

**AUSTRALIAN
GEOMECHANICS
SOCIETY**
South Australian Chapter



July Meeting

THE APPLICATION OF THE TOTAL ENGINEERING GEOLOGY APPROACH

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Consultant Engineering Geologist

SYNOPSIS

The essential concepts underlying the "total engineering geology approach" will be described e.g. the use of staged investigations, the adoption of a rigorous scientific approach, the role of geo-mapping, the establishment of reference conditions, the development of different types of geo-models, the application of the observational method etc. How the approach can be used to great advantage on major projects will be illustrated with case histories, together with some examples of the consequences of using less effective methodologies. The approach will be shown to be actually part of long established good practice, which nevertheless needs to be promoted within the construction and mining industry if we are to reduce the current high levels of project failure; some strategies to achieve that aim will be outlined.

ABOUT THE SPEAKER

Fred Baynes is a consultant engineering geologist who works on major civil, mining and oil and gas projects around the world. Fred was educated in the UK, emigrated to Australia in 1980 and has worked for contractors, consultants and utilities. He is based in Perth, West Australia, and is a general practitioner with a field bias who has been involved in the investigation, design, construction and operation of a wide range of projects including dams, hydro-electric plants, mines and their associated infrastructure, quarries, oil and gas processing plants, roads, railways, pipelines, ports, offshore structures, tailings storage facilities, landfills and geohazard assessments. He is currently President of the International Association for Engineering Geology and the Environment.

DATE: Monday 20 July 2009

TIME: 6:00 pm to 7:30 pm (light refreshments from 5:30 pm)

VENUE: Engineering House, 11 Bagot Street, North Adelaide