The Mine Permitting Process in Minnesota - Who, What, Where, and When

Mark J. Severson
Natural Resources Research Institute, University of Minnesota Duluth,
5013 Miller Trunk Highway, Duluth, MN 55811-1442
e-mail: mseverso@nrri.umn.edu

Interest in the Cu-Ni-PGE deposits of the Duluth Complex has been recently renewed due to advances in hyrometallurgical processes and increased PGE metal prices. Economic evaluations are currently being conducted for several of the deposits, and in some cases, initial steps have also been taken in order to obtain the various permits to mine. In Minnesota, the permitting process for a non-ferrous, metallic mine is complicated; involves dealing with numerous different federal, state, and local agencies; and as yet, has not been carried through to completion for establishment of either an open pit or underground mine. This project outlines each of the necessary permitting steps that are needed to develop a metallic mine, and provides time lines, or length of the various determination processes, for each type of permit that would be required. Also included are lists of agencies, contact persons, phone numbers, and e-mail addresses. All of the data generated in this project will be used to produce a report, and supplemental pamphlet, that fully describes what each permit entails.

At the forefront of the mine permitting process in Minnesota is an environmental review process consisting of preparation of an Environmental Impact Statement (EIS), and because an EIS is mandatory, it must be preceded by preparation of a scoping Environmental Assessment Worksheet (EAW). Many of the permits that are mining-related require this process to be completed (Table 1). The scoping EAW is designed to identify potentially significant issues (including possible environmental, sociological, economic, and health risk impacts) that will be associated with a proposed mine and will need further study in the EIS. Thus, the EAW is a "blueprint" for the EIS because it sets limits on what will be discussed further and at what level of detail. It is a standardized six-page questionnaire (31 questions), accompanied by numerous supplemental pages to fully answer the questions, and "typically" takes 90-120 days to complete. The EIS, which typically takes 280 days to complete (legally mandated time), is a thorough study of the issues defined in the EAW and provides information regarding environmental impacts and how they can be avoided/minimized. It considers and sets forth a series of "reasonable" alternatives (including the "no-build" alternative), possible permit conditions, and possible mitigation measures. The EIS does not approve or disapprove of a project; rather, it provides information and alternatives. A determination on the adequacy of the information provided in the EIS must be made before it can be used in determining whether to grant or deny any mine-related permit applications.

The Minnesota Department of Natural Resources (DNR) is the Responsible Government Unit (RGU) for both the scoping EAW and EIS. The EAW/EIS process should begin as soon as possible because the entire process could take around 1.5 years before a final adequacy decision can be made. Furthermore, no decisions on most mine-related permits can be made until after the EIS process has been completed (actually 25-90 days after the adequacy decision). It is extremely important to make early contact with all of the agencies that are responsible for granting permits for several reasons that include: 1. to insure that all issues relating to the various permits are included for study in the EIS; 2. to begin preparation on some of the permits so they can be issued as quickly as possible after the EIS is complete (some permits can take up to 1.5 years (or more) before decisions to grant or deny can be made); 3. to avoid duplication of efforts for the various permits and establish cooperation between the agencies; and 4. to get the public informed and involved to hopefully minimize later delays in the permitting process.

Table 1. *List of potential permits required to establish a non-ferrous, metallic mine in Minnesota.*

Permit	Agency	Approximate Application determination time*
Permit to Mine**	DNR Minerals	7-8 months
WCA-Wetlands Replacement Plan**	DNR Minerals	4-6 months
Water Appropriation Permit**	DNR Waters	< 2 months
Public Waters Work Permit**	DNR Waters	< 2 months
Dam Safety Permit**	DNR Waters	< 2 months
Part 70 - Air Quality Permit**	MPCA	1.5 years
NPDES/SDS Stormwater Permits (two - for Construction and Industrial Activity)	MPCA	< 2 months?
NPDES/SDS Wastewater Permits** (two - for industrial process wastewater and sewage)	MPCA	1.5 years
Hazardous Waste Permit**	MPCA	1-3 years
Section 404 Permit (discharges to wetlands)**	ACOE	120 days (unless Fed. EIS required?)
Section 10 Permit ? (Affects to "navigable" waters of the US)	ACOE	?
Section 401 Certification (wetland certification needed before 404 permit can be issued)	MPCA	60-120 days?
Water Treatment Plant Permits	MPCA	?
Local Permits - zoning, construction, bonding, etc	varies	"short" period

** = Minimum time to complete (assuming optimal conditions)* ***after*** *all data that are required to be submitted for the permit are complete.*

*** = Permit that by itself may require a mandatory EAW and/or EIS.*

Abbreviations: DNR = Department of Natural Resources; MPCA = Minnesota Pollution Control Agency; ACOE = Army Corps of Engineers; NPDES = National Pollutant Discharge Elimination System; SDS = State Disposal System; WCA = Wetland Conservation Act.