

Project 1.9

Mine Closure Guidance: Review and Comparative Analysis

Background

Increasingly stringent societal expectations and the drive towards sustainability have resulted in significant enhancements in mine closure planning and implementation by industry. Most mining jurisdictions and leading international industry institutions have also enhanced mine closure policy and procedures.

Mine closure is a complex, multidisciplinary process, requiring coordinated and ongoing effort from industry, governments, landholders and communities. Ideally commencing before mine development begins, an effective process should be designed to:

- establish a shared vision for post-mining land use in consultation with landholders, communities and stakeholders. Rigorous and regularly updated mine closure plans supported by indicative cost estimates and rehabilitation milestones should be included. This aims to give confidence that remediation will be to a contemporary standard while acknowledging that mine plans, social expectations and environmental standards evolve over time.
- ensure the site/s are safe, geotechnically stable, non-polluting and capable of sustaining an agreed, ideally beneficial, post-mining land use.
- plan for the social and economic transition of workers and local economies following closure.
- provide adequate financial assurance so the responsible government can affect closure plans even if the company fails to honour its closure-related liabilities and commitments.
- relinquish (return responsibility for the lease area) the site to the relevant government or another party at an agreed point.

Why the project?

To inform improvements to its regulatory regime, the Northern Territory Government has requested a comparative analysis of selected leading and international mine closure guidance. Project analysis will help the government to identify which guidance may best suit its needs, subject to adaptation to local condition and filling potential gaps.

In addition to this analysis, it is envisaged the project will produce a generalised version of the comparative analysis that may be useful for other jurisdictions.

Furthermore, project findings could provide evidence to inform a future mine closure and transition framework for use through Australia. Such a framework could inform local approaches with the aim of supporting consistently high processes and outcomes.

Project scope

After consideration, it was decided the comparative analysis should include guidance by international institutions such as the World Bank, the International Council on Mining and Metals, the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development and International Standards Organisation. Towards Sustainable Mining, which has been adopted by the Minerals Council of Australia, is also included.

National guidance by the Australian Government and Queensland, Victoria and Western Australia will also be considered.

Approach

University of Western Australia researchers will undertake the project in consultation with identified regulatory bodies and mining representatives and companies. This consultation will help understand expectations and inform analysis.

Others key representative bodies in the Northern Territory, such as Aboriginal land councils, farming and pastoral associations, will be identified for later consultation by the NT Government. The comparative analysis will support informed consultation.

Timeline

Commenced in mid-2023, and due for finalisation in early 2024.

Project Methodology

To enable valid comparison, the content of various guidance will be characterised and 'sliced' by:

- different domains (such as technical, social and environment)
- procedural themes common across different documents but dealt with to varied degrees.

This process will highlight the strengths and weaknesses of different regimes that may be compared using some form of qualitative weighting of individual attributes regarding effectiveness in facilitating mine closure planning and compliance.

Information will be collected in tabulated form with final publications.



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