



STRATEGIC PLAN FOR
ISO / TC 82 / SC 7



C O N T E X T



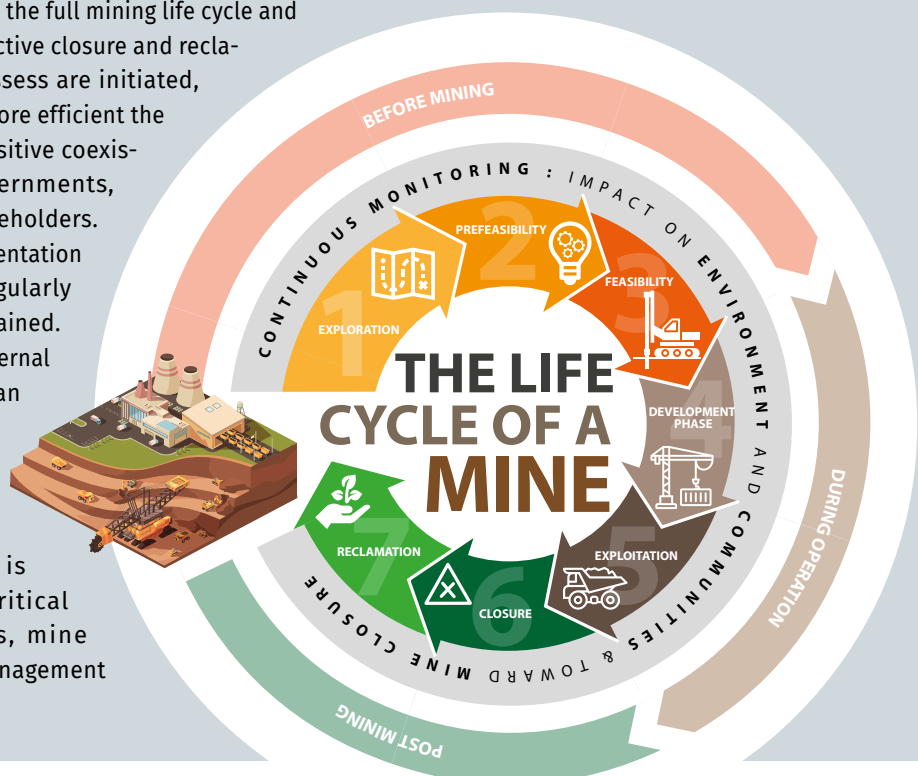
The mining industry provides raw materials essential for the functioning of the economy and society in general, with the mining sector contributing significantly to the socio-economic fabric of many countries. However, this industrial activity also has attracted negative sentiment, notably due to short and long term impacts that can extend beyond mining extraction. Technological advances enable larger and deeper mines which contribute to a greater physical scale and community awareness of mining. This means that mine closure and reclamation management are also gaining greater scrutiny.

Consequently, there is increasing societal attention being given to the environmental as well as social impacts resulting from mining. It therefore is of great importance to articulate and promote leading practices, particularly those that allow for increased community and other stakeholder engagement. In this way, it is possible to demonstrate sustainable development principles and practices for mining, that are applicable globally to further enhance the significant economic and social benefits provided by the activity.

Effective mine closure and reclamation processes reduce potential mining impacts over the full mining life cycle and beyond. The sooner that effective closure and reclamation management processes are initiated, planned and designed, the more efficient the outcomes are in terms of positive coexistence between mines, governments, communities and other stakeholders. Closure planning and implementation are most effective when regularly reviewed, improved and sustained. Positive relationships with internal and external stakeholders can be built through intentional engagement that identifies and addresses risks and opportunities. Part of this process is to identify and resolve critical gaps in knowledge. Thus, mine closure and reclamation management

should be a continuous process that starts early, is integrated with all mining activities and evolves over the life cycle of a mine.

To support these principles, the ISO TC 82 (mining) committee launched a specific Subcommittee, "ISO/TC 82/SC 7" in 2014 to address standardization of "Mine Closure and Reclamation Management" (MC&RM). This Strategic Plan introduces the mission of this Subcommittee.



MISSION OF ISO/TC 82/SC 7

To develop International Standards and complementary documents, which when applied, will prevent and mitigate long term mining impacts and create environmental and socio-economic value through the mine closure and reclamation management process.



SCOPE

ISO/TC 82/SC 7 produces International Standards and complementary documents (guidelines, technical reports...) that address all lifecycle stages of resource development, including: design, development, mining, temporary suspension of operations, cessation of mining, closure, post-closure monitoring and management, along with the effective transition to post-closure use. While safety and health aspects related to the active mining workplace are not considered in the Subcommittee, post-closure health and safety risks, monitoring/maintenance, social aspects of closure, human and animal exposure and use of the post-mining landscape will be addressed.

Planning for mine closure and reclamation should be a key objective to reduce mining impacts. Unfortunately, many improperly closed mines already exist around the world. As a result, closure and reclamation management International Standards will not only benefit for new mines, but also for existing (mid-life mines) and legacy mines (with negative impacts), where closure and reclamation planning has not yet been properly implemented. The development and application of dedicated International Standards on this topic will help to mitigate negative impacts associated with mining and will provide opportunities for value creation throughout the mine closure and reclamation management process.



E X P E C T E D B E N E F I T S

Thus, the Subcommittee addresses new mines, as well as active and already abandoned mines. Mine closure and reclamation management is very broad in scope. It integrates many technical subjects such as water, subsidence, tailings, monitoring, landform design as well as social aspects such as community and other external stakeholder engagement, land use planning and management, integration of cultural elements. Effective mine closure and reclamation understanding and practices evolve over time. They start with initial closure planning during mine design to implementation during mining, through progressive reclamation concurrent with operations and continue through to preparation for cessation of mining, and completion of decommissioning and closure. The process must also address long-term maintenance and monitoring whilst also understanding the expectations of internal and external stakeholders.

To encourage an integrated approach that is globally applicable, ISO/TC 82/SC 7 appoints Working Groups formed by international members with appropriate expertise and experience to develop standards. It is also charged with the regular review and updating of International Standards for mine closure and reclamation whilst connecting with other ISO Committees working on related International Standards.

By promoting voluntary and proactive mine closure and reclamation International Standards, ISO/TC 82/SC 7 aims to reduce potential impacts of mining activity on local communities and the environment and to promote positive re-use of land after mine closure. Additionally, mine closure and reclamation International Standards have the potential to promote constructive dialogue between stakeholders. The Subcommittee is developing International Standards and complementary documents accessible to a wide range of users. To address similar objectives, International Standards offer a unique opportunity to develop leading practice standards through an international consensus process.

The family of Mine Closure and Reclamation Management standards will support the needs of a range of stakeholders:

- **Mine operators:** to demonstrate that their proposed mining procedures are aligned with global leading practices. Standards support small and start-up mining companies with limited resources and capacity to develop their own internal standards;
- **Public authorities:** to align environmental and socio-economic aspects of regulation with leading practices. In cases of inadequate guidance, standards can articulate and facilitate effective closure and reclamation;
- **External stakeholders:** to benchmark technical solutions proposed by local mining operators with leading practices for environmental protection and socio-economic benefit as outlined in standards, thereby providing a foundation for meaningful engagement.

PARTICIPATION

ISO/TC 82/SC 7 first met officially in September 2014. Since then, the membership is continuously growing. Consult the dedicated ISO website to identify current participating and observing members (<https://www.iso.org/committee/5052041.html>).

For issued ballots, voting is limited to participating members. Observing members can participate in meetings and transmit observations on standard projects, but they cannot contribute to voting processes. Countries are encouraged to offer comments and additional documents throughout their development process as well as nominate international members to participate on specific International Standards development projects.

Interested experts wishing to engage within ISO/TC 82/SC 7 should contact their national member body to ISO (see <https://www.iso.org/members.html>).

An annual Plenary meeting of the Subcommittee gathers active members, usually coinciding with the Plenary of ISO/TC 82 (the 'parent committee'). This also offers the opportunity for Working Groups (WGs) to schedule face-to-face meetings for Plenary attendees with the support of ISO staff and local meeting organizers. Outside of the Plenary, Working Groups also organize other regular meetings to develop projects (e.g., via web-based or telephone conferences).

For each new project, a working group leader is nominated as International Convenor. The recommended development track for ISO standards is three years. There is also the possibility to 'fast track' standards over two years.

For specific information concerning International Standards elaboration, please consult ISO process ([Development process of International Standards](#)).



STRATEGIC AGENDA

Potential topics of relevance to Mine Closure and Reclamation Management are numerous. To avoid overloading expert volunteer involvement, a Strategic Agenda is described here to identify high-priority themes to be addressed in the coming years. The agenda will be regularly reviewed and adapted, in the context of progressive development of standards and emergence of new issues and priorities. Future projects can refer to globally-relevant multi-disciplinary themes (Figure 1), or be more narrowly focused on single disciplinary areas where the need to develop a standard is demonstrated. The following figure presents the themes in Mine Closure and Reclamation considered by the Strategic Plan, including those currently under development, as well as new initiatives proposed for coming years.

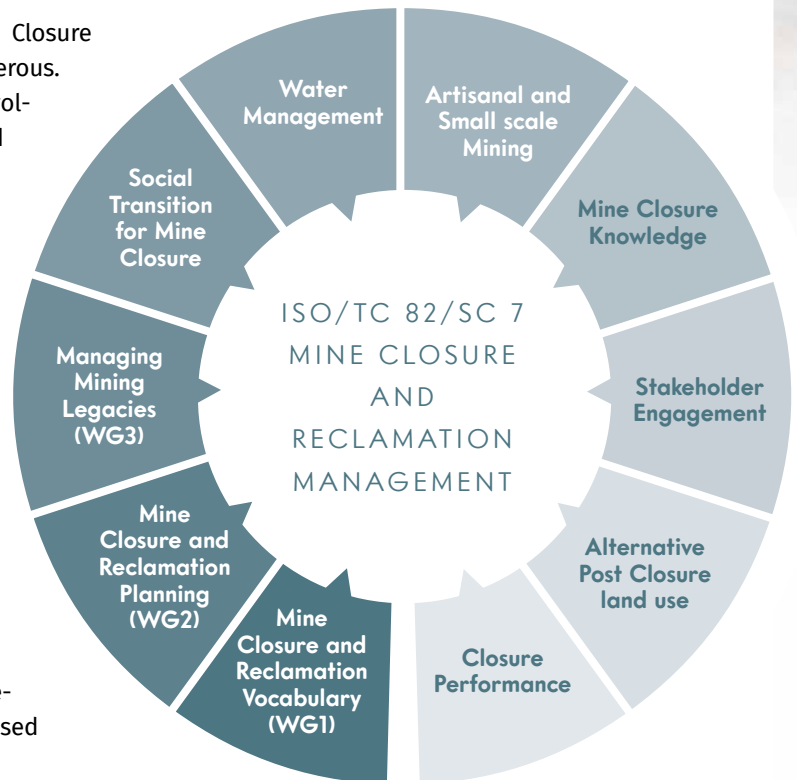


FIGURE 1: Proposed themes for future standards to be addressed within ISO/TC 82/SC 7

CONTACT POINTS:

Chair : Christophe Didier
c.didier@brgm.fr

Secretariat : Soondong Kwon
sdkwon@mireco.or.kr

Website :

<https://www.iso.org/committee/5052041.html>