

DWA

SOUTH AFRICA

www.dwa.gov.za

CORPORATE BROCHURE



Water for everyone

Water affects every aspect of our lives and in South Africa it's regarded as a precious commodity. Dr Cornelius Ruiters, from the Department of Water Affairs, is charged with helping to improve water quality, supply and security on a limited budget. He tells Andrew Pelis about current initiatives to provide safe water for everyone

The effects of climate change have been acutely felt around the world and water management has become an ever-more pressing issue. In Africa, this has exacerbated an already critical problem and put huge pressure on South Africa to ensure its approach to water can maintain the socio-economic development in the sub-Saharan region.

That responsibility falls squarely on the shoulders of the country's Department of Water Affairs (DWA), one of South Africa's oldest government departments. "Our department has existed since the beginning of the twentieth century," says Dr Cornelius Ruiters, deputy director general, "and we cover areas of water infrastructure, maintenance and supply; our focus is very much on water management not only in South Africa but also through partnerships with our neighbouring countries."

Preserving nature's
resource



ASH RESOURCES (PTY) LTD

Ash Resources has been a leading supplier of its fly ash products to the Department of Water Affairs and Forestry for many years. The many benefits that fly ash provide in concrete used in the construction of dams, reservoirs and canals are well recognised by DWA. Fly ash is a by-product of burning pulverised coal in thermal power stations and the growing use of this material in concrete applications is also contributing significantly to the reduction of greenhouse gas emissions into the atmosphere.

Ruiters says that the department's focus spans a number of different uses of water, with agriculture the biggest beneficiary, followed by domestic use, mining, electricity and power generation, forestry, recreation and other users, in a group he calls the "water pie".

At present the DWA is working on seven major projects to build and rehabilitate 25 dams across South Africa, all aimed at improving water utilisation and bringing potable water to everyone in the country. "There is a direct relationship between health and water quality and we aim to prevent illnesses like diarrhoea and cholera, although there are other water-borne diseases like malaria that are nothing to do with us," says Ruiters.

"We represent the whole country (serving a population of around 48 million) and we have achieved our Millennium Development Goals. At present roughly 93 per cent of the population receives clean water and we are moving towards 95 per cent. The challenge is to provide for rural communities—the topography and geography often make it technically difficult to implement operations to build the infrastructure needed. We are therefore aiming for universal access to water by 2014."

The department introduced incentive based regulation of the South African municipal drinking water business in 2008. Its Blue Drop standards assess water quality across the country and have helped to identify areas that require further improvement. The initiative has seen water quality standards improve and supplies are now regarded as adequately managed by world standards.

The global economic downturn has impacted



Although you may not see Fly Ash, it provides our dam walls with the durability and density they need to preserve life's most valuable resources for us - Water.





2010 AND BEYOND

Goba, an independent and progressive South African consulting engineering practice, offers a range of multidisciplinary engineering services, primarily for civil infrastructure development. As a member of CESA, Consulting Engineers South Africa, we work closely with clients to create cost-effective solutions and enable efficient investment in new quality assets. Our track record speaks for itself, with numerous awards received over the years for technical and business excellence.

Goba Consulting Engineers and Project Managers. Leading the way in developing South Africa's infrastructure.

CREATING UNIQUE SOLUTIONS TOUCHING EVERYDAY LIVES

SOUTH AFRICA REGIONAL OFFICES

Sunninghill +27 (0)11 236 3300 Durban +27 (0)31 583 3400
Cape Town +27 (0)21 914 3600 Port Elizabeth +27 (0)41 373 6552
East London +27 (0)43 721 0135 Centurion +27 (0)12 679 9300
Bedfordview +27 (0)11 409 8800

www.goba.co.za



GOBA

CONSULTING ENGINEERS
AND PROJECT MANAGERS

Goba Consulting Engineers and Project Managers

Goba Consulting Engineers and Project Managers are leading providers of multidisciplinary consulting engineering and project management services in the civil engineering field. With a long-standing reputation for visionary thinking, innovation and excellence, Goba has over the years formed valued partnerships and joint ventures across a broad spectrum of civil engineering infrastructure and established a proud track record of award-winning achievements.

on the DWA's funding and Ruiters says that the department is implementing R50 billion of water resources capital projects for the next five to 10 years, funded by the National Treasury of South Africa and by open market financial institutions. "Global meltdown has affected our capability to fund all of the necessary projects and we have looked elsewhere to help fund some of the commercial projects. For example, we might go to the open market to provide funding for power industry projects or for the liquid fuel industry, and this has included issuing bonds in the past."

The department has prioritised projects and Ruiters explains that decisions have taken into



WK Construction is one of the largest independent construction and engineering companies in southern Africa, we are a multi-disciplinary company with more than forty years experience with a proven record in quality project delivery.

Our primary market offering includes pipeline construction, trenchless technology construction, township roads and infrastructure development, general roads and earthworks, concrete structures, crushing and screening operations.

www.wkc.co.za





IBHAYI CONTRACTING cc

- **Industrial Flooring**
- **Structural Rehabilitation**
- **Bridge Rehabilitation**
- **Civils**
- **Cutting and Coring**
- **Plant Hire**



account a number of factors including the socio-economic impact of each project. "There are areas like the Eastern Cape Province where we need to develop infrastructure and that has an impact on business in the area also. We continue to supply water through the most advanced integrated water systems in the world for the major water users; and the dams we have built and rehabilitated have provided some of the highest stored capacity also (up to 1,000 cubic metres per person)."

The work on dams has been intensive and Ruiters says that 22 of the country's 161 dams to be rehabilitated have been refurbished along with connecting pipelines, with projects very much ongoing. "These projects can take up to 10 years to plan and five years or more to complete thereafter. The grand scale of these has led to the name 'Mega Projects' and there are unavoidably long lead times to complete them."

Plans were announced in June 2009 that South Africa would spend in the region of R30 billion over the next five to eight years on continuing construction and establishing 15 mega water infrastructure projects. The then Water and Environmental Affairs minister Buyelwa Sonjica said that these projects would increase the capacity of existing water resources infrastructure to provide water to strategic installations such as the energy sector, the industrial sector and the mining sector, as well as for domestic purposes.

"Additional infrastructure programmes include an accelerated programme for the construction of the De Hoop dam, the continued partnership with the government of Lesotho for the implementation of the proposed phase two of the Lesotho Highlands Water Project, implementation of the project to augment the supply of water to Lephalale for use by Eskom and other petrochemicals industries," Sonjica said.

Water sustainability was highlighted as a key focus and a number of desalination pilot projects are underway now, with municipalities from Mossel Bay to Richard's Bay looking to utilise new technologies to create a viable freshwater option.

Additionally, projects such as the Mokolo Crocodile Water Augmentation Project will provide water supply for thermal-electric (coal-fired) power generation. However, pilot projects are now underway to improve acid mine drainage in the coal and gold mining regions of the country.

Ruiters says that at present the department has



Boet Pretorius Electrical CC

Service over & beyond



We specialize in large electrical infra structure installation

- Turnkey Projects
- Project Management
- Township establishment
- Water & Sewerage works
- Shopping Centers
- Warehouse & Factories

Contact us for construction and reticulation electrical work

Please visit our webpage
www.bpe.co.za

TZANEEN: 54 Agatha Street, Tzaneen, 0850
Tel: 015 307 3571/4 • Fax: 015 307 1770 • boet.tzn@mweb.co.za

GAUTENG: 24 Edward Street, Midrand, 1685
Tel/Fax: 011 4684624 • dewald@bpe.co.za



around 12,000 employees but feels more people are needed to fulfil all of its goals. “We work on a one-to-eight ratio, with one support staff individual to every eight technical people. We do have a problem attracting and retaining the right skilled professional engineers and there are lots of vacancies to fill here,” he admits.

Employment also takes into account the Black Economic Empowerment and Employment Equity initiatives which Ruiters describes as “part of the whole suite of attacking inequalities in South Africa.” This approach means the company utilises the services of black-owned supply chain partners, although projects are publicly tendered and contractors have to meet stringent

requirements before they are awarded.

So with funding in place for the future, Ruiters has a clear mind on what the next few years will hold for the DWA. “For operations and maintenance we want to provide better infrastructure and maintain systems properly, so there is water for everyone.

“On the infrastructure side we have to unlock the social economic development for areas such as mining, agriculture, industries, forestry, nuclear, etc., and because our work affects those economies, it affects the whole sub-Sahara region. This is one of the issues that the World Bank recognised when it helped supply a loan for our work with Eskom on the Mokolo Dam.” www.dwa.gov.za



PRETORIUS BROERS CONSTRUCTION

(pty) Ltd.

- Turnkey Staff villages
- Social housing units
- High density housing
- Security villages
- Luxury homes

We can build according to your requirements

Contact us for all your building needs.

54 Agatha Street, Tzaneen, 0850
Tel: 015 307 3571/4 • Fax: 015 307 1770 • boet.tzn@mweb.co.za

Please visit our webpage • www.pro-bou.co.za



DWA
SOUTHAFRICA
www.dwa.gov.za