

CASE STUDY

PROJECT

Quarry rehabilitation strategy

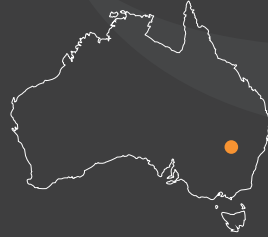
SECTOR

Quarry Closure

COMMODITY

Gravel, sand

LOCATION



ISO

9001:2015 | 14001:2015 | 45001:2018





SGME developed a rehabilitation plan for the quarry that addressed landform stability, water quality, vegetation restoration and infrastructure decommissioning.

Site description

The quarry is located in the Orana region near Dubbo, New South Wales.

The problem

The quarry required a robust strategy with a clear set of objectives that reflected the legislative, regulatory and compliance standards. It also needed an effective rehabilitation plan that focused on landform stability and environmental sustainability to enable increased stakeholder confidence.

SGME solution

SGME addressed the quarry's rehabilitation planning need by developing a comprehensive strategy to address key aspects of the quarry and its rehabilitation. We prioritised landform stability by planning for surface water management, overburden reshaping and endemic vegetation planting for long-term stability that reduces land degradation and conserves water. Compliance with regulatory standards involved following guidelines for soil management, water quality and final land use, as well as monitoring and maintenance protocols. SGME's approach integrated technical expertise, ecological considerations and legal requirements to achieve successful rehabilitation. By combining engineering solutions with environmental stewardship, we created a sustainable plan that balanced ecological integrity with industrial needs, thereby aligning with the project's overarching goals, ensuring long-term effectiveness and achieving compliance with environmental regulations.

SGME adds value to quarry rehabilitation through expertise in environmental engineering and sustainable land management. We conduct thorough site assessments to understand ecological needs and regulatory requirements. Our solutions include innovative cover design, landform design, erosion control measures and revegetation strategies that enhance biodiversity and minimise potential environmental impacts. We also bring expertise for ongoing monitoring and adaptive management plans to ensure long-term sustainability and compliance with regulatory standards, providing enduring value to quarry rehabilitation projects.