

New Closure Guidance Published by ICMM: Planning for Integrated Mine Closure

By Dawn H. Garcia

The [International Council on Mining & Metals](#) (ICMM) has followed up the August 2008 publication, [Planning for Integrated Mine Closure](#), with a [Spanish-language version](#) (Planificación del Cierre Integrado de Minas: Equipo de Herramientas), which was published in a web-based format in September 2009.

The document was introduced at a recent workshop in Peru to mining companies, governmental agencies and non-governmental organizations. The text is a guide to mine closure planning with a focus on decision-making that incorporates the participation of both external parties and stakeholders.

The process is presented as “holistic” closure planning per the document introduction by Dr. John Groom, Chief Operating Officer of the ICMM.

One of the most important aspects of the [mine closure planning strategy](#), according to the document, is the stakeholders’ engagement with affected and interested parties throughout the mine life cycle.

It also recommends that stakeholder dialogue be initiated at the pre-feasibility stage, during conceptual closure planning, and throughout the [mine life cycle](#).

There are no technical discussions about [mine closure](#) methodology, such as prescriptive closure methods, presented in the document. Rather, the emphasis is on the process of planning, and guidance content includes topics such as setting closure goals, uncertainty in closure cost estimates based on the stage of planning, triggers for updates and estimating closure costs.

The ICMM is an industry-led organization that is composed of a governing structure made up of mining company CEOs. The work of the ICMM is done under multiple task forces of 30 or more senior company personnel that meet quarterly. These groups implement the recommendations of the governing structure, which has previously prioritized issues to be assigned to an individual task force.

A task force will typically use an outside consultant or an ICMM staff member to help write and produce documents, but he or she always works under the supervision and with the final approval of the task force.

According to Fernanda Diez, Communications Officer for ICMM, the organization’s governing structure decided that a closure guidance document was paramount for promotion of sustainable development.

Lack of mine closure has negatively colored the public perception of mining because abandoned mines have often leaked acid drainage and left scars on the landscape. Mines in the development phase have faced opposition to new mining because of this practice.

Closure planning is part of the mining industry’s aspiration to sustainable development and “integrated mine planning,” which means that environmental impacts are considered throughout the mine life cycle. These concepts incorporate responsible management, protection of human health and the reduction of potential environmental impacts.

“[Designing for closure](#)” has become a hot topic in the mining industry. The idea is to start planning for closure during the pre-feasibility and feasibility stages of a project.

The implementation of “designing for closure” and “integrated mine planning” concepts has a number of benefits for the mining operation. Companies need to show their stakeholders - stockholders, lending institutions, non-governmental organizations and the public - that their operations are environmentally responsible. Long-term benefits include greater support from the stakeholders, lower risk operations, reduced liabilities and easier financial funding.

As with other ICMM publications, [Planning for Integrated Mine Closure](#) is intended to be used in conjunction with previous ICMM documents. Some of the toolkits specified in the new closure guidance are previously-published documents for stakeholder engagement, risk/opportunity assessment and

ICMM
Consejo Internacional
de Minería y Metales

Planificación del Cierre Integrado de Minas: Equipo de Herramientas



The text is a guide to mine closure planning with a focus on decision-making that incorporates the participation of both external parties and stakeholders

management, biodiversity management and community development.

New tools introduced in this publication include company/community interactions to support integrated closure planning, knowledge platform mapping, typical headings for contextual information in a conceptual closure plan, brainstorming support tables for social and environmental goal setting, cost risk assessment for closure, change management worksheet and the domain model.

Most sets of tools are focused on planning processes and not on technical closure methods. The new ICMM guidelines will not tell readers how to close their heap leaches. Nor does the document list options to review when discussing closure methods. However, it provides a structure for setting up a meeting with the purpose of analyzing the risk associated with the heap leach and soliciting the participation of stakeholders.

Socio-Economic Challenges

Addressing [the socio-economic aspects of mining](#), at any stage of the mine life,



One of the most important aspects of the mine closure planning strategy, according to the document, is the stakeholders' engagement with affected and interested parties throughout the mine life cycle

can be a challenge, even for companies that have established corporate socio-economic goals. ICMM materials support the processes that companies incorporate into their activities.

Even though the publication is structured to guide planning from cradle to grave, a mining operation of any size could easily apply the practices to an operating mine at any time in the life cycle.

It should be noted, however, that the new ICMM toolkit does not put much emphasis on closure of exploration projects. In fact, the authors acknowledge that many exploration projects are never subjected to mine closure planning due to the early, uncertain nature of the project and the frequent buying and selling of exploration projects to a company that might undertake mining operations.

Other tricky subjects for closure planning include management changes that result in lack of attention to closure issues, unexpected or unplanned temporary (or permanent) closure and the complexity of estimating closure costs. The ICMM materials do not include suggestions on how to deal with these subjects.

Also in Spanish

The availability of guidance documents in Spanish is of huge benefit to the large Latin American mining community. Using a document written in a foreign language creates an additional level of difficulty in an inherently complex process.

Most publications in Spanish related to mine closure are country-specific and focused on laws and regulations, which has made them unique in that market. In the case of the newest toolkit, the English-language version was professionally translated and subsequently proof-read by a second contractor prior to publication. ICMM uses an "international" version of Spanish to make its documents country-neutral and most understandable.

Currently, ICMM does not have a policy about selecting the documents which will be translated into Spanish, but the demand has been noted and internal discussions indicate that there will be more in the near future. ■

Dawn H. Garcia is an analyst with [SRK Consulting](#).

Links and References

- [Design for Closure](#)
- [Gaining a Social License to Mine](#)
- [ICMM](#)
- [ICMM, 2008, Planning for Integrated Mine Closure](#)
- [ICMM, 2009, Planificación del Cierre Integrado de Minas: Equipo de Herramientas](#)
- [Mine Closure: Papers and Cases](#)
- [Mine Closure Planning](#)
- [Mine Life Cycle](#)
- [Robertson Consulting Group](#)
- [SRK Consulting](#)
- [The Road to Mine Action and Development: The Life-Cycle Perspective of Mine Action](#)

Click here for full list of links:
<http://go.mining.com/jan10-a8>