the wild rice standard for surface water quality, leaching of metals to surface water, impacts to flow rates in the St. Louis River Basin, and the ability of the Project to meet long-term closure requirements relative to surface water quantity and quality.
- Potential direct and indirect wetland impacts in the St. Louis River Basin including the potential connectivity between groundwater and wetlands at the Mine Site and the impacts from changes to surface and groundwater quality and quantity; the assessment methodology, extent, and duration of direct and indirect wetland impacts from the Project; and the proposed wetland mitigation plan, including legacy clean-up responsibilities and compensatory mitigation ratios.

- Potential impacts to vegetative cover types, wildlife and aquatic habitat, and protected species in the 1854 Ceded Territory including species of tribal interest (e.g., wild rice and moose), the proposed use of invasive species and monocultures during reclamation, the cumulative effects of disturbance to protected species and wildlife corridors, and the potential for mercury accumulation in fish due to water quality changes from the Project.
- Potential impacts related to extent of noise impacts; the deposition, emission, and accumulation of air pollutants; and the impact of new mining features on the visual landscape in the 1854 Ceded Territory
- Potential environmental, social, and economic impacts to natural resources of tribal concern including wild rice, fish, and other wildlife within the 1854 Ceded Territory
- Potential environmental, social, and economic impacts of a land exchange on tribal land use within the 1854 Treaty Ceded Territory.

## IV. NEXT STEPS

### IV.A PUBLIC COMMENT PROCEDURES AND PUBLIC MEETING INFORMATION

The DEIS will be published and circulated for a public comment in accordance with MEPA requirements set forth in *Minnesota Rules*, chapter 4410, and with NEPA requirements. Public comments on the DEIS will be accepted during this period via written letter, e-mail, or fax to the agency contacts listed below and via written or oral comment at the public meetings.

The DEIS is available online at <http://www.dnr.state.mn.us/input/environmentalreview/polymet/index.html>. For further information, contact the MnDNR or USACE points of contact identified below.

Two public information meetings will take place during the DEIS comment period: one in the Hoyt Lakes area and one in the Minneapolis - St. Paul metropolitan area.

### IV.B FINAL EIS/ROD PROCEDURES

Comments on the DEIS will be taken into account in assessing proposed Project impacts and potential mitigation. Following the end of the DEIS comment period, responses to substantive comments will be prepared and a Final EIS will be issued. The MnDNR will review the Final EIS for adequacy with MEPA following issuance of the Final EIS and a ten-day comment period. The state notice of adequacy will be published in the EQB Monitor.

The USACE will prepare the federal Record of Decision (ROD) and issue a Public Notice regarding its availability no sooner than 30 days after the Final EIS is published. Appeals to the USACE must be received within 60 days of the ROD. The USACE will make a final decision on an appeal

within 90 days of the receipt of an acceptable appeal.

### IV.C AGENCY CONTACT INFORMATION

The MnDNR and USACE are co-lead agencies for preparation of the joint state-federal EIS for the proposed NorthMet Project. Comments, questions, and concerns regarding the DEIS should be addressed to the following individuals:

#### **MnDNR Contact:**

Stuart Arkley, EIS Project Manager  
Environmental Review Unit  
Division of Ecological Resources  
Minnesota Department of Natural Resources  
500 Lafayette Road  
St. Paul, Minnesota 55155-4025  
651.259.5089

651.297.1500 (FAX)

[Environmentalrev.Dnr@state.mn.us](mailto:Environmentalrev.Dnr@state.mn.us)  
(reference NorthMet in the subject line)

#### **USACE Contact:**

Jon K. Ahlness  
Regulatory Branch, St. Paul District  
U.S. Army Corps of Engineers  
190 Fifth Street East, Suite 401  
St. Paul, Minnesota 55101-1638  
651.290.5381

651.290.5330 (FAX)

[jon.k.ahlness@usace.army.mil](mailto:jon.k.ahlness@usace.army.mil)