



International Network for Acid Prevention

Global Alliance Minutes

Skelleftea, Sweden

June 23, 2009

Chaired by Adam Jarvis of PADRE

Participants: Nico Bezuidenhout, (Golder), Rich Borden (Rio Tinto), Charles Bucknam (ADTI/Newmont), Devin Castendyk (ADTI/NYU), Tom Claridge (FMI), Terry Chatwin (INAP/ADTI), Meiring du Plessis (WRC), Linda Figueroa (ADTI/Colorado School of Mines), Elizabeth Gardiner (MEND/MAC), Adam Jarvis (PADRE/ Newcastle University), David Jones (SSD – Australia), Bruce Kelley (Rio Tinto), Lars-Ake Lindahl (Swedish Mining Association), Scott Miller (Newmont), Mike O’Kane (O’Kane Consultants), Eric Perry (ADTI/USDI-OSM), Jim Robertson (Barrick), Gilles Tremblay (MEND/ NRCAN), Flavio Vasconcelos (UFMG, Brazil), Rens Verburg (Golder/ADTI), David Williams (ADTI/USDI – BLM), Andrea Chatwin (INAP)

1. GARD Guide Up-Date (Nico and Rens)

- Nico presented an overview of the GARD Guide from Golder’s involvement to date
 - a. Phase 1 (6/07-4/08): Beta Version
 - b. Phase 2 (4/08-1/09): Review and revision of Rev A
 - c. Phase 3 (1/09-6/09): Review, February posting on the Wiki
 - d. Phase 4 (ICARD 8): Roll-out
- Invited Contributors
 - a. Steve Day and Stuart Miller – Chapters 5 & 6
 - b. Mike O’Kane – Chapter 6
 - c. Bob Kleinmann - Coal (Added 40-60 pages of text. Links to coal sections.)
 - d. Keith Ferguson – Chapter 11
- Input over 2 years
 - a. >120 conference calls
 - b. 3000 e-mails
 - c. >2500 man hours
 - d. 30 key contributors
 - e. 200 stakeholders on 4 continents
- Delineation of risks at the outset of the project
- Successes
 - a. Dedicated core team: Keith Ferguson, Terry Chatwin, Rens Verburg, Nico Bezuidenhout

- b. Importance and influence of key contributors cannot be over-emphasized.
 - c. Geographic footprint and network influence (GA interaction and ownership)
 - d. Importance of maintaining a technical vision during the development. (Custodian – Keith Ferguson)
 - f. Stakeholder engagement and input in a very busy industry
 - g. Use of the Wiki model
- Challenges
 - a. Busy stakeholders
 - b. Addressing all opinions/comments and selected rejection of some comments
 - c. Enormous amount of information on ARD to consolidate (almost 700 pages)
 - d. Developing “How To...” guidance that applies to most situations without being prescriptive
 - f. Selection of “Best Practices
 - g. Implementing the Wiki model and setting up electronic links
 - h. Overcoming ingrained mistrust of the mining industry by some regulators and NGOs
 - i. Addressing skepticism of the GARD Guide’s usefulness by some ARD practitioners
- Broad Stakeholder engagement with workshops and presentations.
 - a. Workshops on the GARD Guide
 - Brisbane, Australia – organized by ACMER
 - Johannesburg, South Africa – organized by WRC and Golder
 - Denver, CO – organized by ADTI-Metal Sector and US EPA
 - Vancouver, BC – organized by the GARD Guide team with support from MEND
 - Morgantown, WV – organized by the GARD Guide team and the ADTI-Coal Sector
 - Stockholm, Sweden – organized by the Swedish Mining Association
 - b. Presentations on the GARD Guide
 - February 2008 – SME Annual Meeting (Salt Lake City, UT)
 - February 2008 – MAC Annual Meeting (Toronto, ON)
 - April 2008 – ACMER AMD Meeting (Burnie, TS)
 - June 2008 - Ontario Mining Association (Kirkland Lake, ON)
 - August 2008 – SME Hydromet Conference (Phoenix, AZ)
 - September 2008 – NMA – Mining Expo 08 (Las Vegas, NV)
 - September 2008 – 6th ASSARD – (Guangzhou, China)
 - February 2009 – SME Annual Meeting (Denver, CO)
 - April 2009 – CIM Annual Meeting (Toronto, ON)
 - May 2009 – Mine Design, Operation & Closure (Fairmont, MT)
 - June 2009- 9th ICARD (Skelleftea, SW)

- c. Future Workshops
 - September 2009 – Perth, Australia – organized by Golder and ACMER
 - October 2009 – Pretoria, South Africa – organized by Golder and WRC
- Comments from the GA
 - a. Gilles Tremblay recognized tremendous contribution made by Charlene Hogan of MEND to support the GARD Guide.
 - b. GA members reiterated the importance of case studies (Practical Examples) demonstrating the utility and value of the GARD Guide.
 - Include lessons learned in the case studies
 - Address how application of “Best Practices” are important in case studies.
 - Case studies should be concrete and concise while maintaining confidentiality and sensitivities.
 - Look at past projects and assess how lessons learned are being applied now.

2. GARD Guide Next Phase – Jim Robertson

- Copies of the GARD Guide Next Phase draft will be e-mailed to GA by Terry Chatwin.
- Need to introduce the GARD Guide into university curriculum
- Upcoming Workshops
 - a. Workshop in Perth in September 2009
 - b. Training workshop in South Africa at the International Water Treatment Conference in October 2009
 - c. Possibly a workshop at the NWMA in Reno in December 2009
- The GA raised the possibility of “web-i-nars” for promotion and training on the GARD Guide.
- INAP reviewing the possibility of translating the GARD Guide.
 - a. Cost is a constraint.
 - b. We would consider translating the executive summary
 - Spanish,
 - French,
 - Mandarin
 - Portuguese

3. Global Alliance Expansion

- Possible expansion of the GA
 - a. China – Prof. Wen-Shen Shu, contact - Group organized at Sun Yet San University with 10 universities, 4 mining companies and 4 research centers.

- b. Brazil – Dr. Flavio Vasconcelos, contact – Group organized at Federal University of Minas Gerais with 5 universities, 2 mining and service companies and a government agency.
- c. Indonesia – Prof. Bostang Radjagukguk, contact – Group organized at Gadjah Mada University with 3 universities.
- d. Introduction of Flavio Vasconcelos to the GA
- Application process for membership in GA delineated by Bruce Kelley

4. Annual Awards to possibly to be Presented at the December MEND Conference

- Award categories
 - a. Recognizing Lifetime Achievement (Person)
 - b. Recognizing Best Technology (Team)
- Terry will prepare award criteria for Annual Lifetime Achievement and Best Technology awards and e-mail to GA
- Every third year the awardees would be recognized at ICARD so that there will be a larger international recognition for the award.

5. Action Items

- Terry Chatwin will prepare award criteria for Annual Lifetime Achievement and Best Technology awards and e-mail to GA
- Bruce Kelley will send Terry Chatwin information on past GA Application Processes and Terry will prepare a Application Packet, which he will distribute to potential GA members.
- Copies of the GARD Guide Next Phase draft will be e-mailed to GA by Terry Chatwin.