

MINUTES FOR THE MEND STEERING COMMITTEE MEETING DECEMBER 2, 2005, Vancouver, BC

Prepared by Catherine Coumans (with use of official minutes of the meeting)

Present:

Elizabeth Gardiner – The Mining Association of Canada (Chair)
Mike Aziz – Placer Dome Canada
Kim Bellefontaine – British Columbia Ministry of Energy, Mines and Petroleum Resources
Catherine Coumans – MiningWatch Canada
Amy Crook – Centre for Science in Public Participation (CSP²)
Chris Doiron – Environment Canada
Ben Edirmanasinghe for Ernie Armit – Manitoba Ministry of Industry, Economic Development and Mines
Charlene Hogan – MEND Secretariat, Natural Resources Canada (NRCan)
Denis Kemp – Falconbridge Limited
Bill Price – NRCan
Gilles Tremblay – MEND Secretariat, NRCan

Regrets:

Louis Bienvenu – Ministère des Ressources naturelles et de la faune du Québec
John Robertson – Ontario Ministry of Northern Development and Mines
John Martschuk – Barrick Gold Corporation

Guests:

Dave Bucar – Placer Dome Ltd., Porcupine Joint Venture
Alan Penn – Cree Regional Authority
Philippe Poirier – SNC-Lavalin
Derek Riehm, Barrick Gold Corporation (Chile)
Maxine Wiber – BHP Billiton

RESEARCH PROJECTS STILL BEING COMPLETED

There are a number of research projects from 2003-2005 that are still being completed:

- **Pastebackfill – MESH Ltd. (Peri Mehling)** – uses of cement paste backfill for tailings disposal.
- **Case Study Assessment – SNC-Lavalin (Philippe Poirier)** – this study is assessing the efficacy of tailings management at closed facilities: Heath Steele, Dona Lake, Mandy Lake, East Sullivan and Lorraine. Approvals from mining companies and the Quebec government have been problematic in some cases.
- **BC Case Studies – MMSL-CANMET (Bill Price)** – Bill Price has been documenting case studies for Johnny Mountain, Snip and Sulphurets focusing on tailings management. Translations of executive summaries are not ready.

- **Dry Covers Manual (Phase II - Macrosystems) (O’Kane Consultants)** - Delay in completion of this study is due partly because the lead author, Bonnie Dobchuk, has been on maternity leave.
- **MEND Prediction Manual (CANMET-Bill Price)** - Bill Price has been over-committed during the last year.

- **Literature Review of Molybdenum and Selenium (EcoMetrix – Ron Nicholson)** -

A discussion ensued on the scope of the review (whether it included both the aquatic and terrestrial receiving environments) because some of this information was on elevated Se levels in fish tissue prior to mining (baseline work) and the impact of Se salts on the uptake of methyl mercury. A report on selenium cycling by MERG (Yukon) was also identified. This report can be downloaded from:

http://www.emr.gov.yk.ca/mining/programs/mperg_2005_earnlakereport.html

- **DIAMIK Project – Waste Rock Pile Study** – this is a five year contribution by MEND to research being done by the International Network on Acid Prevention (INAP) to predict behaviour of waste rock from the Diavik Mine. Progress has been slow mostly due to the short construction season available on site. Placing instruments in the pile face has turned out to be more of a challenge than expected. Several methods were tried unsuccessfully last year. The project team has identified another option to try and if this fails, they will use the more conventional approach of placing the instruments vertically rather than just below the surface of the slope. The availability of on-site equipment has also been an issue and Diavik has committed more equipment and people time for the project in 2006. As a result, time and costs are greater than estimated. The Diavik team is looking at changing the scope of the project and will submit a proposal to the partners. This would involve a change in the type of waste rock used in the construction of the test piles. This change is based on the fact that one type of rock is more in abundance than originally identified. Ongoing discussion on the freezing of the waste rock piles with respect to collecting samples was had.
- **Cold Temperature Weathering (SRK – Stephen Day)** – Draft report is currently being reviewed.
- **Northern Soil Covers (SRK – Daryl Hockley)** - Some follow-up on case studies is necessary.
- **RCEN Project – Technology Transfer Initiatives - North American Indigenous Mining Summit** - The Summit was held in Edmonton from July 27 to 30, 2005 (September 2005 MEND Monitor). Gilles and David Chambers presented two workshops on Best Practices for Managing Acidic Drainage and on Prediction. They both found it an informative experience, and received positive feedback on their presentations. The Summit was organized and hosted by the Western Mining Action Network (WMAN, www.wman-info.org) and the Indigenous Environmental Network (IEN, www.ienearth.org). A general discussion ensued on other possible opportunities for MEND to pursue technology transfer to communities. Some suggestions were made for working with an Indigenous audience. A good practice is to cross-check after translation into Indigenous languages – wherein the dialogue is translated back to English. Also need to develop an understanding of the institutional framework i.e. land claim structure

and environment. There are people who work with these communities who can provide pointers on forming linkages.

- **Ontario-NRCAN Video** - Gilles Tremblay noted that Ontario – MNM with NRCAN has produced a mining sequence video titled “Our Community...Our Future: Mining and Aboriginal Communities”. In a summary document on the video it states that “the primary audience for this video is the Aboriginal peoples of Northern Ontario, and after that, all other Aboriginal peoples across Canada. The secondary audience would be exploration and mining companies and a third audience would be governments.” The video would increase awareness and expand knowledge of all aspects of the mining sequence:
 - Government Geological Surveys & Mapping
 - Early Exploration: Claim Staking & Prospecting
 - Advanced Exploration
 - Building a Mine: Planning & Construction
 - Mining Operation: Resource Extraction and Processing
 - Mine Closure: Clean-Up and Site Rehabilitation

DVD and VHS video formats would be available in English, French, Ojibwe, Cree and Oji-Cree. It was shown at PDAC in March 2005 – but its release has been delayed due to problems with correct translation and wording into Indigenous languages.

PROPOSED PROJECTS FOR 2006 –

A number of proposed projects for 2006 were discussed but it was decided that a final decision would be made on these and a few others that were still coming in at a conference call in January.

RCEN PARTICIPATION

There is a budget of \$115,000 for research in 2006. Of that \$20,000 has been allocated to participation by RCEN, including \$5,000 for reviewers of research reports, \$ 5,000 for participation of the RCEN representatives to MEND, and \$10,000 for a technology transfer project - meaning participation of community or NGO members to a MEND event or having a component of tech transfer on Acid Mine Drainage at a RCEN event.

RCEN Reviewers over 2005 have been Sue Moodie, David Chambers and We discussed trying to widen the pool of reviewers from RCEN. One agreement we reached was that Gilles would supply Amy Crook and Catherine Coumans with summaries of the projects even before the project is ready for review so RCEN would have a longer time period to advertise the project for paid review.

Finally, we are now officially on the look out for a good project that will allow us to access the \$10,000 that has been set aside for use by RCEN for tech transfer on AMD and Metal Leaching for the coming year.

EUROPEAN UNION – EFFORT UNDERWAY TO PROVIDE STANDARDS FOR MINE WASTE AND WATER RAISES CONCERN AMONG MEND MEMBERS.....

An interesting development in Europe was discussed. During the BC/MEND workshop, Lars-Ake Lindahl noted that the EU is moving to develop standards to characterize mine waste and water, which is expected to impact on industry world-wide. The other MEND members feel that these standards are expected to be very prescriptive. Some discussion was had on the level of expertise available in the EU around mining issues with regard to industry and applications. In the EU there is a heavy reliance on academia (very specialized) while in Canada, the expertise resides with industry, consultants and the governments.

Thirty standards have been developed for mining with many of these originally developed as landfill standards. Some are being directly applied to mining, but the other MEND members are concerned that they are not always relevant to mining applications.

There was an interesting discussion of how Canada can become “involved” in this process by finding key representative(s) from the EU who are very familiar with mining operations to sit on the standardization committee to ensure relevant input to the discussions on the new EU standards since these could be adopted abroad. These standards are expected to take effect in two years.