

**Vancouver Meetings December 2003
Global Alliance – INAP, ACMER, ADTI, MEND and
IMWA**

Mon 1 Dec 13h00-18h00

Venue : Placer Dome room

Anne-Marie Fleury - INAP Technical
Manager
Bruce Kelley – INAP (Rio Tinto)
Denis Kemp – INAP (Falconbridge
Noranda)
Larry Todd – INAP (Phelps Dodge)
Mike Aziz – INAP (Placer Dome)
Ross Gallinger – INAP OpCom Chair
(BHP Billiton)
Steve Slater – INAP (Rio Tinto)
Clive Bell – ACMER (Tlcnfr)
Charles Bucknam - ADTI
Rens Verburg – ADTI (Golder)

Bill Price - MEND
Catherine Coumans – MEND (Mine
Watch Canada)
Elizabeth Gardiner – MEND (MAC)
Gilles Tremblay - MEND
Christopher Wels - IMWA/Infomine
(Robertson Consultants)
Paul Younger – IMWA/University of
Newcastle upon Tyne
Shannon Shaw - IMWA/Infomine
(Robertson Consultants)
John Bennet – ANSTO
Jim Robertson – Placer Dome

Minutes

Item 1	Summary of INAP Activities	B Kelley
--------	-----------------------------------	----------

INAP has been working on developing a strategy for 2004.

The OpCom will be using 2004 resources to focus on networking and information sharing. This will involve compiling information from operations and working on how best to distribute it publicly. Details on this line of action for 2004 are yet to be formalized, however INAP hopes that the regional organizations will agree to play a key role.

It was agreed that there would not be another public call for proposals this year. INAP will be going forward with existing projects and may be re-considering previously submitted projects. Any new projects will only be considered on an ad hoc basis. 2004 projects include an addendum of South African experience to the Sulphate reduction report, two workbooks under ADTI on geo-chemical modelling and pit lakes, a project on store and release covers with ACMER, and research at the Diavik mine within a scale-up project. INAP also has an interest in pit lakes and may look to develop projects in this field in the near future. Another area of interest for INAP is a world-wide guide on acid drainage. The Regional Partners

would probably be called on to participate in this project, a strategy will be developed during the year.

Reports from completed projects will continue to be shared with partner regional organizations.

Other news with respect to the Scale-up project relates to the Copper Technology group (CTG). The CTG recently held a meeting and identified scale-up work as a serious gap. INAP has formerly contacted the CTG in order to identify potential collaboration on scale-up work.

Action Item

The Dry Covers report will be sent to Regional Organizations.
Anne-Marie Fleury

Item 2	Summary of ACMER Activities	C Bell
--------	------------------------------------	--------

ACMER will be conducting a research workshop in Melbourne at BHP Billiton on Dec 18th, 2003. The session will be attended by industry representatives to brainstorm on key research issues in Australia.

On-going and recently completed ACMER research projects include:

- Completion of a handbook on the National Water Quality Guidelines that is specific to the minerals industry.
- Commencement of a project on risk assessment of the effects of cyanide-bearing tailings solutions on wildlife which involves Australian mine sites and an African operation.
- Commencement of a project on designing effective store-release covers for long-term containment of mine wastes. Seed funding provided by INAP will enable the first stage addressing review and gap analysis.
- Completion of the Australian component for a global consortium producing a review on good practice in post-mining regeneration worldwide as part of a business case being developed by Rio Tinto, the Eden Project (Cornwall, UK) and English Nature for a “global centre for post-mining regeneration”.

On the technology transfer side, the Minerals Council of Australia (MCA) recently invited ACMER to develop a strategic business plan to work with MCA on a sustainable development extension strategy. Recently completed workshops include a series of 6 sessions on cyanide management held throughout Australia, a Sustainable Mine Closure workshop and a joint workshop with MCA on Management and Remediation of Abandoned Mines.

Upcoming technology transfer activities include a Sustainable Mine Closure workshop to be held in Perth in March 2004 and a short course to be given in Johannesburg, South Africa in March 2004 jointly with the Universities of Cape Town and Witwatersrand.

ACMER is actively participating and benefiting from the Global Alliance (GA). For example, ACMER recently used information on the abandoned mines experience in Canada provided by MEND through the GA as input to a workshop on the topic.

Action Item

Abstracts of papers presented at the Sustainable Mine Closure workshop in October 2003 will be made available on the ACMER website (www.acmer.com.au).

Clive Bell

Item 3	Summary of ADTI Activities	C Bucknam
--------	-----------------------------------	-----------

ADTI has recently held several strategic meetings. The coal mining division met in November to formulate a five-year plan going forward. The metal mining sector re-organized its steering committee at a meeting in October.

A successful workshop on characterization at the EPA Conference Centre involving the Colorado School of Mines and USGS was recently held as an activity of the Rocky Mountain Hazardous Substance Research Centre. Other workshops being planned include a technologies database review workshop organized by the University of Nevada and funded by the US Army Corps of Engineers. In February, ADTI will be participating in a symposium with SME in Denver on sustainability from the ground up.

The workbook series continues to move forward. The introduction is mostly completed, though it still needs a few figures. The mitigation workbook is available on the ADTI web site for review. The sampling and monitoring workbook has not obtained funding yet. Both the pit lakes and modeling workbooks will be funded by INAP. Changes in scope are being reviewed. Finally, the prediction workbook is being funded by the US EPA.

ADTI is also advancing work on carbon sulphur phase methods in a Task Group of ASTM. A statistical review report addendum is being completed, after which acid neutralization titration methods will be studied. Four more co-operating laboratories are required to finalize the work to develop the ANPA titration, which is “fizzles” and uses peroxide corrections for siderite.

Other projects include a proposal on humidity cell testing that is being developed by the coal mining sector and USEPA. The Molycorp project is also going

forward. The scientific team for the project will have a site meeting in December 2003. And the ADTI scientific review team is expected to be finalized and begin work in 2004.

The ADTI Statement of Mutual Intent is still in the process of being signed.

Item 4	Summary of MEND Activities	G Tremblay
--------	-----------------------------------	------------

See presentation

*Budget figures have not been approved yet.

Action Item

Much work has been done by the Industrial Chair NSERC - Polytechnique - Université du Québec en Abitibi-Témiscamingue (UQAT) project on Environment and Mine Wastes Management that is not being integrated into Global Alliance. Opportunities for linking the UQAT work with the Global Alliance will be pursued through MEND.

The web site of the UQAT Chair will be linked to INAP web site.

Anne-Marie Fleury

Item 5	Summary of IMWA Activities	P Younger
--------	-----------------------------------	-----------

One of IMWA's main activities is to publish and distribute a journal, which Springer helps to disseminate to the membership and to libraries and scientific indexes. This would be an opportunity for the Global Alliance to contribute to a publication with a very wide distribution.

The Annual IMWA conference was held in Johannesburg in November, 2003. The IMWA presidency was moved from South Africa to Poland. At the meeting, it was also agreed to establish the Partnership for Acid Drainage Research in Europe (PADRE) as the acid drainage branch of IMWA. Current policy development in Europe and potential European Commission funding mean that there is much momentum already underway in this field.

PADRE was designed to be the European acid drainage network of choice for a number of activities. For example, PADRE will manage an existing programme training young scientists from Eastern Europe. Under the Marie Currie funding system, individuals are selected to study passive remediation technology for mine water. PADRE will continue to update the recently completed PIRAMID guidelines, or contribute them to other ongoing guidelines. In addition, PADRE will continue to work with MiMi and on-going work in Sweden on acid drainage.

PADRE will also have links into Eastern Europe. The ERMITE project dealt with mine water issues in this region. The project is winding down this year, but European money is likely to continue to be funnelled to this region. For example, IMWA recently collaborated on a training project on groundwater management for young scientists held in Hungary in June.

Also under the ERMITE project, a multi-directorate meeting of European Commission was held in November to discuss mine water issues. This meeting included the first ever discussion between Directorate General (DG) enterprise (metal sector), DG transport and Energy, and the DG environment on the need to improve how regulators deal with the mining industry – for example on issues like groundwater behaviour. This may result in the development of new guidelines.

IMWA is planning a workshop in September 2004 in Newcastle, UK. IMWA formerly invites the global alliance to the meeting. This would be an ideal venue to formalize a relationship between IMWA and the global alliance.

Other Activities at the University of Newcastle include:

- The ASURE project on passive applications of sulphate reduction technology.
- The closure of east Durham coal field, which is producing large volumes of acid drainage.
- A Multi-stakeholder network for remediation of closed mines polluting river system in Ireland.
- Collaboration with the UK Environment Agency placing a research fellow to support policy on mining pollution issues.

Item 6	Global Alliance going forward	B Kelley
--------	--------------------------------------	----------

The target to get the Global Alliance functioning and formalized at the 6th ICARD was achieved. The GA is currently composed of ACMER, MEND, ADTI and INAP, with an interest from IMWA to join. Interaction among the GA has been evident throughout the year.

We need to ensure that the relationship adds value to each organization as we go forward. Face to face meetings in Cairns and Vancouver have proved very valuable and will continue to be organized. Teleconferences also need to continue to be held on a regular basis. Three regular teleconferences a year was proposed.

The Global Alliance can work together in a number of areas:

- Helping to distribute completed projects.
- Managing research project.

- Coordinating technology transfer events in the regions.
- Participating in technology and/or project reviews.
- Participating in committees.
- Helping to understand and access research capabilities globally.
- Brining regulatory/government participation through the regional organizations.
- Keeping each other aware of conferences and workshops.
- Helping to raise the international profile of other GA members.
- Leveraging research grants and helping to maximize research funds.

In parallel to consolidating the current relationship between GA members, the Global Alliance will look to expand into Europe and South Africa, and in the long-term, South America, China, and other regions.

Action Item

Confirm with Clive Bell agencies in China who have expressed interest in the Global Alliance and contact them.

Anne-Marie Fleury

A concern was raised regarding the level of NGO participation in the Global Alliance. MEND have a clear NGO participation that has been beneficial to the GA. ADTI also have NGO participation and ACMER involve NGOs in workshops and through consultative processes. It was agreed that the Global Alliance will look at how to disseminate information to communities of interest and stakeholders, particularly through technology transfer events.

Item 7	ICARD 7	C Bucknam
--------	----------------	-----------

Organization for the ICARD7 is underway. There will be much emphasis on keeping the costs low. The social activities will be ticket events.

The need to have published or electronic proceedings is being discussed. It was suggested that it would be most useful to have both formats.

IMWA have agreed to get involved in the ICARD7 organization, particularly to include more groundwater issues in the agenda.

Clive Bell and Larry Todd agreed to be part of the organizing committee.

Item 7	Meetings in 2004	B Kelley
--------	-------------------------	----------

Vancouver Meeting December 2003

INAP meetings have not yet been planned in 2004, opportunities for joint meetings with the Global Alliance will be favoured.

The annual BC MEND meeting will be held Dec 1-2, 2004.

The IMWA meeting in Newcastle, UK would be a good venue for introducing IMWA into the Global Alliance.