



NORTHSHORE MINING

FACT SHEET

Northshore Mining (NSM), which originally operated as Reserve Mining Company, was the first taconite processing facility in North America when it opened in 1956. It was purchased by Cyprus Minerals in 1989, and Cleveland-Cliffs became the sole owner of the property in 1994. Northshore Mining's Peter Mitchell Mine is located in Babbitt and the taconite is transported 47 miles by rail to the processing facility in Silver Bay, near Lake Superior.

Northshore operations consist of an open pit truck and shovel mine where two stages of crushing occur before the ore is transported along a wholly owned rail line to the plant site in Silver Bay. At the plant site, two additional stages of crushing occur before the ore is sent to the concentrator. The concentrator utilizes rod mills, ball mills and magnetic separation to produce a magnetite concentrate, which is delivered to the pellet plant located on-site. The plant site has its own ship loading port located on Lake Superior.

In 2018, Cliffs began a capital upgrade to produce low silica DR-grade pellets on a commercial scale. Throughout the construction project, management has maintained production of its standard iron ore pellets for its blast furnace customers. The upgrade project is expected to be completed in mid-2019. While overall production capacity at the processing facility will remain the same, Northshore will be able to produce up to 3.5 million long tons of DR-grade pellets. This will be the only facility in the United States capable of producing both DR-grade and regular blast furnace iron ore pellets.

Northshore Mining operates an Environmental Management System in compliance with ISO 14011:2015 requirements.

Operational Statistics

- **Type of Ore:** Magnetite
- **2018 Pellet Production:** 5.6 million gross tons
- **Annual Rated Capacity** (includes concentrate): 6.0 million tons

Annual Economic Impact

- **Workforce:** 529 employees
- **Payroll** (including benefits) \$85 million
- **Local services/supplies purchased:** \$200 million
- **Minnesota, local & taconite taxes:** \$16 million
- **Total Economic Impact:** \$300 million