



THE SOUTH AFRICAN COAL ASH ASSOCIATION (SACAA)

No 26, Aug. 2009

ASH @ WORK

COMMUNIQUÉ OF THE SOUTH AFRICAN COAL ASH ASSOCIATION

from your Editors and President of the SACAA

Editorial

With this third issue of 2009 we hope to provide our members with some interesting ash-related news and kindle their curiosity to attend this year's AGM on 26 August 2009.

We welcome the two new ash companies, Sephaku Ash (Pty) Ltd and Ulula Ash (Pty) Ltd, who both joined SACAA as Corporate Members. Their respective representatives, Hennie van Heerden and Mark Hovy, have however been long-standing members of the Association.

There is the usual information on activities of Council and some feedback on the last Technical Meeting, held on 29 July 2009.

Council Matters

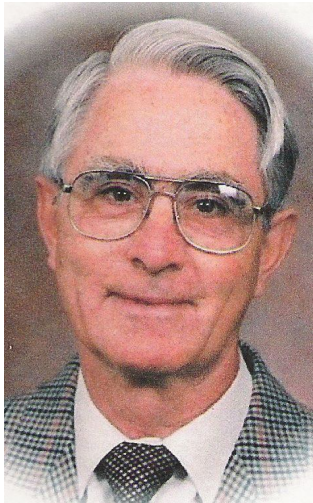
The 90th Council meeting was held at SAICE, Midrand on 26 July 2009. The main issues arising from the meeting were:

- With the general trend of "greener" environments ECOBA* is heavily engaged in assuring that coal ash is not classified as a waste. To this end the ECOBA Boardmeeting in Copenhagen, later this year, will be preceded by a conference. Both will be attended by RK

* ***European Coal Combustion Association***

- ECOBA's participation in the International Conference on Sustainable Construction Materials, in June 2010, in Ancona, Italy, was sanctioned by its members. It is the intention to have South Africa and/or SACAA present at this conference
- In light of new environmental legislation SACAA should endeavour to establish contacts with the new Department of the Environment to make them aware of the benefits of fly ash
- In preparation for the AGM, fee structures were reviewed. For the current financial year an approximate increase of 10% was approved and a provision of about 6% for 2010/2011.
- The next Council Meeting has provisionally been scheduled for 16 September 2009
- There is still no new date for the postponed Workshop/Seminar on Clean Development Mechanisms (CDM is the latest buzzword!). The delay is partly due to the problem of selecting dates that suit the potential speakers

Maestro celebrates



SACAA's founder member, Dr Japie Krüger, recently turned 80. As you all know he is a mine of information on ash and its behaviour in all kinds of applications. That's also why, even at his age, he is still serving as consultant in a variety of problem solving situations.

We wish him well, especially that he may be blessed with reasonable health, little stress and lots of joy with his family and friends. Also, we look forward to many more years of staunch support for SACAA and all ash-related matters. Congrats Japie!!!

Feedback - SACAA Technical Meeting, 26 July 2009

Lecture: *"Global Ash Kaleidoscope – Feed back on WOCA 2009 and other international happenings"*
by Dr Richard Kruger

Initially there were three candidates to give this feedback, but last minute other commitments prevented their attendance and it was left to our President to fill us in. His vivid presentation concluded with the following summary:

The World of Coal Ash Conference was attended by 498 delegates. There were 51 exhibits and 158 presentations on topics as diverse as the asset value of coal combustion products, mercury capture, co-combustion, clinker factors, flue gas desulphurisation and fluidised bed ash.

The application and sustainability of CCPs is an integral part of many sectors of the economy. The resource potential of CCPs is becoming fully appreciated and several new and innovative uses are emerging.

Companies need to be full-service providers if they are to become successful.

Challenges remain: Basic and fundamental research is needed to develop new more profitable applications as Clean Coal Technology will necessarily generate new CCPs. The use of fly ash and FGD in agriculture will usher in a new era of ash utilisation but environmental credentials will need to be guaranteed.

The revised version of EN 450 will be issued shortly. Co-combustion with biomass will be applicable. Reactive silica levels are to be adapted; the activity index will be used to measure pozzolanicity and product consistency will need to be improved if compliance is required.

The feedback meeting was concluded with lengthy discussions over refreshments.

Ash Development Association of Australia

➤ Post-tensioned structural fly ash concrete

The Conclusion section of this four-page Data Sheet reads as follows:

"Fly ash is extensively used in concrete for structural applications. The use of fly ash in concrete in Australia dates back to the late 1950's. From studies conducted on fly ash inclusions into concrete specifically relating to post-tensioning applications, the following findings have been noted:

- Concrete gain strength characteristics for control (non fly ash) and fly ash concrete mixes are well understood and are often optimised for particular design and construction applications.
- Bond (pull-out) strengths for control (Type GP cement only) concretes and fly ash concretes were similar.
- There is no evidence in the technical literature that suggests increasing fly ash proportions (up to 30% of total binder in concrete) will decrease bond strength between tendons and concrete.
- Fly ash concretes can be easily designed to meet early age requirements specified for post tensioning applications."

Source: *Reference Data Sheet No. 9, April 2009, www.adaa.asn.au*

➤ Coal Combustion Products Handbook

The ADAA has, in conjunction with the Cooperative Research Centre for Coal in Sustainable Development, published a Coal Combustion Products Handbook. Anyone wishing to order a copy (R750) should please contact Richard Kruger before 15 September 2009: richonne@mweb.co.za

Ash Resources' glittering launch

The local ash scene was lightened up at a glittering function at Emperor's Palace on 11 June 2009, when Ash Resources (Pty) Ltd launched its new product **DuraPozz® Pro™**. It is a new generation classified fly ash, super-fine for high performance, high durability concretes. Just like the product, the evening was of high calibre in terms of food, beverages and interactive entertainment, which included presentations by the new local chairman of Lafarge, Mr T Legrand and Graeme Smith, MD of Ash Resources. A brochure, with full details on the product, is available from Ash Resources [+27 11 886 6140 or www.ashresources.co.za].

Green Taxes

The SA Government has proposed Green Tax incentives to help counter the effects of climate change, but they could be ineffective according to experts. National Treasury released the draft Taxation Laws Amendment Bill on 1 June 2009 for public comment, proposing that the sale of certified emission reductions (CERs), or carbon credits, be exempt from income tax. The draft also proposes income tax deductions for energy efficient businesses.

Carbon credits are normally taxed on profits of sale. Due to the bulk of South Africa's energy being derived from coal-fired power stations, the country's greenhouse gas emissions rank among the top 20 in the world; 42% of Africa's and 1,8% of global emissions. Developing nations, like South Africa, are exempt from emission limits in terms of the Kyoto Protocol. However, regulations will be renegotiated in 2012, which probably will require the implementation of measures to lower emissions.

It appears that the emission limits set in the draft may make it unlikely for some incentives to be highly effective, since the incentives will only be valid till the end of 2012, whereas the CERs will extend beyond this date.

An Energy Certificate from the SA National Energy Development Institute will have to be obtained by taxpayers who wish to utilise the energy efficiency incentive. The taxpayer would then be granted an allowance of 50% of the energy efficiency savings multiplied by an as yet undetermined rate by the Minister of Energy.

Source: *Fin24.com, 10 June 2009*

LAST SNIPPET

The UN Environment Programme (UNEP) says nature's way is best for controlling the gases responsible for climate change.

A UNEP report says better management of forests, more careful agricultural practices and the restoration of peat lands could soak up significant amounts of carbon dioxide, the most common gas blamed for global warming. It says millions of dollars are being invested in research on capturing and burying carbon emitted from power stations, but investing in ecosystems could achieve cheaper results. It would have the added effects of preserving biodiversity, improving water supplies and boosting livelihoods. [UN report released on 5 June 2009 at climate talks in Bonn, Germany]

Editorial comment: This is a much better option and will ensure the long-term supply of ash!

FORTHCOMING EVENTS

SACAA AGM 2009 and Technical Meeting, SAICE, Midrand, 26 August 2009

Concrete Innovations and architectural responses, by Daniel van der Merwe, after the AGM at 15:00

SACAA Special Function, Velmorè, Erasmia, 8:30 for 9:00, 2 September 2009

The Local Ash Scene – Some historic facts and a tribute to Jurgen Meyer. Initiated and sponsored by Ulula Ash (Pty) Ltd

Coal-Gen Europe Conference & Exhibition, 1-3 September, 2009, Katowice, Poland

Website: <http://cge09.events.pennnet.com/fl/index.cfm>

Management of Air Quality – Minimizing Pollution and Harmful Emissions, 2-3 September 2009, Balaleika Hotel, Sandton

Organiser: Syncom Business Intelligence and Conferences

Tel.: +27 11 781 9511; E-mail: sbt2@syncombi.co.za

Annual Conference of the National Association for Clean Air (NACA), 14-16 October 2009, Emerald Casino, Vanderbijlpark

The conference will follow immediately after the DEAT Air Quality Governance Lekgotla

Enquiries: bev@naca.org.za

**International Coal Ash Conference and Exhibition, Yanxiang Hotel, Beijing, China,
15-16 October 2009**

Organiser: China Building Materials Federation. *Website: www.coalash.org*

Tel: +86 10 51167476; Fax: +86 10 65766206; Mobile: 1 355 229 9116, e-mail: info@coalash.org

Advanced Concrete Materials, 17-19 November 2009, Stellenbosch

Organiser: Concrete Society of Southern Africa and Stellenbosch University

Enquiries: admin@concretesociety.co.za *Website: www.concretesociety.co.za/acm2009*

YOUR SACAA COUNCIL

Elected Members:	Corporate representatives [& alternates]:
Richard Kruger (President)	<i>Afrisam:</i>
Wayne Truter, UP (Vice President)	Mike McDonald
Dieter Heinichen (Treasurer/Administrator)	[Amit Downerangen]
William Burtone, PPC	[Eunice Mguqulwa]
Karen Surridge, UP	<i>Ash Resources:</i>
	Matthew Reynolds
	[Graeme Smith]
	<i>Eskom:</i>
	Tyrone Singleton
	<i>LaFarge SA:</i>
	Vacant
	<i>PPC:</i>
	Eduardo Auger
	[Walter Wirth]

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

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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*