US Army Corps of Engineers
St. Paul District

MNDNR

Project and Land Exchange Overview

PolyMet Mining, Inc. (PolyMet) is proposing to develop a mine and associated processing facilities for the extraction of copper, nickel, and platinum group elements (PGE) from the NorthMet Deposit in northeastern Minnesota. The mine would be the first of its kind in the state.

OVERVIEW OF THE PROPOSED MINE PROJECT

Where would the proposed NorthMet project be located?

The proposed NorthMet project would be located in the St. Louis River watershed on the eastern edge of the Mesabi Iron Range, about 6 miles south of Babbitt and about 1 mile south of the existing Northshore (iron-ore) Mine. Processing of the ore would take place at a former industrial site, the LTV taconite plant in Hoyt Lakes.

The total project area would include the open pit mine, a processing plant, tailings basin, and an existing 7-mile-long railroad and utilities corridor for the transportation of ore between the proposed mine and existing processing facility.

How long would the proposed NorthMet project last?

The proposed NorthMet project would have three major phases lasting:

- Pre-mining construction would last approximately 18 months and would include land-clearing, building renovation and construction, stockpile preparation, and utility upgrades.
- Mining operations would last approximately 20 years and would include ore mining and processing, water treatment, waste rock management, continued construction, and progressive reclamation.
- After the completion of mining activities, closure and post-closure maintenance would occur and would include timely infrastructure removal, long term water treatment, and final land reclamation. Maintenance, monitoring, and water treatment would be ongoing, the latter lasting as long as required in meeting water quality standards. All portions of the project would be financially assured under a Permit to Mine. Applicable financial protections would remain in place until the site is maintenance free, including water treatment.

What would the proposed NorthMet project involve?

The NorthMet deposit would be mined using conventional open-pit surface methods, such as blasting and excavation. During the mine's 20-year lifespan, approximately 533 million tons of ore and waste rock would be removed from the deposit. An average of 32,000 tons of ore would be processed each day. Annually, this would yield about 113,000 tons of copper concentrate, 18,000 tons of mixed (nickel/copper) hydroxide, and 500 tons of PGE precipitate.

There are about 1,580 acres of wetlands in the project area, of which about 913 acres would be directly affected and permanently impacted by activities related to the proposed NorthMet project. Activities that would directly affect wetlands include filling, excavation, construction and operation of the project. Some other wetlands are expected to have a modified or reduced function or value and would be considered indirectly affected. See Wetlands Fact Sheet for additional information.

In addition to activities directly related to mining, reclamation would occur during operations and after closure. Reclamation would include the closure and/or demolition of buildings and other infrastructure, the treatment of waste rock and water, and the restoration of vegetation, wetlands, and land, among other activities. In addition, surrounding bodies of water, wetlands, vegetation, wildlife, and other features of the environment would be monitored to prevent or mitigate potential future effects from the project.

Throughout the duration of the project, measures would be taken to eliminate or reduce the effects of the project on the surrounding environment. Financial assurance (provided by PolyMet) would ensure that environmental management, including planned water treatment needs, would occur for as long as needed to meet environmental standards.

OVERVIEW OF THE PROPOSED LAND EXCHANGE

In addition to the mining activities described above, PolyMet is proposing a land exchange to acquire the Forest Service lands on which proposed mining operations would occur. The exchange would involve the transfer of about 6,650.2 acres of federal lands from public to private ownership, and up to about 6,722.5 acres of land from private to public ownership, depending upon the results of the environmental analysis and real estate appraisals.

The federal lands proposed to transfer to PolyMet would include a large black spruce, tamarack, and cedar wetland, as well as Mud Lake. Yelp Creek and the Partridge River flow through the property. These federal lands are located immediately south of the Superior National Forest boundary and are bounded on the south by the former LTV Steel Mining Company railroad and the private Dunka Road.

All of the non-federal lands proposed for exchange are located within the 1854 Ceded Territory of northeastern Minnesota. There are no mining activities proposed on these lands, which would become part of the Superior National Forest.

For more information about the proposed actions, see the Executive Summary and Chapter 3.0 (Proposed Action and Alternatives) of the Final EIS. Also, refer to additional Fact Sheets about the NorthMet Mining Project and Land Exchange Final EIS:

1. **Project and Land Exchange Overview**
2. **What is the Environmental Review Process?**
3. **What's Changed since the Draft EIS?**
4. **What's Changed since the Supplemental Draft EIS?**
5. **Supplemental Draft EIS Comment Response Process**
6. **Effective Commenting on the Final EIS**
7. **A Guide to the Final EIS Document**
8. **Air Quality**

9. **Water Quantity**
10. **Wetlands**
11. **Water Quality**
12. **Wild Rice**
13. **Mercury**
14. **Threatened & Endangered Species**
15. **Cultural Resources**
16. **Land Exchange**
17. **Reclamation & Financial Assurance**
18. **Cumulative Effects**
19. **Tailings Basin Stability**
20. **Water Modeling**
21. **Northward Flowpath**
22. **Duration of Treatment & Financial Assurance**
23. **Human Health**