



SGM Environmental

Creating enduring value

## SGME VALUES

Honest



Trust



Innovation



Safety



## Progressive rehabilitation & closure planning, progressive certification and estimated rehabilitation cost

Recent rehabilitation reforms have brought mine closure and rehabilitation planning to the forefront. Amendments to the *Environmental Protection Act 1994* means that mines must plan for and start progressive rehabilitation during operations. The focus has been drawn away from simple, end of mine closure concepts, towards progressive strategies that are implemented throughout the life cycle.

The regulatory tool used to implement these requirements is the progressive rehabilitation and closure plan (PRC plan). The intent of the PRC plan is to maximise progressive rehabilitation, ensure consultation with affected stakeholders and clearly define the condition that rehabilitated land must meet before it can be surrendered.

When submitting a site-specific application for an environmental authority for a new mining activity relating to a mining lease, companies are required to develop and submit a PRC plan.

Existing mines will be transitioned into the PRC plan framework by November 2022. This poses unique challenges and will, in many instances, require reflection upon current rehabilitation plans, technical investigation, changes to final land outcomes, and even amendment to the environmental authority.

The estimated rehabilitation cost (ERC) is the cost to rehabilitate land on which mining is carried out and is the total potential cost to the Queensland Government for rehabilitation if the owner fails to finish rehabilitation.

Progressive certification involves staged rehabilitation, formal assessment and acceptance that the rehabilitation meets the conditions of the environmental authority. Any application for progressive certification must include a progressive rehabilitation report and if approved may result in the amendment of the PRC plan schedule and a reduction in the ERC.

SGME is focused on delivering innovative and successful closure planning. Our experienced team offers our clients comprehensive insight and step-by-step guidance through the complex and evolving legislative requirements for PRC plans, progressive certification and ERC calculations.

## KEY CONSIDERATIONS IN MINE CLOSURE

1. Mines must plan for closure and rehabilitation from the earliest stages of development
2. Closure and rehabilitation planning must be integrated into operational activities
3. Closure and rehabilitation planning must seek the best possible use of land
4. Progressive certification can reduce your ERC and progressive rehabilitation obligations
5. The project must be designed so that the full cost of closure and rehabilitation can be met by the owner

## OUR APPROACH

**At SGME we will work with you to create new land resources from mine remnants to bring future value to your mine site. We will advocate strongly for you and guide you through the process of closing your mine, from planning and decommissioning through to rehabilitation and transition to a sustainable future land use. We will help you to understand the unique risks that face your mine and provide you with innovative solutions that reduce your risk to acceptable levels while not compromising on government and community expectations.**

### Past projects

- 1 Lady Annie Mine, progressive rehabilitation and closure plan and estimated rehabilitation cost, Qld (Austral Resources)
- 2 Burton Mine, closure gap analysis, progressive rehabilitation and closure plan and review of estimated rehabilitation cost, Qld (Peabody)
- 3 Dugald River Mine, closure gap analysis, progressive rehabilitation and closure plan and estimated rehabilitation cost, Qld (MMG)
- 4 Century Mine, estimated rehabilitation cost and supporting information report, Qld (New Century Resources)
- 5 North Goonyella Mine, facilitation of closure risk planning and workshop and estimated rehabilitation cost gap analysis, Qld (Peabody)
- 6 Codrilla Coal Project, progressive rehabilitation and closure plan gap analysis, Qld (Peabody)
- 7 Isaac River Coal Project, closure gap analysis, progressive rehabilitation and closure plan, Qld (Coking Coal One Pty Limited)
- 8 Wilkie Creek Mine, estimated rehabilitation cost and supporting information report, Qld (New Emerald Energy Pty Limited)
- 9 New Acland Mine, progressive rehabilitation certification of 320 hectares of land, Qld (New Hope Group)
- 10 Carborough Downs Coal Mine, progressive rehabilitation and closure plan, Qld (for Fitzroy Australia Resources)
- 11 Broadlea Coal Mine, progressive rehabilitation and closure plan, Qld (for Fitzroy Australia Resources)

### Working with SGME

We are highly experienced and leaders in the fields of soil science, geochemistry and mine closure. At SGME we support you to achieve your objectives in ways that contribute to a sustainable outcome:

- Our director and technical leaders are 'on the tools'. We will not waiver from this commitment as it is critical to your successes
- We have a practical, solution focussed work ethic
- We are cost-effective, without the overheads of larger competitors
- A high level of responsiveness, enabling us to mobilise at short notice



#### Dr Timothy Rohde

Timothy is a certified professional soil scientist (CPSS), a practicing engineer in Queensland (RPEQ) and a mine closure specialist (MAusIMM(CP)). He has been a consultant for 18 years and has worked extensively throughout

Australia in coal and metalliferous mining and has published over 25 papers on soil science, geochemistry and mine closure.

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#### Justin Vohland — Mackay office

Justin is an environmental scientist and mining professional specialising in project management, mine closure and rehabilitation. He has actively managed closure and rehabilitation activities for over 10 years in the Bowen Basin and now provides consulting services from SGME's Mackay office.

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