## A Word from the Mine Water Notes Editor

The ICARD 2006 conference programme is being finalized. The conference is being co-organised by the most prominent mining and mine water related organizations in the world: SME, ASMR, IMWA, INAP, ADTI, and the Rocky Mountain Regional Hazardous Substance Research Center. It is anticipated that approximately 1000 delegates will come to the ICARD conference. More than 280 abstracts from all continents were received but there was only time for 148 oral presentations and only one oral presentation per author was allowed. The rest were grouped into two categories: poster with a full manuscript published in the proceedings and the option to substitute an oral presentation if one of the accepted presenters fails to come to St Louis, and posters with abstracts published in the proceedings.

As a result of long negotiations with the conference organizers, IMWA has its own session with 10 IMWA-relevant presentations and another 10 posters. This is not to imply that most of the other papers won't be of interest to IMWA members, just that we wanted to have a focal point for IMWA members to meet and to increase awareness of IMWA to conference participants. Other IMWA members who will not be in this session and have been accepted for oral or poster presentation will have their papers placed thematically in one of the other 18 conference topics. This grouping will be unusual for IMWA members, as we usually have only one session with 4 – 8 topics.

From the abstracts I read, I am sure that the 2006 IMWA symposium will be a very interesting meeting. I hope that all of you will take the opportunity to be part of this important international "7<sup>th</sup> International Conference on Acid Rock Drainage" next year, which is not only focused on acid rock drainage, but all kinds of polluted mine waters!

Chris Wolkersdorfer, Freiberg/Saxony

# Banyan Tree Phuket resort, Thailand – An example of a successful mine site conversion

In our last issue, we reported on potential destruction of former mine sites in Thailand by the December 26 2004 Tsunami. Now we can report that at least the Banyan Tree Phuket resort was not destroyed because it was situated on the lee side of the wave.

The Banyan Tree Phuket resort at Laguna Phuket in Thailand is one of the world's nicest health resorts. In 1907, tin dredging started in the Ohang-Nga and Bang-Tao Bays; the mangrove swamp was dredged up to a depth of 30 m, destroying the mangrove environment. Even six years after an area was dredged, the

natural mangrove habitat did not recover and the sediment plumes moving into the open sea devastated off shore coral reefs. Due to the large tin reserves in this area, a smelter was erected close to a reef, which today is called the Tin Smelter Reef.

Increasing conflict between the interests of the tourist industry and the shallow and coastal tin dredging activities along with a collapse of the tin market in 1985 caused an end to mining. However, the "problem of effects caused by increases in suspended solids and turbidity" remained. For a long time during and after the active dredging operations, an intense, well documented monitoring of the area was conducted by the Phuket Marine Biological Research Center.

In 1977, the United Nations Development Plan stated that the area was toxic wasteland, too severely damaged to support vegetation and consequently "too environmentally damaged to have any development potential". Nevertheless, two years later, the Tourism Authority of Thailand wrote: "although the damage was probably beyond repair, effort should not be spared to try to restore the environment". A \$US200 million restoration programme was initiated starting with importing fertilized topsoil, which was used for planting Casuarina, palm, fruit and flowering trees as well as other vegetation. This measure successfully stopped the erosion of the abandoned mine and tin smelter land. At the same time, large quantities of contaminated soil were removed, pit lakes were flooded with fresh and salt water, and new hotel resorts, such as the Banyan Tree Phuket, were constructed. Even today, the effects of the previous offshore tin mining in Bangtao Bay affects the region as millions of Baht have to be used to replace the sand swept away into the holes on the ocean floor left by the dredging operations (adopted from pers. comm. Rung-Aroon Wichitwatee, Public Relations & Advertising Manager, Laguna Phuket Media Contacts and other references).

Chris Wolkersdorfer, Freiberg/Saxony

### **Back Issues**

Members who recently joined IMWA can find a complete author index (issues 1–23) of the "International Mine Water Association Journal" and "Mine Water and the Environment" at our web-page www.IMWA.info. Volumes 17(1), 18(1), 19(2), 20(1) and 21(1) as well as proceedings of the 7<sup>th</sup> and 8<sup>th</sup> IMWA Congresses are still available for \$US/€ 15.00 a copy. Some other back-issues are available on request (copies of single pages at \$US/€ 0.60 each). Please add \$US/€ 5.00 for shipping/handling. You can also access the journal on line, using springerlink.com

Chris Wolkersdorfer, Freiberg/Saxony

# **New MEND Report released**

MEND Report 1.61.4 - Covers for Reactive Tailings Located in Permafrost Regions Review (October 2004)

The report provides a brief introduction to permafrost issues and then focuses on applications of covers constructed over reactive tailings in Canadian permafrost regions. Case histories for Nanisivik, Raglan, Lupin and Rankin Inlet are examined, representing sites with different tailings operations, cover design approaches and physical and climate conditions. Parameters that govern the design of the cover are addressed including: cover materials, factors affecting the depth of active thaw zone, temperature changes and variations, water saturations, and pore water quality.

To purchase this, or any MEND report, please contact:

MEND Secretariat CANMET 555 Booth Street Ottawa, Ontario K1A-0G1 E-mail: mend@nrcan.gc.ca

Report available in hard copy for \$35.00 Cdn.

From: MEND electronic newsletter February 2005

### **New Members**

IMWA welcomes the following new members:

Larry Breckenridge, Golden, USA
Kenneth Carroll, Tucson, USA
David Cline, Murray, USA
Carl S Kirby, Lewisburg, USA
Richard Martin, Perth, Australia
Michael J McGlone, Tucson, USA
Leon Payne, Tom Price, Australia
Maria do Rosário M.C. Pereira, Vila Real, Portugal
Geoff Ricks, Castlemead, United Kingdom
Michael Schlömann, Freiberg, Germany
Steve Slater, Bundoora, Australia

We hope that our new colleagues will benefit from and contribute to the extensive mine water knowledge and expertise gathered within our group of international experts. Please use your membership number in any correspondence, especially money transfers with IMWA. You can find it easily on your journal's address label, in front of the word "GES". European Union members please ask for our German account details, convert US dollars to EURO and use our IBAN and BIC numbers, as they make money transfers within the European Union as cheap as it would be in your home country!

Adrian Brown, Treasurer, Denver, Colorado, USA

# **Forthcoming Events**

6<sup>th</sup> – 9<sup>th</sup> June 2005, The Hague, Netherlands
ModelCARE'2005, International Conference on Calibration and Reliability in Groundwater Modelling: From Uncertainty to Decision Making; website: modelcare2005.nitg.tno.nl

19<sup>th</sup> June – 24<sup>th</sup> June 2005, Breckenridge, USA

ASMR – 22<sup>nd</sup> National Meeting; website:
ces.ca.uky.edu/asmr; e-mail: asmr@insightbb.com

27<sup>th</sup> June – 1<sup>st</sup> July 2005, Skellefteå, Sweden
"Securing the Future – International Conference on Mining and the Environment" website: www.securing2005.skelleftea.se; e-mail: tomas.from@svemin.se

 1<sup>st</sup> – 3<sup>rd</sup> September 2005, Rhodes Island, Greece
 9<sup>th</sup> Conference on Environmental Science and Technology – 2005; website: www.gnest.org/cest; e-mail: cest@gnest.org

5<sup>th</sup>– 9<sup>th</sup> September 2005, Oviedo, Spain
10<sup>th</sup> IMWA Congress 2005; website:
www.IMWA.info; e-mail: imwa2005@IMWA.info

11<sup>th</sup> – 16<sup>th</sup> September 2005, Freiberg/Saxony
"Uranium Mining and Hydrogeology IV";
website: http://www.geo.tu-freiberg.de/umh;
e-mail: umh@geo.tu-freiberg.de

15<sup>th</sup> – 16<sup>th</sup> September 2005, Nicosia, Cyprus

1<sup>st</sup> International Conference on Sustainable Urban
Wastewater Treatment and Reuse, SUWTR 2005;
website: at www.uest.gr/medaware.htm; e-mail:
suwtr2005@ucy.ac.cy

16<sup>th</sup> – 18<sup>th</sup> November 2005, Nancy, France
"Post-Mining Reclamation 2005";
website: http://www.mines.inpl-nancy.fr/gisos/

27th - 30th March 2006, St Louis, USA

IMWA/ICARD/SME/ASMR Symposium 2006; website: http://www.smenet.org/meetings/Annual Meeting2006/Author/icard.cfm; e-mail: asmr2@insightbb.com