



Creating enduring value

SGME VALUES

Honest



Trust



Innovation



Safety



Quarry closure

While quarry land use represents a small percentage of total land use in Australia, we want the land we do quarry to have a positive impact on the community and result in a long and sustainable life when operations are complete, and there is no reason why this cannot be achieved.

At SGME we will work with you and state and territory governments to determine an achievable post-operational use of the land and develop a rehabilitation plan. A rehabilitation plan is the road map that lays out how the post-operation land use will be achieved. It also provides a cost to complete rehabilitation work so that you can plan for eventual closure.

For example, on land previously used for agriculture, the aim might be to restore the land to its previous level of productivity. For other land uses, the objective may be to restore land as close to its original condition as possible. Where the land cannot be returned to a similar condition then it may be transitioned to an alternative land use, like converting a quarry pit to a wetland, habitat zone, recreational area or land suitable for urban development.

KEY CONSIDERATIONS IN QUARRY CLOSURE

1. **Operations must plan for closure from the earliest stages of project development**
2. **Closure objectives must address legal requirements and commitments made to the community**
3. **Closure planning must be integrated into operational activities where possible**
4. **Closure planning must achieve the best possible use of land after the project is finished**
5. **The project must be designed so that the full cost of closure can be met by the owner**

OUR APPROACH

At SGME we will advocate strongly for you and guide you through the process of closing your operation, 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 operation and provide you with innovative solutions that reduce your risk to acceptable levels while not compromising on government and community expectations.

Past projects

- 1 Boral Quarries, rehabilitation strategies and liability estimates for Yatala, Purga Metz, Montrose and Wollert Quarries, Qld, NSW and Vic (Boral Property Group)
- 2 Gunlake Quarry, soil survey, land and soil capability, biophysical strategic agricultural land and rehabilitation strategy, NSW (Gunlake Quarry Pty Limited)
- 3 Emu Plains Quarry, rehabilitation cost estimate and final landform and project management of ecology and erosion and sediment control studies, NSW (Boral Property Group)
- 4 Broken Head Quarry, quarry closure strategy, landform design and rehabilitation cost estimate for future land use of residential, NSW (Leadshine)
- 5 Allandale Quarry, quarry rehabilitation management plan including a conceptual final landform for quarry extraction schedule, NSW (Newcastle Quarry Products)
- 6 Talbragar Quarry, rehabilitation and restoration plan, NSW (Boral Property Group)
- 7 Broken Head Quarry, review and design of erosion and sediment controls for interim rehabilitation phase prior to redevelopment for residential land use, NSW (Leadshine)
- 8 Dunmore Quarry, land and soil capability assessment and soil management, NSW (Boral Property Group)

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 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. He has gained a reputation by not backing away from difficult projects (positivity), delivering on his promises (trust), looking for new ways to help (innovation) and sharing mutual responsibility for preventing harm and promoting well-being (safety).

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