About the Workshop

In the last decades worldwide efforts have been conducted to understand acid mine drainage and its abatement. Yet, passive and active treatment methods as well as enhanced natural attenuation are still not fully understood and need further investigations. This workshop will introduce mine water issues in general and treatment methods for contaminated mine water.

During the introduction the participant will learn basic geochemical mechanisms that can be observed in mines and result in ground or surface water contamination. Simple case studies shall exemplify which environmental impacts are caused by mining and how the hydrogeological and ecological surroundings might be altered and can be limited. Usually, hydrogeologists and non-mining engineers are not familiar with the mining terms. This is also true for the situation underground, especially if it comes to historic mining and to acid mine drainage. Therefore, the first part of the workshop aims to provide a general understanding of the terms and conditions in a mining environment.

To work a mine on a medium or long term basis, the mine workings have to be kept dry. The most important mine pump types will be described and which drainage technologies might be necessary.

After mining ceases, the mine workings are usually flooded. To predict or calculate mine flooding, it is necessary to understand the hydrogeological situation on-site. Several theoretical methods and case studies will be described and discussed along with proper sampling technic (field trip).

To develop the most advantageous treatment strategy, the temporal and spatial development of a mine flooding have to be understood. Similarly, it is necessary to understand the chemical development of mine flooding. Based on that data a conceptual model and a treatment option can be planned. The last part of the workshop will give an introduction to mine water treatment.

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Preliminary Programme

April 23rd 2009
- Introduction
- Historical Background
- Mining Methods
- Technical Aspects
- Water in Mines

April 24th 2009
- Mine Dewatering
- Mine Flooding
- Mine Water Geochemistry
- Flooding Prediction
- Mine Water Treatment

April 25th 2009
- Field Trip (please bring your own safety helmet and safety boots)
- Mine Water Sampling

Recommended Literature

- Brown, M., Barley, B. & Wood, H. (2002): Minewater Treatment Technology, Application and Policy. 500 p., London (IWA Publishing).
- Jambor, J. L., Blowes, D. W. & Ritchie, A. I. M. (2003): Environmental Aspects of Mine Wastes. In: Raeside, R.: Short Course Series Volume 31. 430 p., Waterloo, Ontario (Mineralogical Association of Canada).
- Wolkersdorfer, Ch. (2008): Water Management at Abandoned Flooded Underground Mines – Fundamentals, Tracer Tests, Modelling, Water Treatment. – 466 p., Heidelberg (Springer).
- Younger, P. L., Banwart, S. A. & Hedin, R. S. (2002): Mine Water Hydrology, Pollution, Remediation. 464 p., Dordrecht (Kluwer).

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Sender:

Title, Name, Given Name

Institution/Company

Street, Nr. / Postbox

City, ZIP-Code

Cape Breton University
Mine Water Remediation & Research
Prof. Dr. Christian Wolkersdorfer
PO Box 5300
Sydney, NS, B1P 6L2
Canada

Registration

I here by register to participate in the workshop "From Ground Water to Mine Water".

Please tick the appropriate fields All workshop fees are given in Canadian Dollars.	Regular Participants	IMWA Members	Students | Additional Material
Theory April 23rd – 24th 2009	**350.00** ☐	**280.00** ☐	**70.00 CAD** ☐
Field Trip (Sampling) April 25th 2009	**150.00** ☐	**120.00** ☐	**30.00 CAD** ☐

Date: ..... Signature: .....

Name, Given Name: .....

.....

Institution/Company: .....

.....

Street/PO Box: .....

City, ZIP-Code: .....

Country, State: .....

Telephone: .....

Fax: .....

E-Mail: .....

IMWA Membership Number: .....

I agree with the fact that my personal data will be used for the planning of this workshop by CBU and IMWA. Your data will not be shared with third-parties.

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General Information

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Web: **http://minewater.cbu.ca**

Registration
Registration is requested on the attached registration form or by e-mail until March 23rd. With the confirmation of your registration you will receive an invoice and further information.

Participant Cancellation
In the case of participant cancellation full refund will be provided with written notification prior to March 23rd, 2009. Cancellation before April 19th will result in a 50% handling charge. There will be no refund after April 19th, 2009.

Venue
The workshop will take place in Sydney, Nova Scotia in room CE 323 of Cape Breton University, 1250 Grand Lake Road.

Accomodation
Accommodation and meals are not provided in this workshop. Both are the responsibility of the participant. We ask the participants to organise their own accommodation reservations: http://sydney.capebretonisland.com.

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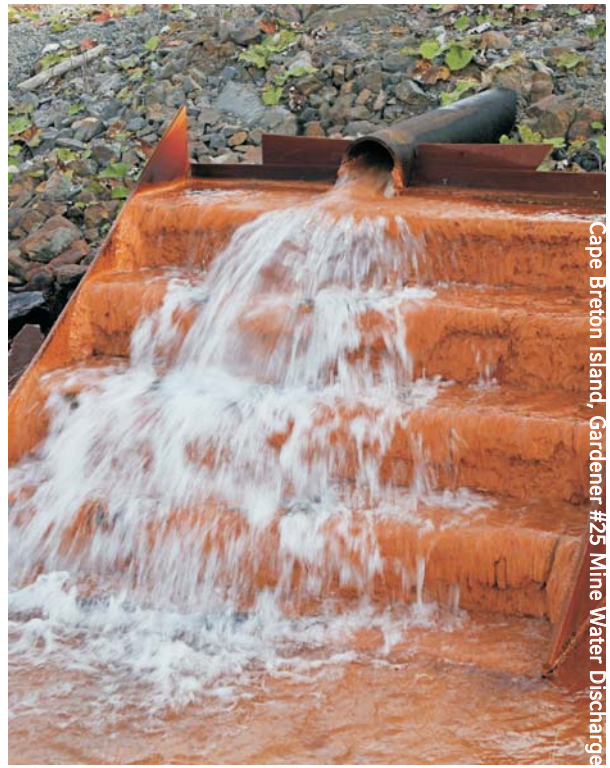
Cape Breton Island, Gardener #25 Mine Water Discharge

From Ground Water to Mine Water

Workshop on Mine Water Management and Remediation

April 23rd to 25th 2009

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