



THE SOUTH AFRICAN COAL ASH ASSOCIATION (SACAA)

No 20, Summer 2008

ASH @ WORK

COMMUNIQUÉ OF THE SOUTH AFRICAN COAL ASH ASSOCIATION
from your Editors and President of the SACAA

Obituary

Valerie Patricia Howard



17 June 1944

17 December 2007

Our dear Val, SACAA's efficient administrator for many years, passed away in December last year, after a long illness, bravely borne. Thanks to her efforts the Association's administration was always up to date and on many occasions she, together with her partner Peter, treated members to some excellent fare after their meetings and at the social events. She made a point to personally get to know most members and her caring attitude was a strong factor in the fine fellowship within SACAA.

Rest in peace Val - we thank you and will surely miss you!

Editorial

Due to this sad loss there was a hive of activity at the start of the New Year in order to maintain continuity in SACAA's affairs. Feedbacks from the most recent Council meeting are given below. The big news is that Council has representatives from ESKOM & the C&CI: **"Welcome Tyrone Singleton and Santie Gouws!"** The Council likewise welcomes Claudene Moorgas as

alternate to Jean-Bosco Kazirukanyo of Afrisam/Holcim. Members are also advised that already for some time Walter Wirth of PPC is the alternate to Eduardo Auger. On the environmental/health side we have a look at chromium VI in this issue of **Ash@Work**. Finally, there is the invitation to a non-ash outing.

Council Meeting

At the 84th Council meeting, held on 22 January 2008, the functionality of the association was modified and the following actions were approved:

- The Honorary Treasurer, Dieter Heinichen, has stepped in as Acting Administrator/ Secretary assisted by Yvonne Kruger. This combination proved itself with the 2006 conference and more recently with the compilation and distribution of our newsletter, **Ash@Work**.
- With the shift of the administration to Pretoria, the Cresta postal address will only run until the end of 2008, while a new postbox has been applied for at Moreleta Village (a brand new Post Office with boxes still under construction).
- The association's bank account will be moved from Cresta to Woodlands. The account number will remain the same.
- Council member, Wayne Truter, has accepted the task of organising and running the one-day seminar on ash applications in agriculture and in the rehabilitation of mine dumps. This will be staged at the University of Pretoria, in March 2008 (more details below under Forthcoming Events).
- SACAA's website is to get urgent attention.

International News of Note

The Worldwide Coal Combustion Products Network (WWCCPN) is in the process of establishing a website to which the websites of all member organisations will be linked. A draft of this website has been generated by the AACA and comments have been requested from SACAA. This is another reason for the necessity to speedily update SACAA's website.

Environmental and Health

Chromium (VI) Directive

(Source BCA and Chromium VI Handbook, by James A. Jacobs and Jacques Guertin, published by Elsevier)

The EU Chromium (VI) Directive was implemented in the UK in January 2005 via amendments to the COSHH Regulations. It reduces the risk of chromium-related allergic dermatitis by restricting the chromium (VI) content of cement, and products containing cement. When hydrated the product must not contain more than 0,0002% (2 ppm) of soluble chromium VI of the total dry weight of the cement. This restriction is not applicable when there is no chance of skin contact, such as in enclosed automated systems.

Chromium occurs naturally in some of the raw materials used in the manufacture of cement:

Material	Total Cr mg/kg
Coal	15
Coal ash	152
Bituminous	172
Sub-bituminous	50
Lignite	43

(Source: Adriano et al, 1980 in Table 4.1.9 in Chromium VI Handbook)

South African fly ash contains 100-200 mg/kg of Cr. Manufacturers control soluble chromium VI levels by the addition of reducing agents, such as ferrous- or stannous sulphate. The lifespan of these reducing agents is limited and manufacturers are obliged to indicate the date of manufacture, storage conditions and expected shelf-life.

Maybe there are some knowledgeable readers who can enlighten us on the current legislative position in the RSA?

Potential non-ash event

Our Vice President, Japie Krüger, suggested that we join the Tree Society's outing to the University of Johannesburg on Saturday, 26 July 2008 to a presentation by Dr Michelle van der Bank, Department of Botany and Plant Biotechnology, on the topic "Plant DNA". Together with Dr Vincent Savolainen [Royal Botanic Gardens/Imperial College London], she is leading a team of five University of Johannesburg senior researchers in an ambitious project that aims at using DNA sequencing and barcoding techniques in the study of local plants. Of

specific interest is the entire flora of the Kruger National Park. The diagnostic technique uses the DNA sequence of a single gene for species identification. (*More information is available in the UJ once-off newspaper "The DNA Barcoding Herald", Jan. - Dec 2008*).

Please advise Dieter (contact details at end of this newsletter) who and how many persons would like to attend so that appropriate arrangements can be made.

Forthcoming events

ICCX, Sun City, 19 - 21 February 2008

The International Concrete Conference and Exhibition will include 20 presentations by local and overseas experts. *Details are available from Dr Hans Beushausen of UCT [ICCRRR@eng.uct.ac.za].*

Workshop on Ash, University of Pretoria, March 2008

A workshop entitled "Can Fly Ash make a Contribution to Solving Agricultural and Environmental Challenges in South Africa" is to be held at the University of Pretoria during March 2008.

The current plan is to schedule this as a one-day event. During the morning all the researchers involved in the challenge will "workshop" the topic.

The afternoon will see a mini-symposium being held under the auspices of the SACAA.

Dr Wayne Truter, Prof Norman Rethman, Ms Juanita Rossouw, and an environmental lawyer Mr Morne Viljoen, are among the invited speakers.

Date and programme will be available as soon as all arrangements have been confirmed.

For further information and sponsorship opportunities please contact: Wayne Truter [wayne.truter@up.ac.za] or 083 470 3964.

3rd Biannual Coal Ash Professionals Training Course, San Antonio, Texas, USA, 11 - 13 March 2008

The University of North Dakota, in conjunction with the Energy and Environmental Research Institute will be running this course. **Main topics are:**

- how CCBs are viewed from a coal company, electric generating company, marketer, and regulatory perspective
- implications of environmental initiatives and emerging specifications on coal ash
- updates on the industry's latest hot topics including IGCC by-products and FGD materials
- tricks of the trade from those who successfully utilise coal ash
- options for recovery of disposed coal ash and disposal site development

For further details contact Richard Kruger: richonne@mweb.co.za

Excellence in Concrete Construction - through Innovation, Kingston University, London, 9 - 10 September 2008

Full details at <http://cmrg2008.kingston.ac.uk>

International Conference EuroCoalAsh 2008, Warsaw, Poland, 5 - 9 October 2008

This conference is organised by the Polish Coal Combustion Union in conjunction with the European Coal Combustion By-products Association (ECOBA). The conference covers all aspects of coal fly ash, especially in the European Union. Details are available on: www.eurocoalash.org

ICCRRR 2008, Cape Town, 24 - 28 November 2008

Website: www.civil.uct.ac.za/iccrrr

World of Coal Ash (WOCA) 2009, Lexington, Kentucky, USA, 4 - 7 May 2009

IN THE NEXT ISSUE

Biofuels and Human Feeding. A discussion of the outlook for growing energy and food crops. Is there sufficient land?

YOUR SACAA COUNCIL 2007/8	
<p>Office Bearers:</p> <p>Richard Kruger (President) Japie Krüger (Vice President) Dieter Heinichen (Hon. Treasurer and Acting Administrator)</p>	<p>Council members [& alternates]:</p> <p>Jean-Bosco Kazirukanyo, Afrisam [Claudene Moorgas, Afrisam] Matthew Reynolds, Ash Resources [Graeme Smith, Ash Resources] Santie Gouws, C&CI Tyrone Singleton, Eskom Stanley Moeketsi, Lafarge SA [Reinhold Amtsbüchler, Lafarge SA] Eduardo Auger, PPC Cement [Walter Wirth, PPC Cement] Wayne Truter, UP</p>

The editorial team would welcome any information for publication in forthcoming **Ash@Work** newsletters.

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or write to:

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Disclaimer: *The views expressed in this newsletter are not necessarily those of the Council of the South African Coal Ash Association*