



SGM Environmental

Creating enduring value

SGME VALUES



Honest



Trust



Innovation



Safety

PROJECT CASE STUDY: Wet Season Sampling for the New South Wales Legacy Mines Program

SGM Environmental Pty Limited (SGME) did wet season soil and water sampling and analysis of Apsley, Mulloon Creek, North Wisemans, Peelwood, Phoenix Mabel, Ponsonby and Shambala mines (the mines).

Site description: The mines are historically abandoned and located throughout central New South Wales (NSW). The mines are partially rehabilitated and susceptible to erosion, acid mine drainage (AMD) and / or neutral mine drainage (NMD).

The problem: The Legacy Mines Program (LMP) is an initiative of the NSW government to assist in the management and / or remediation of abandoned mines where no owner can be held responsible for the works. Some abandoned mines are difficult to access, possess unique geochemical challenges and are of such a scale that it would be physically and economically impractical or impossible to achieve complete rehabilitation. The LMP aims to reduce or eliminate risks to public health, safety and the environment.

What SGME did: Each assessment involved a review of available data, soil and creek sediment sampling followed by comparison to background (reference) sites. Additionally, water samples were taken within the landform as well as upstream and downstream of the mines to assess the landform condition, identify issues, and develop a conceptual model.

The aim of each assessment was to determine the effectiveness of past remediation, identifying potential impacts to the receiving environment and make recommendations to address issues including maintenance of existing works or recommendations for new works.

The assessment built on past sampling programs capturing temporal and spatial variations. The information was used to inform the LMP of future management options for the mines.

