



The Eightth Year of the International Mine Closure Conferences: its positive influences on effective Mine Closure, Completion and Reclamation in Australia

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MWH Global

Wyoming Reclamation - ASMR

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Introduction

- History and sharing of global knowledge - Mine Closure
- Survey
- Influence
- ASMR

History

- Developed from Perth in 2003 by the AGC
- Prof. Mark Tibbett and Prof. Andy Fourie
- Sharing of global knowledge the aim
- Mine closure, my involvement
- Links ASMR
- Mine closure planning.
- Standards for mine rehabilitation and closure.

Core Purpose

- Professionals from Academia, Global and Local Mining companies, Consultants and Scientists are now more connected and interactive through this annual international forum
- Mine completion ultimately determines what is left behind as a benefit or legacy for future generations - inter generational responsibility.
- If mine closure and completion are not undertaken in a planned and effective manner, a site may continue to be hazardous, and a source of pollution for many years to come.

Survey Results

- 6 Held in Southern Hemisphere – 1 in North
- Attendance since 2006 – from ~300 – to ~ 600 in Canada last year
- Many attendees from South – yet most knowledge in North Hemisphere UK, USA, Canada – greatest investment historically
- Sample set small ~ 43 responses
- **Q:** Have you travelled from your country of origin, to other countries to attend these conferences 55% said **Yes** 44 % **NO**

Q: How has attending these conferences improved your knowledge of mine closure and reclamation matters?

Question	Percent Yes
Gaining knowledge directly from presentations	88%
Through one on one interaction with attendees	78%
Reading and referencing the proceedings after the conference	60%
Being able to contact peers and colleagues after the conference	18%

Q: If you believe the conference series is changing and improving mine closure knowledge, how effective is that level of change? in relation to:

Question	Adequate	Very Effective	Total
Overall mine closure planning	72	23	95%
Community engagement and closure consultation	59	20	79%
Landform – design, construction, stability, rehabilitation, monitoring and closure	59	26	85%
Tailings facilities – decommissioning and closure	58	18	76%
Financial provisioning and estimation	58	13	71%

Q: If you believe the conference series is changing and improving mine closure knowledge, how effective is that level of change?

Question	Adequate	Very Effective	Total
Impact management – AMD, hydrological, contamination, pollution ect.	69	21	90%
Ecosystem restoration and reclamation -rehabilitation	54	33	87%
Measurement and evaluation of closure success	50	13	63%
Establishing completion criteria	50	12	62%
Beneficial and alternative land use post-mining	70	10	80%

Post Conference – reference.

- How often do you refer to the physical proceedings as a guide after the conference?
- ***51% of attendees – refer “occasionally” once ever 6 months. 25% frequently >1 month or more***
- How often do you reference and acknowledge other authors or papers from previous proceedings in your papers and work?
- ***51% of attendees – refer “occasionally” once ever 6 months. 7% Frequently >1 month or more***

Q: How successful is the conference series in changing and Improving the following processes?

Question	Adequate	Very Effective	Total
Informing your mining industry colleagues of the advancing knowledge of mine closure	51	46	96%
Informing the broader mining industry in your county of good mine closure practice	56	28	84%
Improving understanding in the wider community and NGO's in your county that good mine closure practice can be achieved	39	26	65%
Improving the benchmark standards for mine closure in your country of origin	62	23	75%
Informing regulators in your county in such a way as to improve current regulation	47	24	71%

Peer Reviewed Proceedings Valued

- Q:The conference maintains a panel of peers.
- Peer review papers for editing, improvement and selection (or rejection) prior to publication, a rigorous process.
- Do you value the quality of the papers which result from that process?

- 47% of respondents – Said Yes
- 47% Yes Very Much

94%

The economical and environmental and socially acceptable closure of mines is one of the greatest challenges facing the mining industry in this new century. Increasingly, the future approval of new operations and the continuing social licence to operate at existing operations will become contingent on a company displaying a proven track record of appropriate and successful closure of old or uneconomic mines. Although there are many examples of good closure practice, there are also many that have been unsuccessful and it is the latter that generate most public scrutiny. A consequence of this scrutiny, and the desire of mining companies to adopt best practice in mine closure, has seen a very rapid increase in the financial provisions that are being made for closure at some, as-yet undetermined date.

It was recognition of the need to develop mine closure practices that are not only environmentally and socially sustainable, but are based on principles of sound planning and economics, that led to the initiation of the First International Seminar on Mine Closure, which was held from the 13th to the 15th September, 2006, in Perth, Australia.

Mine Closure 2006

The seminar was organised to provide a forum for the exchange of experiences and expertise amongst the wide range of disciplines that are necessary to make mine closure successful. Specialist sessions included those on Planning for Closure, Ecosystem Reconstruction, Hydrology and Pedogenesis of Wastes and Covers, Financing Closure, Landform Stability, Contaminant Risks and Off-Site Impacts, Success Criteria and Social Impacts. Many of the papers at this seminar provide valuable information and experience describing approaches to solving the complex problem of mine closure and will be of interest to mine owners and managers, regulators, corporate planning strategists, environmental officers, consultants, researchers and students.

The interest generated by this seminar led to the decision to run the Second International Seminar on Mine Closure in Chile, which will take place in October 2007.

EDITORS ANDY FOURIE AND MARK TIBBETT

mine 2012
closure

ACG AUSTRALIAN CENTRE
FOR GEOMECHANICS
CSIRO · Curtin University · The University of Western Australia
Joint Venture

Mine Closure 2012

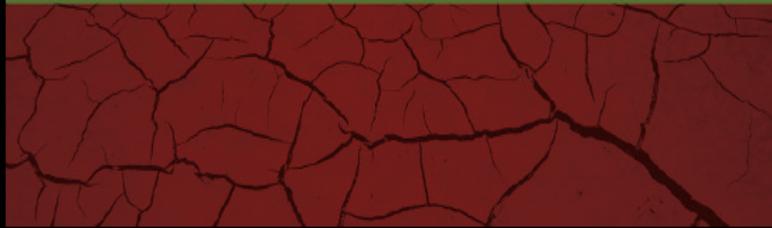
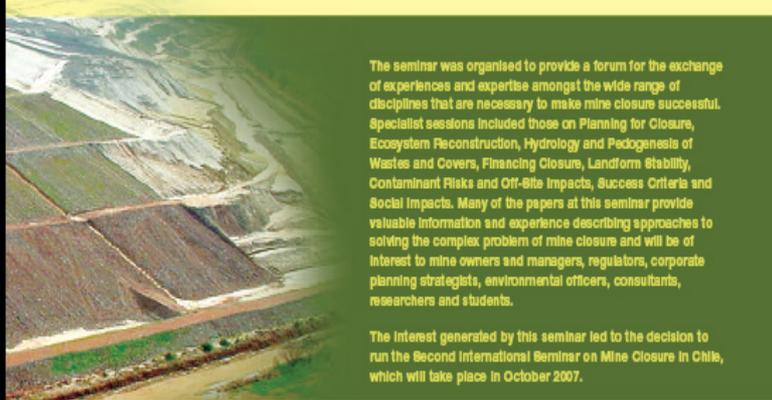
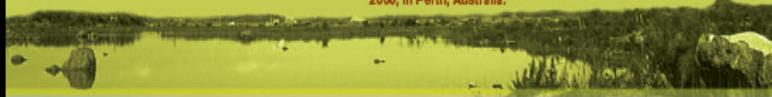
Proceedings of the Seventh International
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25–27 September 2012 | Brisbane | Australia

Editors A.B. Fourie and M. Tibbett

Collaborating Organisation

Cranfield
UNIVERSITY



ASMR Members

- See if you can engage in these international meetings
 1. Wealth of knowledge
 2. Provided to individuals world wide
 3. In keeping with the objectives of the ASMR, perhaps the oldest and most dedicated Society
 4. Residing in Continental America - at the forefront of change in this field,
 5. Has invested heavily in Mine Closure and Reclamation
 6. The Society and its members have a great deal to give to these International Mine Closure Forums.

Clay Mine = Eden Center



Cornwell UK Eden 2013

MINE CLOSURE 2013

Eden Project
Cornwall, UK
14-22 Sept 2013



Eighth International Mine Closure Conference

Come and explore the Eden Project, a breath-taking example of mine regeneration, and the ideal setting for a discussion on good practice in mine closure. Learn from worldclass experts and share your practical experience with your peers from other parts of the mining world. The week-long conference will include opportunities to visit Cornish Mining World Heritage sites and landscapes - the places where today's mining industry was born.

Register your interest at www.mineclosure2013.com
or email MC13@edenproject.com

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Post-Mining
Alliance
Keep the ground beneath
us

Influencing Mining Australia

- Images from changes ongoing in mine reclamation in Australia,
- Overview of the influences and challenges the Australian industry still has in many areas of mine closure
- The Mine Closure Conferences are assisting in addressing those challenges.

**Thanks to the ASMR
and
Wyoming Group
for the opportunity
to address you
Today**