



## OVERVIEW

Twin Metals Minnesota is pursuing the development and operation of an underground copper, nickel, platinum, palladium and gold (strategic metals) mining project in northeastern Minnesota. The project brings the promise of significant long-term jobs and economic development for generations in Minnesota.

**Offices:** Corporate office in St. Paul, Minn., operational headquarters in Ely, Minn., field office in Babbitt, Minn.

## INSIDE THE PROJECT

**Project Location:** The project area encompasses three NI 43-101 compliant mineral deposits – Maturi, Birch Lake and Spruce Road – located approximately 10 miles east of Babbitt, Minn., and 15 miles southeast of Ely, Minn.

**Underground Mine:** The Twin Metals Minnesota proposed underground mine will protect the environment by limiting surface impacts and providing opportunity for underground tailings storage.

**Duration of Mine Operation:** Twin Metals Minnesota's proposed underground mine has the potential to be operational for up to a century.

**Target Metals:** Copper, nickel, platinum, palladium and gold (strategic metals).

**Stewardship:** Twin Metals Minnesota is dedicated to protecting Minnesota's pristine wilderness, natural environment and recreational resources, and is strongly committed to developing an environmentally responsible mine project that exceeds state and federal standards.



## PROJECT DEVELOPMENT STATUS

**Prefeasibility Study (PFS):** Twin Metals Minnesota is currently conducting the project's PFS to evaluate such details as mine design, facility locations, mining rate, transportation and transmission corridors, economic benefits, job creation and environmental protection.

- Launched in October 2011, the PFS will result in a formal Mine Plan of Operation that will be proposed to multiple state and federal regulatory agencies for rigorous and lengthy environmental review.

**“In-Fill” Drilling:** A prominent PFS activity, “in-fill” drilling provides detailed information about the project’s targeted mineral deposits, including the depth and breadth of the deposits, mineral content and other geologic features.

**Core Samples:** Core samples taken from the deposits are studied to help engineer the future underground mine and to develop customized mineral processing and environmental protection technologies.

- Twin Metals’ in-fill drilling has reached depths approaching 5,000 feet.
- To date, Twin Metals Minnesota has drilled more than 365 holes, with many holes serving as the starting point for multiple “angle holes” into a deposit.
- Once drilling is completed at a site, the site is “reclaimed” to its natural state, meeting state and federal requirements and industry-best environmental protection practices.
- Drilling investment January-March 2012 totaled more than \$7.5 million and supported 100-120 full-time drilling jobs.

### Environmental Assessments:

- Twin Metals Minnesota and its predecessor Duluth Metals Limited have been conducting environmental studies and assessments for more than five years – and that effort is continuing under the PFS. Environmental information from in and around Twin Metals Minnesota’s land and mineral assets will feed into the formal multi-year Environmental Impact Study that will be conducted by state and federal regulatory agencies.
- Key environmental issues include surface water quality and hydrology, threatened and endangered species, air quality, plant life, wetlands and socioeconomic factors.

**Environmental and Operating Permits:** More than 100 federal and state environmental permits will be required to plan, construct and operate the proposed underground mine. Twin Metals Minnesota will work with multiple federal and state regulatory agencies and Native Tribes as part of the permitting process.

## JOBS, WAGES AND INVESTMENT

**Employees:** Twin Metals Minnesota currently has more than 40 Minnesota-based employees across its three offices. Through its project development activities, Twin Metals also supports more than 140-160 consulting/contractor jobs.

**Jobs for Generations:** The Twin Metals Minnesota project will create thousands of construction jobs and hundreds – potentially thousands – of long-term mining jobs.

- More than 12,000 Minnesota construction jobs will be created when all strategic metals mining projects in Minnesota move forward.\*
- More than 5,000 long-term Minnesota mining jobs will be created when all projects become operational.\*
- For every one mining job created in Minnesota another 2.6 spinoff jobs will also be created.\*

### Mining Wages:

- Average mining wages and benefits significantly outpace other industries in Minnesota.
- According to the U.S. Bureau of Labor Statistics, the average annual wage for a Minnesota mining job is \$72,365, more than \$25,000 above the all-industries average.
- Mining offers living wages that can support a family, sustain communities and drive economic growth.

### Capital Investment:

- More than \$160 million has been invested in exploration and project development to date.
- Long term, capital investment to develop and build the underground mine is anticipated to exceed \$2 billion.

**Supporting Minnesota Companies:** In 2011, Twin Metals Minnesota spent more than \$35 million, or 81 percent of total vendor spend, with Minnesota businesses.

**Tax Revenue and Royalties:** The underground mine will generate significant tax and royalty revenue for state and local governments as well as school districts.