



## PROJECTS

### RISK ASSESSMENT

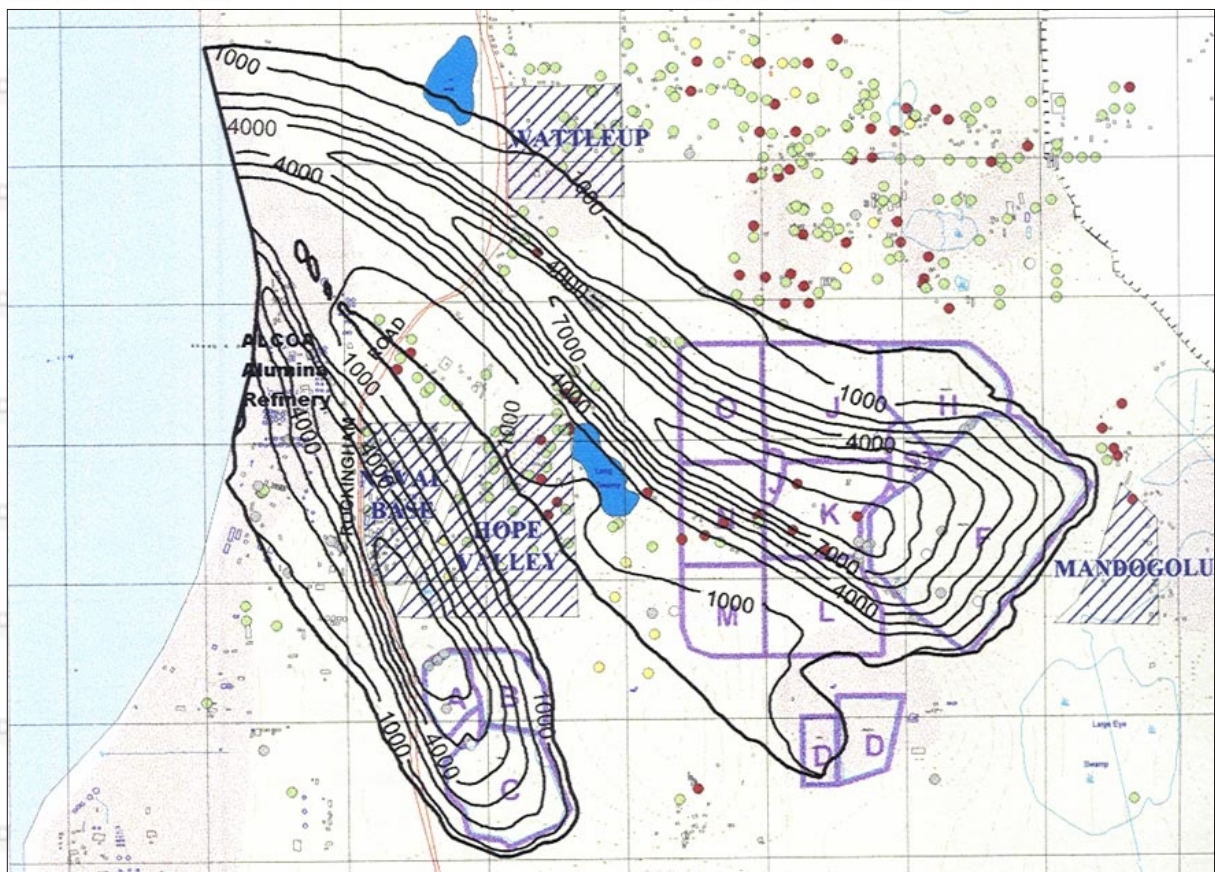
Risk 3

#### ALCOA (AUSTRALIA)

Groundwater Risk Assessment, development of a Groundwater Management Plan

A new groundwater management strategy was developed on behalf of Alcoa at their residue storage area in Kwinana, Western Australia. The multidisciplinary project included:

- Community consultation identifying sensitivities & conveying management solutions
- Development of a hydrogeological database
- Review of planning controls and future landuse issues
- Risk assessment of potential leachate seepage rates under different scenarios
- Numerical modelling and contaminant simulation to predict impact 'footprints'
- Hydrochemical modelling relating bulk EC to specific contaminant concentrations
- Cost benefit analysis of remedial options.



A technical paper by SR Jeffries, RW Colman and D Cooling entitled 'Development of a Groundwater Management Strategy, Alumina Residue Storage, Kwinana, Western Australia' was presented at Hydro2000, 3rd International Hydrology and Water Resource Symposium, Perth, 20-23 November 2000.

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