

# MINE WASTE 2010

First International Seminar on the Reduction of Risk in the Management of Tailings and Mine Waste

29 September – 1 October 2010, Sheraton Perth Hotel, Australia

Reduce your risk at Mine Waste 2010

*"A company gets the level of safety performance it deserves"*  
~ Dupont

## Seminar Objectives

This seminar will tackle the full range of issues that constitute risks in the management of mining wastes, particularly tailings and waste rock.

## Mine Waste 2010 Keynote Speakers



### Gary Bentel, Australia

'The real value to the mining industry of leading-practice waste management'

### Michael Shelbourn, Barrick Gold of North America, Inc., USA

'Geotechnical design verification and performance assessment of tailings storage facilities'



## Seminar Themes

- Improvements in design of tailings storage facilities
- Dam break analysis: appropriate tools and calibrated case studies
- Appropriate in situ testing techniques
- The application of geosynthetics in mine waste management
- Use of mining waste in backfilling of mining voids
- Mitigating the impacts of geochemical problems
- New approaches to the management of waste rock
- Accounting for climate change
- Sustainable closure and the concept of designing for perpetuity
- Improved management and operational strategies to minimise risk
- Case studies



## Key dates

Submission of papers:  
**31 May 2010**

Managing Tailings and Waste Rock Drainage – Quality and Quantity Workshop:  
**28 September 2010**

Mine Waste 2010:  
**29 September – 1 October 2010**

Principal Sponsor



Industry Sponsor



Official Media Partner



# Mine Waste 2010

## Received Abstracts\*

TITLE OF RECEIVED ABSTRACT	AUTHOR(S)
<b>Keynote Addresses</b>	
The real value to the mining industry of leading-practice waste management	G. Bentel
Geotechnical design verification and performance assessment of tailings storage facilities	M. Shelbourn
Environmental consideration in industrial plant for gold extraction of sulphide ore with high copper grade	M.Kargar Razi et al.
FULCRUM – an innovation in quality and data management	C. Butt
Scope of utilisation of coal ash in indian coal mining industry with special reference to open pit mines of Mahanadi Coalfields Ltd – some legal and environmental issues thereof	M. Jawed
Effectiveness in risk assessment – a comparison of perceived and realised risk from project concept to construction and operation	L. Murray
Size distribution estimation of stone fragments via digital image processing	M.Salehizadeh and M.T. Sadeghi
Innovative expansion of a centerline constructed tailings storage facility	K. Morrison et al.
The development of thickened discharge methods – a review	K.D. Seddon and M.P.A. Williams
Strength and liquefaction assessment of tailings	M. Dillonj and H. Wardlaw
Approaches to estimation of runout distances of liquefied tailings	K.D. Seddon
Safely mining deeper in tailings deposits for pastefill production at George Fisher Mine	K. Kuganathan
Design of borrow pits for redeposition of tailings	C.T. Saunders
Geochemical characterisation of waste at Rio Tinto's Pilbara iron ore mines	R. Green
Tailings – waste rock interaction realistic, cost effective and reliable application Xstrata, Mount Isa, Queensland, Australia	A. Soliman et al.
Geotextile capping of a large tailings storage facility	T. Fitton et al.
Some geotechnical aspects of closure – case study of a thickened tailings valley storage in Western Australia	C. Hogg
Filtered tailings in Western Australian iron ore projects – comparison of filtered tailings with other tailings disposal methods	C. Hogg
In-pit dumping at Gwalia Mine	L. Snyman et al.
Coupled seepage and consolidation analysis of tailings impoundments	I. Gillani et al.
Ecological and economical success through advanced tailing separation process	R. Raberger et al.
Computer aided earthmoving systems – mine reclamation in the digital age – a case study	M. Witler and J. Thompson
Challenges affecting the successful implementation of systematic structural stability risk control processes in the design and construction of waste rock dumps at Nkomati Mine	M. Thamae and M. Nxumalo
Upstream raising of the Siguirri tailings storage facility, Guinea	M. Theron et al.
Upgrading of storm water handling at a tailings storage facility in South Africa	F. Wagener et al.
Closure, an often forgotten risk in the design and operation of waste rock and tailings disposal facilities	A. Wright
Risk reduction strategies for operators	T. Tyson
Setting a standard for tailings dam management	D. Brett and B. Brown
Tailings storage design – playing God	R. Longley and D. Brett
Considerations and associated benefits of lined facilities	N. Slade and S. Wilson
Reducing risks on tailings storage facilities through in-line flocculant addition	F. Silva et al.

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## Received Abstracts\*

TITLE OF RECEIVED ABSTRACT	AUTHOR(S)
Case study – an environmentally and economically attractive integrated landform for the storage of tailings and waste at the Randalls gold project in Western Australia	D.A. Williams and T.E. Minard
The importance of selecting appropriate compliance and completion criteria during the initial stages of tailings storage facility design	P. Chapman and D.A. Williams
Environmental compliance	H. Jones
Critical hydraulic gradients in tailings dams in long-term perspective	I. Jantzer and S. Knutsson
Personal perception on safety culture: a survey amongst supervisory level and above in a multinational electronic company	E.H. Sukadarin et al.
Challenges during designing, scheduling and managing waste rock facilities – a case study on the waste rock dumps at Phoenix Mine, Nevada	V. Galla and P. Zacarias
Interpreting the results of specialist tailings laboratory tests to justify and support selection of appropriate design criteria for tailings storage facility design	C. Mundle and P. Chapman
Co-disposal and in situ neutralisation of waste rock and tailings – limiting AMD formation in acid forming waste rock	G. Maddocks and S. Kent
Co-disposal techniques to address the risks associated with storage and management of potentially acid generating wastes	D.J. Williams et al.
In situ foundation improvement for upstream raising of embankments using dried tailings	D. Smirk and S. Jackson
Co-disposal stack cell wall dam break – calibrated back-calculated study	T. Vasconi et al.
The impact of desiccation and oxidation of nickel sulphide tailings on its suitability as a embankment construction material	J. Diemert et al.
Risk assessment for mine tailings/waste surface ponds	W. Pytel and G.V. Griffiths
Disposal of marble slurry waste and water recovery in marble mining and processing	A. Bhatnagar
Selection of waste dump site by using fuzzy VIKOR approach	A. Yazdani and K. Oraee
Predicting void ratio for paste tailings deposition	E. Salfate et al.
Case study – tailings dam construction in an Arctic climate	F. Esford et al.
Evolution of landform design concepts	E. Howard et al.
Consolidation of in-pit tailings	L. McDonald and C. Lane
Incorporating operational flexibility into mine waste management	C. Johns and S. Narendranathan
Environmental risk mitigation through concurrent disposal of tailings and mine waste rock at the Minago Mine in north-central Manitoba, Canada	A. Zivkovic et al.
In-pit tailings storage facilities – maximising the benefits from the investment – effective management of these landforms for effective closure	H. Lacy et al.
Implementation of a mesa landform in the Pilbara, Western Australia	J. Mifsud
Slope failure at dragline waste rock dump of Sasti opencast mine of Coal India Ltd – a case study	I. Roy
Waste minimisation in marble mining and processing	A. Bhatnagar

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## ACG 2010 Environmental Courses

**Environmental Geochemistry  
of Minesite Pollution  
– An Introduction**  
26–27 May 2010  
Novotel Langley Hotel  
Perth, Western Australia

**Rheology Workshop**  
22–23 June 2010  
Novotel Langley Hotel  
Perth, Western Australia

**In-pit Waste Storage  
and Management**  
8–9 December 2010  
Novotel Langley Hotel,  
Perth, Western Australia

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events\\_and\\_courses](http://www.acg.uwa.edu.au/events_and_courses)



Image of the Merriespruit Tailings Dam failure in South Africa (image from Tailings.org)

## Expression of Interest for Mine Waste 2010

- Attendee
- Speaker
- Sponsor/Exhibitor

Name:

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Position:

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Organisation:

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Address:

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Country:

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Phone:

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Fax:

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Email:

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Please submit your expression of interest in  
Mine Waste 2010 to:

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