



LETTERS TO THE EDITOR

Incorrect water treatment chemistry also causes problems

Your article "Cheap Plumbing Imports Wastes Precious Resources" (*Water Wheel* July/August 2008) refers.



The problem of inferior plumbing is mostly exacerbated by the incorrect water treatment chemistry. Poor pH control at the treatment works, especially of corrosive coastal type

waters also causes a major loss of water for the following reasons: Low pH of water (due to the lack of lime addition) will cause ineffective coagulation and flocculation at the works, thus overloading sand filters, which requires more frequent back washing and consequent water losses. This also causes post flocculation in reservoirs, leading to poor water quality.

The low pH water will corrode the reticulation system, causing pipe failures and leaks.

Refer to the corrosion on the photo of the standpipe in the article (top left hand on p. 18).

Johan Barnard, Civil Engineering Department, Nelson Mandela Metropolitan University

Inferior plumbing products – institutions need to act

I refer to your informative and accurate report, *Cheap Plumbing Imports Wastes Precious Resource* (July/August 2008 issue of the *Water Wheel*) on the wastage of water by inferior plumbing products. As someone who worked 27 years for a municipality and served on the JASWIC Committee for 10 years, I witnessed water wastage due to inferior plumbing products.

My main concern has been the lack of action by institutions such as DWAF and the SABS, of both the previous and present governments. These institutions hide behind "we can't stop anyone selling a product over the counter".

DWAF is strongly promoting water conservation and demand management in municipalities, but nothing is being done about the inferior workmanship and cheap toilet systems being installed in state-subsidised housing projects.

Toilets leak almost from the day owners move in and Municipal Water and Drainage Inspectors are almost non-existent. Some municipalities have had to initiate retrofit projects in houses to correct poor installations. DWAF actually supplied Chinese products, of dubious quality, to municipalities.

We need to follow the example of other countries such as Australia, who are leaders in this field.

David Raymer, Uhambiso Consult, Port Elizabeth

Kilo vs Mega

The letter "Water figures incorrect" in the July/August 2008 edition of *The Water Wheel* refers.

Numbers will explain the dispute the best: Kilo = 10^3 ; Mega = 10^6 . There is 1 000 litres in 1 cubic metre. Therefore, 1 kilolitre = 1 cubic metre.

A megalitre (Mℓ) will therefore be equal to 1 000 000 litres is equal to 1 000 kilolitres is also equal to 1 000 m^3 .

So, to use the exact same values as N Govender: 325 Mℓ per year is in fact equal to 325 thousand m^3 per year. 50 Mℓ per year is equal to 50 thousand m^3 per year. 3 Mℓ per year is equal to 3 thousand m^3 per year. Maybe this will help reduce our electricity bills.

Harold Smook, BKS

Letters must be addressed to The Editor and can be faxed to (012) 331-2565 or E-mailed to laniv@wrc.org.za. Letters are published at the editor's discretion, and may be edited for length. Letters are strictly the opinion of the author(s) only and do not necessarily reflect the considered opinions of the members of *the Water Wheel* or the WRC.

INTERNATIONAL WISA MEMBRANE TECHNOLOGY CONFERENCE

2009

FIRST ANNOUNCEMENT

Spier Hotel, Stellenbosh, Western Cape • 13 - 15 May 2009

The Membrane Technology Division of the Water Institute of Southern Africa (WISA MTD) in association with the European Membrane Society (EMS) wishes to announce the 2009 International WISA Membrane Technology Conference

Contact Details

Please go to website link – <http://www.WISA-MTC09.com> for further information.

Or contact Michelle Wohlberg – Scatterlings Conference and Events

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Michellec@soafrica.com



New degree to up water resources management skills

The University of Pretoria Water Institute (UPWI) and the Georgia Water Resources Institute (GWRI) in the US have joined forces to launch a new MSc qualification in water resource management.

International nano conference coming to SA

An international conference on nanotechnology will be held in Pretoria on 1 to 4 February, 2009.

NanoAfrica 2009 is organised jointly by the South African Nanotechnology Initiative and the CSIR National Centre for Nanostructured Materials in association with the Department

of Science & Technology. This is the third international nanotechnology conference to be held in the country. The other conferences were hosted by Cape Town

in 2004 and 2006.

According to the CSIR, the conference will provide a forum for local and international students, researchers, technologists and entrepreneurs to interact on the latest developments and future trends in the multidisciplinary area of nanoscience and nanotechnology. Plenary and keynote lectures by leading international scientists, invited talks, contributed oral and poster presentations will offer delegates a good opportunity to learn about the latest research developments in this diverse field.

Key areas of focus will include novel nanomaterials synthesis; advanced nanostructured materials; nanotechnology and health/water/energy/textiles; and nanomaterials characterisation and metrology.

For more information, visit www.nanoafrica.co.za



Since its official inauguration in March last year, the UPWI has seen unprecedented success in achieving its aim of providing a research and education platform for meeting the water challenges facing South Africa and the African continent in a sustainable manner, reports Head of the Department of Microbiology and Plant Pathology Prof Eugene Cloete. Prof Cloete also heads up the Southern Education and Research Alliance Task Team.

"Currently the world is experiencing a water crisis. This is largely a matter of governance issues, including sector fragmentation, poverty, inadequate finances, declining levels of development assistance and investment in the water sector, inadequate institutions, human capacity limitations, limited stakeholder participation and, most notably, the lack of information sharing," notes Prof Cloete. The collection, dissemination and exchange of water-related information and know-how is therefore a matter of priority to improve the sharing of knowledge and building human capacity concerning water-related

issues, he says.

GWRI Director Prof Aris Georgakakos adds that sustainable water resources development and management are key to economic development and societal change in Africa. "This is because water resources are the basis of agricultural activities which, in Africa, employ more than 80% of the labour force and generate more than 50% of the gross domestic product. Moreover, water resources support hydropower development which powers industrial growth."

Comprehensive appreciation of all water-related issues and disciplines is of vital significance for effecting environmental and socio-economic change, the two institute leaders maintain. The joint MSc degree was conceptualised with these in mind. This educational and applied research programme, called Aware, combined the expertise and strengths of the two water institutes. It is aimed at creating qualified human resources that will serve ably African governments, industries and academia.

Gauteng budgets R3bn to eradicate informal settlements

More than 380 000 families will benefit from the Gauteng Department of Housing's informal settlement formalisation programme in this financial year, according to MEC for Housing Nomvula Mokonyane.

She made the announcement during the presentation of her budget speech for the 2008/09 financial year at the Gauteng Legislature in June. The province is confident that it will eradicate all remaining 56 registered informal settlements by the 2014 target date. The provincial housing budget of R3-billion shows a 17% increase from the previous year.

"In achieving this milestone, we will continue to execute our strategy through our five key programmes, namely mixed-housing development, eradication of informal

settlements, alternative tenure, the Urban Renewal Programme, and the 20 Prioritised Townships Programme," said Mokonyane.

The department identified 122 informal settlements in 2004 to be upgraded by 2009. To date, 68 informal settlements have been formalised (i.e. upgraded in situ), resulting in 325 000 people having access to water and sanitation. "It is our goal to provide necessary services and tenure to about 710 000 people by 2009," noted Mokonyane.



WATER ON THE WEB**www.knowh20.org**

This website is a water education initiative from the non-governmental organisation (NGO) Playpumps International. The website promotes the NGO's work in schools by providing background information on the world water crisis and lesson plans for teachers, which they have developed with the National Youth Leadership Council.

www.watereum.org

The Effective Utility Management Resource Toolbox provides links to key resources and measures designed to help water and wastewater utilities further improve the management of its infrastructure.

Insects making huge impact

Entomology has made a significant contribution to saving water and reducing the burden of disease in South Africa, according to Minister of Science & Technology Mosibudi Mangena.

Speaking at the 23d International Congress of Entomology held in Durban in July, he said two areas in which South Africa's entomologists have made a huge impact are in the use of insects as biological control agents against invasive alien plants, and the combating of malaria. "An estimated 8 000 alien plant species have been introduced to South Africa. As a result, water flow from some catchment areas has been reduced by as much as 22%."

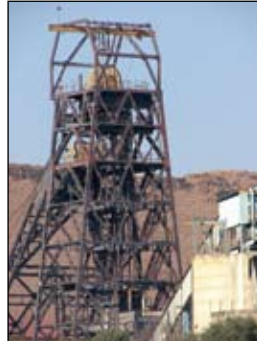
Mangena noted that the use of insects have been used effectively as bio-control agents against invasive alien plants. "We are encouraged that none of the agents introduced into South Africa have resulted in substantial damage to crops or indigenous species."

In addition, entomologists were working towards reducing the impacts of malaria through the South African Malaria Initiative, a national consortium of researchers who are pooling their expertise to find ways of dealing with the disease.

Calling all mine water researchers

Abstracts have been invited for the International Mine Water Conference to be held in Pretoria from 19 to 23 October next year. Organised by the Water Institute of Southern Africa's Mine Water Division, together with the International Mine Water Association, the conference will centre around a series of themes.

These include environmental best practice guidelines, mine closure, mine water treatment, management of brines and sludges, integrated water resources management, geochemistry and impact prediction, and management and rehabilitation of mine



residues, among others.

The conference organisers will offer a special student award in recognition of the importance of continuing to attract young scientists and engineers into the field of mine water management. A cash prize of R15 000 is up for grabs for the best technical paper written and presented by a bona fide

student. Students from around the world are invited to participate.

Abstracts of between 200 and 500 words can be submitted electronically to minewater2009@wisa.org.za. The deadline for abstracts is 15 January 2009.

WATER DIARY**WATER SCARCITY
NOVEMBER 1-7**

An International Conference on Wetland Systems Technology for Water Pollution Control will take place in Indore, India. Visit: www.wetland2008.org/SaveWater/

**WATER SERVICES
NOVEMBER 4-6**

The Multiple Use Services Group and the RiPPLE (Research-inspired Policy and Practice Learning in Ethiopia and the Nile Region) research consortium are organising an International Symposium on Multiple Use Water Services. E-mail: symposium@musgroup.net

**CLIMATE CHANGE
NOVEMBER 13-14**

An international conference on the Role of Information in an Age of Climate Change will be held in Aarhus, Denmark. Enquiries: Jakob Bek-Thomsen; Tel: +45 8942 1966; E-mail: jbt@adm.au.dk

**IRRIGATION
NOVEMBER 18-20**

The SANCID Symposium will take place at Club Mykonos in Langebaan, in the Western Cape. This year's theme is 'Agricultural Water

Management for Sustainable Livelihoods'. Enquiries: Riana Lombard (Event organiser); Tel/Fax: (021) 855-5412; E-mail: riana@sabi.co.za; Web: www.sancid@org.za

**WATER SCARCITY
DECEMBER 1-5**

An International Conference on Water Scarcity, Global Changes and Groundwater Management Responses will be held in Irvine, the US. The conference is convened by UNESCO, the University of California and USGS. Enquiries: Contact Diana Dehm or Megan Kinzer, University of California, Irvine, E-mail: UNESCOCUC@uci.edu

**ECOLOGY
DECEMBER 2-5**

The Sixth International Conference on Ecological Informatics will take place in Cancun, Mexico. Visit: <http://isei6.unipamplona.edu.co/>

**ENVIRONMENT
DECEMBER 15-17**

The School of Chemical Engineering at the University Sains Malaysia is hosting the International Conference on Environment (ICENV 2008). Enquiries: icenv2008@eng.usm.my

Research on small water flea helps teenager win big prize

Research on small planktonic crustaceans, known as Daphnia, or water fleas, has earned Western Cape teenager Raksha Gosai (15) the 2008 South African Youth Water Prize (SAYWP).

Once thought of as creatures of polluted waters, Daphnia have been proven to be very sensitive to poor water conditions, and they are often used to monitor water quality. They replicate rapidly and any difference in the physical state of the clones is due to environmental factors, such as an increase in pollution levels.

Gosai, a Grade 11 pupil from Vredendal High School went on to compete against youth from 30 participating countries for the Stockholm Youth Water Prize in Sweden.

The SAYWP is an initiative of the Department of Water Affairs & Forestry. The aim of the Award is to enhance the interest of high school learners in science and technology towards a possible career in the water sector. Participants identify problems related to water and sanitation in their communities, conduct research and develop innovative solutions and/or inventions to solve the problem.

Runners-up to the South African competition were Truth Mkhize and Welcome Khuzwayo of Ukusa Secondary School in KwaZulu-Natal with third place going to Bakang Gaobuse, Kealeboga Mohibidu and Lebogang Josephs of Baitiredi Technical & Commercial High School in the Northern Cape.



SA Youth Water Prize 2008 winner Raksha Gosai

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Framework Unites SA Under Sustainable Development Vision

For the first time South Africa has a single coherent framework that articulates the country's development context, sets out its common vision and strategic areas of intervention for achieving sustainable development.

The National Framework for Sustainable Development was approved by Cabinet earlier this year. According to Department of Environmental Affairs & Tourism DG Nosipho Jezile-Ngcaba, the launch of the national framework completes the first phase of a three-phase process to ensure the sustainable development of the country and its people. Phase II, which is currently underway, involves preparing and planning for action, and includes the development of a detailed action plan and the mobilisation of the necessary resources. In turn, phase III will entail the process of roll-out, implementation, monitoring and review.

This is part of a commitment South Africa made along with other countries at the World Congress on Sustainable Development in Johannesburg in 2002 to prepare and implement national strategies for sustainable development. "A sustainable development paradigm is integral to our 2014 vision, as it defines the social, economic, environmental and governance parameters, and explicitly recognises the constraints that decision-makers must take into account when policies are adopted aimed at growing the economy, sustaining our natural resource base and meeting basic social and human needs," said Jezile-Ngcaba.

Rather than being a sustainable development 'master plan' the framework seeks to build on existing programmes and strategies that have emerged in the first 14 years of democracy. It aims to identify key, short-, medium- and long-term challenges in South Africa's sustainable development efforts, sets the framework for a common understanding and vision of sustainable development, and defines strategic focus areas for intervention.

The national framework is divided into four main parts. Part One sets the context for

South Africa's sustainable development paradigm and outlines the rationale for the approach that was taken in developing the framework. Part Two identifies focus areas for strategic intervention that are necessary to achieve the national vision of sustainable development.

In turn, Part Three elucidates the critical pathways that are needed to achieve the desired state of sustainable development and to contribute to shared and accelerated growth. Five strategic focus areas are described for intervention: enhancing systems for integrated planning and implementation; sustaining our ecosystems and using natural resources efficiently; economic development via investing in sustainable infrastructure; creating sustainable human settlements and responding appropriately to emerging human development, economic and environmental challenges. The last part, Part Four, describes the three-phased road map that needs to be embarked upon to reach the national vision.

The framework document points out that South Africa's shared growth and poverty eradication strategies are not as effective as they could be in decoupling from unsustainable natural resource use and exploitation. Analysis of natural, social and economic governance confirms that thresholds are now being reached which, if ignored, will generate dysfunctional economic costs that will undermine investments in economic development and exacerbate poverty as poor people experience the loss of supportive ecosystem services.

It is expected that the framework will be used by all social partners and all organs of state within the national, provincial and municipal spheres to progressively refine and realign their policies and decision-making systems in order to establish a coherent and mutually consistent national system aimed at promoting sustainable development.

To access the National Framework for Sustainable Development, go to www.environment.gov.za

