

Fingerboards Critical Minerals Project Study Briefs – Soil Assessment

Overview

The soils assessment will provide a comprehensive evaluation of the potential impacts on and from soil within and surrounding the Project area. It will characterise existing topsoil and subsoil conditions, assess the physical and chemical properties of local soils and overburden materials, and establish a clear understanding of how these materials behave throughout construction, operations, rehabilitation, and post-closure.

The assessment will identify practical measures to avoid, minimise and manage soil-related impacts, and will guide GCM's rehabilitation approach to ensure soil profiles are restored to a stable condition that support agricultural use post-mining. The overarching aim is to ensure the site can be responsibly rehabilitated to the same or better condition for productive agricultural use once mining is complete.

Assessment Objectives

- Deliver a robust, evidence-based evaluation of existing topsoil and subsoil characteristics in the Project area, and potential land use and environmental risks from soils that may arise during construction, operation, progressive rehabilitation and post-mining land use.
- Inform and guide practical and measurable soil, management and mitigation strategies that address risks and ensure the mine site is successfully rehabilitated.

Preliminary Focus Areas

- **Review of existing information:** Analyse existing documentation, investigations and reports to understand soil characteristics and assess how updated project settings and rehabilitation methodologies affect soil behaviour.
- **Soil assessment:** Characterise the physical and chemical properties of soils as they relate to potential environmental risks, including erosion, salinity, nutrient status and acidification.
- **Mitigation:** Outline and assess design and mitigation measures that address potential adverse land use effects during construction, operations (including stockpile management and progressive rehabilitation), rehabilitation and post-closure.
- **Cumulative impacts:** Evaluate any cumulative impacts arising from the Project in combination with other existing and/or proposed projects in the region.

- **Risk register and reporting:** Prepare a soil-related risk register and technical impact assessment that address identified risks, mitigation pathways and compliance requirements.
- **Field work:** Undertake soil profile mapping, sampling, description and laboratory analysis of samples excavated across eight representative sites.

Specialist Consultant

SLR will deliver the soils assessment. They are an internationally recognised sustainability consulting firm with multidisciplinary teams that provide independent, science-based assessment and modelling across major projects. The project soils team has extensive experience leading soils assessments and rehabilitation strategies for Environmental Effects Statements for major infrastructure projects including major mining projects across Victoria and Australia. More information can be found at www.slrconsulting.com/apac

Version: December 2025