

Environmental Assessment

In Canada, environmental assessment (EA) is a primary process used as a basis for deciding whether to authorize a project, and for the terms and conditions to be included in various permits should authorization be granted. A framework of laws, regulations, procedures, and guidelines establishes the rules, steps, and activities of the process.

A well-coordinated EA of a proposed mining project can contribute significantly to effective planning of that project. EA is a process through which a wide range of expertise — including mining specialists, environmental experts, and persons knowledgeable about local conditions — can be brought into focus. EAs of mining projects generally require a whole-of-mine-life focus, from mine concept to mine closure. This includes designs from the outset to minimize disturbance and protect key habitats. Many mining companies in Canada have realized that this is ultimately the most cost-effective approach to planning and managing a mine and, specifically, to managing environmental effects.

For governments, EA provides a mechanism for coordinating the work of the various agencies that have some responsibility for the mining project in question. More fundamentally, it is an opportunity to ensure that the jurisdiction's environmental objectives are met.

The minerals and metals industry requires access to large areas of land to explore for mineral deposits. To increase the probability of successfully finding an economically viable mineral deposit, the industry requires access to large amounts of land. Once the exploration stage is completed, however, mining uses relatively small areas of land, on a temporary basis, to recover mineral resources. The mine may also require infrastructure in the form of road or rail access, airstrips, and power generation and transmission, all of which may increase access to remote areas. Modern mining practices and regulations ensure that much of the land used for mining will later be reclaimed for other uses.

Protected areas in Canada are created to ensure representation of natural regions; protect biodiversity, specific species, or wildlife habitat; preserve ecological integrity; or ensure public access to outstanding natural areas for recreation and tourism. The level of protection in protected areas varies, and mineral exploration and development in these areas may be prohibited, regulated, or managed, depending on which conservation objectives have been set. A sustainable development perspective to the creation of protected areas can help to ensure that future generations are not denied potential access to natural resources while at the same time meeting environmental objectives.

Focusing on Land Access Issues

Sustainable development means balancing industry's need for access to land and the need to protect biodiversity and preserve ecological integrity. In 1998, Canada produced a background paper entitled Land Access, Protected Areas and Sustainable Development, which clarifies, for the minerals and metals industry, current initiatives on this subject and suggests future options to further align Canada's environmental, social, and economic objectives. This paper is available on the Internet at <http://nrca.gc.ca/mms/pubs/land-e.pdf>.