

DEVELOPING MINNESOTA'S FIRST UNDERGROUND MINE IN 50 YEARS

Twin Metals Minnesota (TMM) is pursuing the development and operation of a modern underground copper, nickel and platinum group metals (PGM) mine in northeast Minnesota. The future underground mine is located approximately 11 miles northeast of the city of Babbitt and nine miles southeast of the city of Ely, and targets the valuable minerals of the Maturi Deposit. The Maturi Deposit is part of the Duluth Complex, a world-class copper-nickel-PGM geologic formation that spans a large portion of Minnesota's Arrowhead Region. TMM has studied and mapped this deposit over the past several years using data gathered from an extensive core sample drilling program, which is authorized under permits from state and federal regulatory agencies.

The Maturi Deposit is a layer of rock containing copper, nickel and PGM minerals that ranges from 50 to 200 feet in thickness, extending from the surface at a downward angle varying from 35 to 50 degrees. As currently mapped, the Maturi Deposit is roughly 4,200 feet deep and has a horizontal length of approximately 3.5 miles. The location, extreme depth and downward angle of the Maturi Deposit makes underground mining the only technically feasible approach to mining this valuable resource.



Underground mining provides many environmental benefits, including minimizing surface impacts from the mine project, reducing the excavation of waste rock, and providing the opportunity to reintroduce waste rock and mine tailings into the underground mine for long-term storage.

Twin Metals is in the process of developing detailed engineering, mining methods and environmental protection plans for the eventual construction and operation of the underground mine. These plans will serve as the foundation of a specific mine plan that is targeted for proposal to state and federal regulatory agencies sometime in 2018. If approved after extensive review by regulatory agencies, the Twin Metals Project would be the first underground mine in Minnesota in more than 50 years.