

tunity to present our views on the proposed Surface Mining Reclamation Act of 1968.

HISTORY AND DEVELOPMENT

The history of iron mining in Minnesota dates back to July 31, 1884, with the first shipment of iron ore from the Soudan Mine on the Vermillion Iron Range. In the next decade the Mesabi Range itself came into production with the opening of the Mountain Iron Mine in 1892. In quick succession iron mines were discovered and opened in the Biwabik and Hibbing areas and near Virginia and Eveleth. Most of the early mines were operated as underground mines but the large deposits were soon converted into open pit operations typical of the Mesabi Iron Range.

As mining operations moved westward along the Mesabi, a third Minnesota iron range was being explored and developed. The Cuyuna Range, east and north of Brainerd, shipped its first iron ore in 1911 (see Appendix I, "Minnesota's Iron Ranges").

Underground mining was important in the early days but the last of the underground mines closed in 1967. Large-scale open pit mining has facilitated the rapid development of new mines and increased production. The Hull-Rust Mine at Hibbing is noted as the largest open pit iron ore mine in the world.

Advances in equipment and technology have permitted the change from direct shipping natural ore to the concentrating type natural ores and finally the complex separation of magnetic taconite ores. The present pellet plant capacity from Minnesota's seven taconite plants totals 32.4 million tons per year (see Appendix II). This represents over 65% of the nation's present pellet capacity. These seven taconite plants represent a total capital investment in excess of one billion dollars. Since the turn of the century, the nation's iron and steel needs have been met largely with iron ore shipped from the iron ore mines located on Minnesota's three iron ore ranges. Minnesota has produced over 60% of the nation's domestic iron ore during the past 84 years.

The discovery and development of Minnesota's three iron ranges came at an important time for our nation and for the world, for the 20th century, with its world wars and great economic growth, has demanded tremendous quantities of iron ore. Two world wars plus the Korean conflict have contributed greatly to the depletion of the national reserve. There are, however, over 45 billion tons of magnetic taconite reserve and considerably more tonnage of non-magnetic taconite still available in Minnesota. Iron ore is the basic raw material in the making of steel, and Minnesota is fortunate for its endowment of this important natural resource.

The economic future of Minnesota, the sustenance of the mining industry, and the strength of our nation rest with the continued wise conservation and development of this valuable resource.

STATE ENCOURAGEMENT OF MINING

Minnesota has shown a continuing concern to maintain a competitive position with other countries and the various states in the iron mining industry. We have demonstrated our desire to maintain this competitive position through numerous legislative actions.

The encouragement given the taconite industry illustrates this point, and is described as follows: Beginning in the early 1920's, and continuing for twenty years, the state legislature appropriated approximately \$20,000 per year to support the experiments of Dr. E. W. Davis, director of the University of Minnesota's Mines Experiment Station, and others relating to the concentration of iron minerals found in taconite ore. During this same period approximately \$30,000 to \$40,000 per year was made available for this same purpose from the regular budget of the University of Minnesota, a tax-supported institution. In 1941, near the end of the period in which Dr. Davis and others perfected the laboratory process for concentrating the iron minerals found in magnetic taconite, the legislature enacted laws which authorized leasing of state-owned taconite ore-bearing lands in larger units (240 acres) than that for iron ore (80 acres), and lowered the minimum rentals and royalties to be paid under a taconite lease. Most of the state-owned lands containing taconite ore were leased within a relatively short period after enactment of these laws. In 1943, the legislature authorized the conversion of iron ore permits to taconite leases, which, as mentioned above, provide lower rentals and royalties. In 1945, taconite companies were given the power of condemnation by the legislature, and also were authorized to use state