

Rehabilitation of the Latrobe Valley Coal Mines

Integrating regulation of mine rehabilitation and planning for land and water use

The Latrobe Valley coal-fired energy industry is experiencing a transition hastened by a serious coal mine fire in 2014 and climate change. The mines and associated power stations have either closed (Hazelwood 2017) or are scheduled to close (Yallourn 2028 and Loy Yang 2035) with final rehabilitation to follow. With the Promulgation of The Mineral Resources (*Sustainable Development*) Act 1990 (MRSD Act) regulation in September 2022, which integrates with the operation of land use, water use, and climate change legislation, the Latrobe Valley mine licensees have three years from 1 October 2022 to make a new 'Declared Mine Rehabilitation Plan' (DMRP) for each of their mines.

KEY FINDINGS

- Pit lakes have long been approved for Latrobe Valley mine rehabilitation as the most likely economically viable option to mitigate post-mining risks of instability or fire. Large volumes of water would be required over decades to fill the lakes. In a drying climate, there is concern that such a large allocation of water may be inconsistent with water resources policy and law, re: allocating water to existing and alternative post-mine land uses and environmental purposes. Rehabilitation alternatives remain open.
- The MRSD Act reforms clarify rehabilitation, closure, and post-closure obligations of the mine licensees, creating a special regime for 'declared mine land' including enhanced bonds and a post-closure fund. Mine licensees are responsible for rehabilitation and post-closure arrangements, so the DMRP must include a post-closure plan, including monitoring and maintenance.
- New requirements include a community consultation plan to ensure mine licensees consult the community and explain how proposed post-mine land uses consider their views. The DMRP must propose a final rehabilitated landform that is safe, stable, and sustainable; criteria for measuring rehabilitation completion with a milestones schedule; and a post-rehabilitation risk assessment. DMRP approval is integrated with the land use planning approvals and environmental impact assessment procedures.
- The licensee's closure application must meet the DMRP closure criteria. If agreed with the Minister, the Minister may return the bond and consent to the surrender of the mine licence. If not agreed, the Minister may cancel the licence, pay the bond into the post-closure fund, and take control.



THE CHALLENGE

How could the new legal framework devise and meet a rehabilitation vision acceptable to the community, industry, and government? The reforms had to establish an institution and instrument unique to Australian mining law: the Mine Land Rehabilitation Authority (MLRA) and the Latrobe Valley Regional Rehabilitation Strategy (LVRRS).

The MLRA's statutory objectives assure the Victorian community that public sector bodies and mine licensees are implementing the LVRRS and are planning for the rehabilitation and ongoing management of the declared mine land; and promoting community and Latrobe Valley stakeholder participation in the implementation of the LVRRS. The MLRA monitors and evaluates the LVRRS, among other responsibilities.

The LVRRS was made by the Minister, published in June 2020, and will be reviewed every three years. It coordinates the coal mining and power generation industries' and communities' engagement with government agencies in the regional rehabilitation. It's also an integrative mechanism to link the regulatory frameworks for land and water use planning to the administration of the MRSD Act. It assesses the pit lake rehabilitation option, but alternative rehabilitation options remain open.

Victorian regulatory framework for regional rehabilitation

Mineral Resources (Sustainable Development) Act 1990 (Vic)

- Mine Licence tenure > Work & Rehabilitation Plans > Declared Mine Rehabilitation Plans (DMRP) as variations of current work plans for approval by Department Head
- DMRP must propose a rehabilitated landform that is safe, stable and sustainable
- Mine licensees' duties to consult community and present a community consultation plan
- Process for mine licensee to apply for Minister's determination that DMRP closure criteria have been met
- Mine Land Rehabilitation Authority oversees Minister's Latrobe Valley Regional Rehabilitation Strategy & advises on draft DMRP

Water Act 1989 (Vic)

- Resource planning and allocation human use & environment

Climate Change Act 2017 (Vic)

- Climate Change Strategy 2021: renewable energy is 'an obvious choice to replace our ageing coal-fired generators'



Planning & Environment Act 1987 (Vic)

- Land use planning and development regulation integrates with MRSD Act

Environment Effects Act 1978 (Vic)

- Planning permit not required if environment effects statement (EES)
- EES leads to advisory recommendation

Latrobe Valley Regional Rehabilitation Strategy

- Coordinates coal mining and power generation industries' and communities' engagement with government
- Integrates water, land use, and climate considerations into rehabilitation planning

THE OPPORTUNITY

This is part of a broader project on mapping regulation of mine closure. The regulatory framework for the rehabilitation of Latrobe Valley declared mine lands underpins, in part, the opportunity and obligation of the mine licensees, in consultation with the community and associated industries, to prepare in the next three years DMRPs for government agencies' approvals.

OUTCOMES

The case study report is an informational resource for all involved to understand the rehabilitation planning and implementation process.

NEXT STEPS

A range of scientific, technical, social, and economic questions will arise as the mine licensees prepare the DMRPs, especially in considering the post-mine land use options. Some questions may require an understanding of the regulatory framework. The legal understanding in this case study report can be used to identify gaps in the regulatory understanding and propose further legal research.

PROJECT PARTNERS

Mine Land Rehabilitation Authority, Victoria; Victorian Government Departments of Environment, Land, Water and Planning and of Jobs, Precincts and Regions.

PROJECT REPORTS

REVIEW FULL REPORT

Three case studies, including the above report and:

Downes, L., Gardner, A. (May 2022). Post Mining Land Use – Practice Mapping Options: Ensham Coal Mine Case Study. CRC TIME Ltd.

Brown, N. (May 2022). Regulation of Mine Closure Planning and Pilbara Agreements Case Study. CRC TIME Ltd.

CONTACT

E info@crctime.com.au **T** +61 (08) 9263 9805

ABOUT US

The Cooperative Research Centre for Transformations in Mining Economies is part of Australia's national innovation ecosystem. Our diverse partnership brings scale, collaboration and coordinated investment to tackle the most complex mine closure and post-mine transition challenges. Together we're rethinking what's possible to improve outcomes for people, communities, the environment and industry.

We acknowledge the traditional custodians across all the lands on which we live and work, and we pay our respects to Elders both past and present.