

INTRODUCTION

This issue addresses information and topics to ensure all members of SACAA remains informed.

- ❖ Membership news
- ❖ Updated regulations for the import and export of waste
- ❖ Innovation is going to be imperative to meet the Ash Phakisa objectives
- ❖ Carbon Tax – Six months to go?

Kind regards

Mark Hunter

SACAA GM

MEMBERSHIP NEWS

Welcome - SACAA would like to say welcome to Sonoash Engineered Materiels (Warren Tregurtha) who operate out of Cape Town. Warren may you enjoy your interaction with the members and grow the ash beneficiation opportunities for a better South Africa.

Goodbye - We unfortunately have to say goodbye to Infotox (Dricky Simpson) and Kragbron Fly Ash (Pty) Ltd (Sam von Eck) who have both indicated that they are not going to renew their membership of SACAA.

On a sadder note : SACAA would like to express our condolences to the news of the passing away of Dr Reinhold Amtsbüchler who was previously a long standing member of SACAA and the Cement Industry, who also did a number of technical talks at SACAA meetings. Here are some of his work and life related stories as submitted by his former colleague, Jürgen Meyer.

Reinhold immigrated to South Africa in 1980 as a young MSc Civil Engineering from the Innsbruk University and later obtained a Phd there as well. With his experience in concrete technology with RMC companies in Austria and Teheran before he looked for a job in RMC in Cape Town.

Jürgen convinced him to take a job at D & H Ash Resources in a tiny lab, with his experience putting the young small company on a sound technical footing is much more rewarding with the brief to convince South Africa and the world that fly ash is an essential ingredient in concrete. From here he got hooked on ash and stayed committed and achieved the objectives and even though the company changed ownership a few times Reinhold always was in charge of the technical matters at Ash Resources either directly or indirectly.

Some of his outstanding achievements over his long career were his involvement in the 15 year durability programme of fly ash in concrete and the Lesothu Highlands Water Scheme, in the concrete mix design for both the dam and tunnel lining using vast quantities of ash in the process.

Reinhold to those that knew him was admired for his professional uncompromising, in depth knowledge, scientifically sound, open, unbiased and ruthlessly honest, he was loved and feared for that but always highly respected.

Rest in peace Reinhold.

SACAA together with ASPASA are planning to conduct a technical site visit to Kusile power station during June 2019 as part of our regional visits. Please look out for the invitations closer to the time.

SACAA circulated the New Regulations for the Import and Export of Waste that came into effect on 21 January 2019.



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Import and Export o

Our Website is getting the desired results, based on the number of calls received - www.coalash.co.za

INNOVATION IS GOING TO BE IMPERATIVE TO MEET THE ASH PHAKISA OBJECTIVES

Although the common definition of “innovation” may appear simple, however, using it in the context of growing an economy from an enormous underutilised waste stream that has a hazardous connotation the word innovation becomes a little more complex, and is going to be essential to actively drive innovation to ensure growth.

As part of the unpacking of the word innovation, one would also consider such activities as “invention” and “idea generation”, developmental hubs/circuits where practical and theoretical ideas could be manufactured, tested and demonstrated. This would also include type-tests, trials, age assessments and durability. Much of these activities takes place in the universities and industry but for Phakisa it is going to take entrepreneurs and the communities to take the beneficiation lead.

Whereas the word “invention” describes the development of a new product/concept to a new solution that has never been manufactured before, for example the telephone or the well know Kreepy Krauly pool cleaner. Following on these inventions, innovation has allowed for development of these products further like the cellular telephones etc. The plastic furniture made from recycled material is not an invention but some innovation to do things differently and use a waste resource in the process to make a known product differently. Then again, there has been a massive amount of ideas that have never materialised completely due to various reasons such as failures, costs, motivation and funding. All the above mentioned invariably had to have some innovation by the inventor, idea generator or entrepreneur.

WASTE STREAM

Looking at the ash waste stream with a mindset of increasing the beneficiation, it would be naive to ignore all the previous innovation and acceptance by the persistency of many persons and companies to achieve the current estimated utilisation of 10% of ash by mass produced. It would be essential to continue to support these business initiatives and rather use the potential to grow the ash market through innovation. Further to the understanding of the current state of ash beneficiation in South Africa where 90% of the beneficiation goes into the cementitious market that is very dependant on the capital infrastructure projects, which has been in decline over the last few years. Naturally, most of these are reliant on the producers making the ash available and to the reliable quality, with challenges like distance, transportation and cost being the limiting factors.

Identifying the reasons for establishing a Waste Economy amongst others is the international drive to reduce global warming and the pressures on industries to reduce their processes to be more energy efficient, improved air (emissions) and water usage both from a quality and quantity perspective, over and above the better and improved waste management systems. Naturally industry is also challenged to introduce and use input materials that are less harmful to the environment. i.e. Going green in behaviour, events, programmes and or taking advantage of incentives and measurements.

CHALLENGES

Understanding the demographical location of the ash waste dumps and the economic barriers of transport costs, limiting the movement too far from the source. The Phakisa workgroups are going to use some smart innovation to make the movement of the raw material to the rural and outlying provinces available to stimulate jobs and enhance an economy in those areas.

Identifying the products and success stories from our international partners, particularly in the alternative building materials and products will assist in some potential quick wins. With the South African backlog of housing, reducing or improving the so-called squatter camps and informal settlements that are so susceptible to fires, SACAA is of the opinion that ash can play a critical role in the improvement of these facilities by introducing alternative building solutions. Here we include the roads, pavements and other infrastructure that is required. Again, innovation will be the catalyst to make these projects happen.

WHAT NEXT

To stimulate these innovations and idea generation concepts it is important that SACAA facilitates the formulation of an innovation hub/centre, awards process, provides mentorship programs, training, conducts awareness programmes and sponsorship in certain cases. There are millions of people in South Africa that are not familiar with the benefits and current applications of ash beneficiation and it is an ideal opportunity to broaden the knowledge and intellectual base.

My thoughts - from Mark Hunter.

CARBON TAX – SIX MONTHS TO GO

The ABC of carbon tax

In keeping with a growing worldwide trend to be cleaner and greener, a new tax is around the corner ... and the burden will fall, yet again, on the taxpayer and business – ready or not. With less than six months left before the Carbon Tax Bill is implemented on June 1, the majority of corporates are not ready for it, an expert says. Franz Rentel, the South African director of Climate Neutral Group, which

works with organisations to help minimise their carbon tax liability, said companies should determine which activities are generating tax liable greenhouse gas emissions. They should also develop a carbon offset strategy that addresses crucial questions, such as how and when to purchase carbon tax offsets. "Purchasing carbon tax offsets can reduce carbon tax payable by up to 20%. Many SA corporates are not ready for the carbon tax. There is less than six months to go," he said. Carbon tax is a fee imposed for the burning of carbon-based fuels (coal, oil, gas) and is globally recognised as a core policy instrument for reducing and eventually eliminating the use of fossil fuels, the combustion of which is destabilising the climate. If set high enough, the tax is a powerful incentive to switch to clean energy, because it is economically rewarding to move to non-carbon fuels and energy efficiency. The SA carbon tax stipulates that carbon emissions from industrial processes, such as cement production and from various industrial activities including mining, will also attract carbon tax. Rentel said ordinary citizens would not be directly affected by the carbon tax. Eskom was not allowed to pass the additional cost on to consumers and it would not affect fuel prices. "The most likely way the man on the street will be affected is that certain commodities increase in price as the big emitters pass on the additional costs to consumers. For example, cements, steel, glass, paper. But as the carbon tax is quite low and the allowances very generous in the first phase, the additional costs will not be significant," said Rentel. Companies must report on their greenhouse gas emissions before March 31. The SA greenhouse gas emission reporting regulations came into effect on April 3 last year to assist the national department of environmental affairs to get information from businesses to update the national greenhouse gas inventory. This is a requirement of the Paris Climate Agreement, which SA ratified in November 2016. The first phase will run until December 2022 and the initial tax rate will be R120 per ton of carbon dioxide equivalent.

Source: The Citizen Newspaper

Link to recent published video on our geo polymer concrete project from our Australian partners

https://www.dropbox.com/s/cy507ok14es6q37/Geopolymer_MASTERFINAL.mp4?dl=0

INTERNATIONAL CONFERENCE

Reminder

Early update on the **World of Coal Ash (WOCA)** 2019 conference:



13 – 16 May 2019

St Louis, Missouri USA

<http://worldofcoalash.org/register/>



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The EuroCoalAsh2019 Team

Download the Abstract Submission Form from the Conference Website [here](#).

SACAA DIARY

DATES FOR 2019

13 February 2019 – Council meeting and Technical Talk

15 May 2019 – Council meeting and Technical Talk

13 June 2019 – Kusile Site Visit together with ASPASA members

June/July – Research Forum (Dates and details to be finalised)

14 August 2019 – SACAA AGM

13 November 2019 – Council Meeting and Technical Talk

The next Council meeting will be held on 13 February 2019 at the Concrete Institute in Midrand. This meeting will be followed by a technical talk.

Please share any news, activities or articles that you feel will be interesting to the members.

ALL FOR NOW ...

Regards

SACAA GM