DEPARTMENT OF NATURAL RESOURCES

Project Overview



Twin Metals Minnesota (TMM) is proposing to develop a mine, ore processing, and tailings facilities for the extraction of copper, nickel, cobalt, and platinum group metals in Lake County, Minnesota.

Where would the proposed Twin Metals Minnesota project be located?

The proposed TMM project would be located approximately 9 miles southeast of the City of Ely, Minnesota, and approximately 11 miles northeast of the City of Babbitt, Minnesota. The project would target the valuable minerals within the Maturi Deposit, which is part of the Duluth Complex geologic formation. The proposed mine would be located within the Rainy River watershed.

As proposed, the project would include an underground mine, an ore processing facility, and a dry stack tailings facility. Over the course of the project, half of the tailings would be placed underground in areas of the mine where mining has been completed. The other half would be placed in an above-ground, dry stack tailings facility at a separate, nearby location.

What are the typical phases of a mining project like the Twin Metals Minnesota proposal?

Prior to construction of a mine the TMM project requires the mandatory preparation of an environmental impact statement (EIS) and issuance of numerous state, federal, and local permits. No permit applications have been submitted by TMM and no permit decisions or other approvals may be authorized until after completion of the EIS process.

If TMM's proposed project ultimately receives all necessary permits and approvals, it would have three major phases:

- **Pre-mining construction** would include land-clearing, construction of new buildings, transportation facilities and other structures, temporary stockpile preparation, and utility upgrades.
- **Mining operations** would last approximately 25 years and would include mining and ore processing, water and waste rock management, and progressive reclamation of the dry stack tailings facility.
- **Closure and post-closure maintenance** would occur after mining ceases at all facilities, including timely reclamation as required by Minnesota statute and rule. All portions of the project would require financial assurance under a permit to mine.

How does Twin Metals Minnesota propose to approach mining and waste management?

TMM proposes to mine the Maturi Deposit using conventional underground methods, such as blasting and excavation. The mining would be done 400 to 4,500 feet below the ground surface, and no mining would occur beneath Birch Lake. An average of 20,000 tons of ore would be processed each day. During the mine's proposed 25-year operational life, mine backfill would be placed underground. The backfill would be composed of waste rock and cemented thickened tailings. The remainder of the tailings not placed underground would be placed on the surface as a dry stack tailings facility.