



water affairs

Department:  
Water Affairs  
REPUBLIC OF SOUTH AFRICA

Address by Mrs. Edna Molewa, MP,  
Minister of Water and Environmental Affairs,  
On the occasion of the Launch of Rand Water Academy  
On Friday, 12 October 2012  
In Johannesburg

Executive Mayor of Sedibeng District Municipality

Chairman of Rand Water Board: Advocate MM Petlane

Deputy Chairperson of Rand Water Board: Thembisile Mwedamutswu

Director-General of the Department of Water Affairs Mr. Maxwell Sirenya and Senior  
Managers present

CEO and Executives of Rand Water

Distinguished Guests

Ladies and Gentlemen

It is a great honour and pleasure to join you this morning as we launch this very great initiative in the water sector, the Rand Water Academy.

I must say at the very outset, Chairperson that I regard this as a momentous event in our endeavour as a sector to enhance capacity and ensure that as we deliver on our mandate, we also speak to the need for the development and skilling of our youth to employable levels.

As a sector under the leadership of the Department, we acknowledge the importance of requisite skills and human resource capacity within the water sector. It is

frequently communicated that there is a desperate need for skilled and competent human resources in order to sustain business, deliver on mandates and meet strategic objectives.

We still have to answer the question as to whether the shortage is on actual availability of human capital or the level and quality of skills within the numbers that qualify progressively from our national institutions. This challenge does not face us as a Department or Government only but is being experienced as much by our sector partners; hence we note all the various projects which focus on skills gap analyses.

As part of their objectives for the 2011/2012 financial year, the Board of Rand Water articulated the establishment of a *Rand Water Academy* as a priority project for its Human Resources portfolio. I see this as a response to the picture I have just painted before. I am informed that the academy will address matter relating to a number of identified strategic thrusts for the Board, i.e. creating capacity and capable human resources, deliver specific water-related training, thus alleviate the critical skills gap within the sector.

The work of the Academy will also enhance the current in-house training programmes and really benefit Rand Water as an entity but more so the water and sanitation sectors broadly within the country.

Chairperson, ladies and gentlemen, let me take a moment to look inward. As sector leader, the Department has taken the baton and established the Learning Academy in 2007 as a direct response to the specific technical skills shortage challenges which affect both the service delivery of the department and the water sector in general.

To date the Learning Academy has contracted 285 Graduate Trainees (GT) in its Professional Development component. Within the group of contracted GTs, there are 20 registered Candidate Engineers, 69 registered Candidate Engineering

Technicians, 1 registered Candidate Surveyor, 14 registered Candidate Scientists, 27 registered Certified Scientists and 3 registered Professional Natural Scientists.

The academy has supported 127 learner interns with experiential learning, ensuring completion of their formal qualifications. More than 455 bursaries were paid to learners at 18 Institutes of Higher Learning studying towards the following under and or post graduate qualifications in engineering (civil, mechanical, electrical, surveying) and sciences (for example, hydrology, geo-hydrology, environmental sciences and management, microbiology, biochemistry, geology, integrated water resource utilisation and management, water care, chemistry, biological sciences).

Programme Director, on the 18<sup>th</sup> May 2012 during the Water Institute of Southern Africa's (WISA) biannual conference in Cape Town, we encouraged our sector partners to follow suit on establishing learning academies and skills development programmes.

Today we are very excited that we are here with you, launching the Rand Water Academy. We see this initiative not as a duplication of existing efforts but as a programme that addresses amongst others the dire need for Work Integrated Learning. This it can achieve through the following two programmes:

- The Graduate in Training programme: which will not only ensure that young science and engineering graduates get the on the job exposure and experience needed to make them employable, but also addresses the issue of professional registration with relevant professional bodies.
- Process controllers' development and training programme: which addresses the desperate need for registered and qualified process controllers which can be utilized in municipal water and waste-water treatment works thereby ensuring that the plants can strive to obtain Blue and Green Drop status, maintain the status and improve on the quality of Operation and Maintenance.

I am encouraged to learn that the Academy will be assisting government in a number of ways that will enhance service delivery not just by the Department of Water Affairs and its sector partners but also in collaboration with other sister departments, particularly National Treasury and CoGTA. This process is meant to strengthen the tier of service delivery, i.e. local government, by training and placing human capital (engineers, artisans, process controllers, scientists, governance and leadership, financial management and viability, capacity building and skills development) that will raise the levels of skill within that tier.

All of this training and skilling will also ensure that responses to service delivery protests, exacerbated by lack of understanding of communities served, will be proactively mitigated against. This will lead to better means of accountability and higher levels of confidence within that tier with regard to capabilities to deliver on the prescribed mandate.

It is important to take note that the Rand Water Academy is borne out of the need to systematize the various pockets of excellence in training operating independently across the organization into a single integrated unit. This move to integrate and create efficiencies, signals the broader intention to pursue a sector-wide influence within and outside the borders of the Republic.

Through the professionalisation of the Academy, Rand Water will play a pivotal role in skills and capacity development given the global standards that the organisation measures itself against and surpasses.

We do note that some of the key areas where the water sector is seriously under-capacitated are going to be covered in this programme. These include the following amongst others;

- Assessment of water resources and determination of quantity of water available for use.
- Natural water resource monitoring and modelling systems.

- Interpretation and use of this data in water licensing processes.
- Compulsory licensing processes.
- Catchment Management Agencies.
- Monitoring and enforcement of water use provisions of licences and permits.
- Water effluent treatment, compliance, enforcement and management.
- Water pricing reform.
- Water infrastructure planning and construction.
- Expertise in new water supply systems (e.g. desalination and recycling).
- Technology and expertise in water saving and efficiency options for all sectors, as well as water use monitoring and control systems (green economy opportunities).
- Building productive collaborative relationships with all water users.
- Developing an appreciation and understanding of how to increase water production and security through land restoration and land use change; develop mechanisms that can encourage such activities as part of the water augmentation strategies.
- Developing expertise in designing and using market mechanisms to facilitate the redistribution and reduction of water use allocations and to encourage investments in sustainable land use and restoration.

In line with one of Rand Water's strategic organisational objectives which is to have a high performance culture and to specifically build capability and capacity to meet changing organisational requirements, the concept of an academy must be the special purpose vehicle to drive and sustain that particular strategic objective.

Chairperson and your team, I duly recognise the five key areas that underpin your work around the Academy. For the benefit of all I will name these:

- A Centre of Excellence: addressing one of the key challenges of process controller classification around the Blue and Green Drop incentive based regulations.
- A Centre of Competence: addressing the challenges of innovation in science and technology.
- Research and Development: addressing the shortage of key graded researchers in the water sector by increasing the pool of National Research Foundation graded researchers within Rand Water and the water and sanitation sector broadly.
- A Professional Exchange Hub: addressing the challenges of exposure and international development by allowing trained individuals to practice in different countries and cities outside South Africa and by inviting international ones to do the same within South African water industry.
- A Water/Sanitation Solutions Unit: addressing the challenges of science/engineering and operations solutions in the water/sanitation sector by utilizing a specialist team of trained individuals to provide *ad hoc* specialist solutions to challenges that arise within the water and sanitation sector.

I am confident that in developing this broad capacity base there will be a change in the skills profile for the water sector.

While the water engineering and modelling skills need to be maintained and allowed to grow, there is a much greater need to diversify the skills base to address the broad range of technical, social and political change processes that are needed to deal with the water challenges discussed above.

In all of this, even more challenging is the critical need to change the way everyone values and uses water resources so as to become more responsible and considerate in the way we use water resources.

The dominant feature of the water sector is what has been described as “the looming water crisis”. This has several aspects to it:

- Water scarcity: due to demographic and economic growth, there is a present and worsening scarcity of water that threatens to undermine economic growth and development. This would be true if and only if we do not management our resource prudently. This situation is exacerbated by pollution and land degradation. It will also be further worsened by climate change.
- Skills gaps: there is a recognised skills misalignment within the sector. The water treatment plants in many municipalities are operating well below acceptable standards, primarily due to poor local management. Our Green Drop report has given indication. Laboratories are also struggling to perform due to a lack of practical skills and experience among new employees. Throughout the sector, there is an ageing section of the workforce with vital institutional knowledge and a new cohort of young employees who lack experience and practical skills. There is also a general lack of sectoral knowledge some of the in management positions, as well as a lack of green skills and understanding of environmental issues.
- Management: good management of the available good and well-intentioned supportive policy is often lacking. Decision makers processing water resource applications must be well armed with sufficient coherent and applicable guidelines to help them to make decisions that will aid the transition to more sustainable, equitable water use; and systems of support and performance management necessary to ensure that plants and labs function properly are lacking.

What I have just outlined is nothing new. I believe these are some of the reasons we have such academies that will ensure a smoother transition of particularly our youth and previously disadvantaged from just qualification to accreditation and expertise. We need these skills. I believe we have the numbers of those who qualified but that critical transitions must be put in place and sustained.

Ladies and gentlemen, I cannot end this address without indicating our interests and responsibilities outside of our borders. We are members of SADC, the AU and ultimately active members as a department on behalf of our government and people of the African Ministers' Council on Water (AMCOW). As such we need to be

cognisant of that fact and indicate going forward how our development of this Academy will speak to the aspirations particularly of the African people not just on the continent but also in the diaspora. Considering further our shared water courses we must ensure that South Africa does not develop alone but is consistent with the broad messaging of "a better South Africa, a better Africa, and a better world".

The water sector urgently needs 4,000 artisans/technicians to overcome the crippling challenges of poor operation and maintenance of infrastructure in this country alone; this might deter the achievement of the Millennium Development Goals (MDGs) by 2015. We can thus just imagine what the continental needs are like.

Finally, ladies and gentlemen I must say, as a department we are happy that Rand Water through its Board and Executive is seized with the dire needs of the sector and thus the launch of this academy. We want to emphasize that the concept launch projected the academy beyond just a skills transfer focus, but instead as a special purposes vehicle that could incorporate various other models that include technology development, research platforms and centres of competence and excellence.

Programme Director, let us all work together to bring a change in water sector, remembering that working together we can have a vibrant water sector, alive to the needs and developmental aspirations of all of us as a nation.

I thank you.