

Appendix C Research

RTCA is a major contributor to mining – environmental research through its own programs – such as the highly regarded koala research at the BAM, and also through contributions to the Australian Coal Association Research Program (ACARP) and the research conducted by the Australian Centre for Mining Environmental Research (ACMER).

In addition, the Environmental Management Overview Strategy (EMOS) makes the following commitments to future investigations and studies:

Land Resources

- **Revegetation** – on-site field trials will be conducted with a range of native tree and shrub species and grasses to optimise regeneration on major soil types. This will include key species from the Dawson Gum Woodland community (RE 11.4.8).
- **Revegetation** – on-site trials will be conducted to establish native bluegrass on former grazing and cropping land.
- **Rehabilitation** – on-site field trials to test rehabilitation performance on slopes greater than 17%.
- **Rehabilitation** – The criteria for achieving a self-sustaining vegetation community will be developed based on the results of the on-site field trials;
- **Waste Rock Management** – strategies for the selective placement and burial of PAF waste rock material to control ARD would be investigated. Investigation of criteria for optimum depth of burial would involve developing specifications for NAF, PAF – LC and PAF waste rock types, characterisation of NAF materials available for burying PAF materials, characterisation of the PAF rock to be covered and modelling of water / oxygen flux.
- **Coal Washery Waste Management** – cover strategies to minimise release of oxidation products in leachate, and salt rise into the growth horizon will be investigated. Cover design investigation would include characterisation of NAF materials available for burying PAF materials, characterisation of PAF material to be covered and modelling of water/oxygen flux.

Water Resources

- **Alternative Groundwater Supplies** - Further hydrogeological evaluations for relevant landholders are underway to assess the availability of alternative groundwater supplies that would be unaffected by the mine dewatering programme. Based on the results of these assessments and discussions with the relevant landholders, options to ensure access to adequate alternative water supplies will be developed and discussed with the affected parties. The Proponent will continue discussions with relevant landholders with a view to reaching mutually agreeable arrangements for the provision of alternative supplies throughout the mine life, and after mine closure.