

**Extended National Water Week Programme  
Vaal River Eastern Sub-system Augmentation Project  
(VRESAP) Function for the Commissioning of part of  
the Project**

**Speech by Mrs L B Hendricks, Minister of Water  
Affairs and Forestry**

**Vaal Marina, Boschkop**

**1 April 2009**

Programme Director

Minister of Public Enterprise: Brigitte Mabandla

Minister of Minerals and Energy: Buyelwa Sonjica

Premier of Gauteng: Paul Mashatile

Premier of Mpumalanga: Thabang Makwetla

Ambassador of the Peoples Republic of China: HE Jian  
Hua Zhong

Honourable Mayors

Chairperson and Members of the Board of TCTA

CEO of Eskom: Jacob Maroga

Executive Director of SASOL: Dr Benny Bokaka

Officials from TCTA and Water Affairs and Forestry

Distinguished guests

Ladies and gentlemen

Good Morning.

It is indeed a great pleasure for me to be here this morning as we celebrate another important milestone in the provision of infrastructure which supports the economic development of this wonderful country of ours. As we gather here today we are celebrating years and years of hard work by the current administration led by the ANC.

This project, to provide additional bulk raw water infrastructure, commenced in 2004 following a Cabinet decision responding to the very urgent representations made by two strategic partners, Eskom and SASOL, who required a greater assurance of supply of water to the thermal power stations in Mpumalanga and the petrochemical facility in Secunda. As a consequence of these representations and the decision by Cabinet, the project was declared an emergency project in terms Section 110 of the National Water Act which created the environment to fast track certain of the processes required for the preparation and implementation of the works.

This event today forms part of our extended National Water Week Programme under the theme; **“Water is life – Securing the Nations needs across Generations”**. This theme could not be more relevant given the current global landscape, where we have to respond to a myriad of global challenges at all fronts: be it political, economic,

social, environmental or the impacts of climate change. The pressure to deal with increasing economic and social demands, in a declining world economy, has and will continue to present particular challenges for us in the water sector. There will certainly be pressure on both our natural resource base as well as our environment and it is therefore important that we rise to the challenge and not lose sight of our responsibilities to use our resource in a sustainable manner.

Before focussing on the VRESAP project in particular, let me first for a moment reflect on our achievements over the past years. When the democratic government took office in 1994, while we were confronted with massive infrastructure backlogs, fragmented institutional arrangements and outdated policies and repressive legislation, we nevertheless set out to “create a better life for all”. In doing this, we set as one of our key priorities, the provision of safe drinking water to the millions of South Africans who had previously been denied access to this essential source of life. Today, I am proud to say that Government has made great progress in providing water and sanitation in various parts of the country and we have already far exceeded the internationally agreed 2015 Millennium Development Goals, and in fact we are on target to provide universal access to basic water and sanitation by the year 2014.

Fifteen years ago, water security meant only serving the needs of agriculture and industry and was the preserve of the privileged few. Today when we talk of water security we are talking about the needs of all sectors of the economy (industry, mining and agriculture) as well as the domestic needs of all of the people of South Africa, black and white.

This VRESAP project is tangible evidence of our commitment to ensure water security. This project will certainly contribute to better water security for both Eskom and SASOL. This project will also stimulate economic growth and contribute towards job creation

In 2004 when Government took the decision to implement this project the outlook was very gloomy with regard to water provision for Eskom and SASOL in particular. At that time, based on modelling undertaken by the Department, it was predicted that in a severe drought situation by 2007 the Department would not be able to deliver water at the required 99.5% levels of assurance required by Eskom and SASOL. Thankfully, because of the decisions we made in 2004, today we are in a much more favourable position, **firstly**; following a very good rainy season our storage dams in the Eastern Sub-system of the Vaal River catchment are more than 10% above their normal long

term storage levels. So we have sufficient water in our dams; and **secondly**; we now have these new pipelines and pump stations to convey greater volumes of water to Eskom and SASOL, thus improving the overall security of supply.

The Eskom growth projections in electricity demand in 2004 indicated that all of the thermal power stations in Mpumalanga would be required to operate at full capacity and that mothballed power stations in the area would also have to be re-commissioned. The water demand from SASOL was also predicted to increase due to both the changes in process and projected increased production. An expected deterioration of water quality was also predicted to lead to an increase in water requirements for both Eskom and SASOL. The combined effect of these changes, together with projected increase in demand by domestic and other industrial users, therefore required that additional bulk water resources be provided to augment those of the existing Eastern Vaal River sub-system in order to maintain the required high level of assurance of supply.

The importance of this improved security of supply cannot be over stressed given that the Eastern Highveld area of Mpumalanga is endowed with extensive coal deposits and that most of South Africa's thermal electricity generating capacity operated by Eskom are situated on these

coalfields (effectively making it the “powerhouse” of South Africa). These thermal power stations require substantial quantities of cooling water for their operation. In addition, the SASOL petrochemical industry based on coal and located on the same coalfield, also require substantial quantities of water for their operations. Needless to say therefore, that the uninterrupted provision of electricity and production of fuel by these two industries is critical for the economy of South Africa and also for our neighbours. (To illustrate the requirements: SASOL needs 11,5 litres of water to produce one litre of petrol and Eskom requires 1,5 litres of water for every Kilowatt hour of energy produced from their coal fired power stations.)

Despite the fact that over many years, a complex system of interconnected water supply schemes linking river catchments adjacent to the Eastern Highveld coal deposits has been developed to provide water for these industries and also to provide for the domestic requirements and the needs of other industrial users, we were not able to supply at the required high level of security. There was therefore a very urgent need to implement the VRESAP project in order to improve the security of supply particularly to Eskom and SASOL, to mitigate the impacts of future droughts and to provide for their increased water requirements. As a consequence the planning and implementation process was fast-tracked to reduce the risk

of water shortage occurring should the worst-case drought scenario arise.

The preparations for implementation of this project were dealt with as an emergency project which meant that a number of parallel activities had to take place such as; design proceeding in parallel with the completion of feasibility studies; Independent cost estimates were commissioned to ensure the reliability of figures used for budget preparations and future tariff determination; Environmental studies were fast tracked without relaxation of the requirements to deal with the impact assessment and the design of mitigating measures; Options to accelerate the construction period were considered; and; Negotiations were conducted with Eskom and SASOL about cost sharing and repayment of loans through user charges.

The first tenders were awarded in October 2005, just eleven months after the Cabinet decision. Construction took place simultaneously over six construction fronts and we were able to deliver water through the pipeline which was commissioned in December 2008 using the temporary abstraction works.

This milestone was achieved despite the various challenges which the team had to deal with during the

implementation phase such as: inclement weather; the initial lack of manufacturing capacity to produce sufficient pipes at the rate required; geotechnical conditions at the permanent abstraction works; and; and very recently the technical snags with commissioning the high lift pumps. While the project is now substantially complete and we are able to deliver water using the temporary abstraction works, it is only the technical snags in the permanent high-lift pump station which are being finalised and will be resolved by May of this year.

I must commend my departmental engineers who initially led the multi-disciplinary planning team from project inception, and the Trans-Caledon Tunnel Authority (TCTA) who were brought in to implement and finance the project by using a combination of departmental and private sector expertise. Credit must also be given to the close co-operation of the major users, Eskom and SASOL. I must also commend all of the contractors (Local, International and emerging contractors) involved in the building of the 115 kilometre, 1.9 meter diameter, pipeline from the Vaal Dam to Secunda as well as building the associated abstraction works, pump stations and other related works.

Without the participation of all parties, we would not have been able to roll out this major infrastructure Project in the relatively short time available. This is a testament to the

ingenuity and the technical expertise that we are able to muster to execute projects of this magnitude. Everyone involved in the project needs to be applauded for this remarkable achievement.

There are three significant outcomes from this project which I would like to highlight:

**Firstly:** Eskom and SASOL are now assured of an adequate and much more reliable supply of water and are not only dependent on local water resources.

**Secondly:** Due to loan funding having been procured at highly competitive conditions based on the exceptionally favourable credit ratings of AA + (zaf) long-term and FI + (zaf) short-term awarded to the project by the International Fitch Credit Rating Agency, water users will be enjoying the benefits of an excellent project with water supplied at an optimal price to users who will pay in full for the capital and long-term operational costs at an incremental cost of about R5 per cubic metre.

**Thirdly:** The project has contributed significantly to the achievement of Government's objectives of promoting Broad Based Black Economic Empowerment. Employment, procurement and training opportunities were maximised for local communities, and during construction

1 685 jobs were created of which 1 315 of the required staff were sourced from local communities (The total job opportunities created can be summarised as 5 648 person-years). The total value of goods procured from the various categories can be summarised as follows:

Black Empowerment companies: R315 million;

Local Enterprises: R 29 million; and

Small, Medium and Micro Enterprises: R228 million

The Chairperson of the Board of TCTA, Dr Snowy Khoza, has already made reference to the South African Women in Construction (SAWiC) programme which was implemented through the contract. This is such an important achievement in terms of women empowerment in the construction industry that I would also like to make reference to this initiative. I must thank TCTA who in co-operation with the South African Federation of Civil Engineering Contractors (SAFCEC) assisted with the selection of contractors and the design of the content for the programme, and the DBSA who facilitated the attendance of owners on a mini-MBA. This programme must definitely be extended and implemented in all major infrastructure development projects. In true South African fashion I would salute these enterprising women and say, *“Malibongwe Igama Lamakhosikazi Malibongwe”*.

I wish to congratulate the project authorities and the contractors on these successful outcomes.

Finally, I must make reference to the recently adopted Framework for Water for Growth and Development, which has highlighted that in reality we as a country can no longer afford water losses and to use water wastefully, I would therefore impress upon both Eskom and SASOL to continue to focus on and strengthen their water demand management and conservation measures.

In Conclusion I wish to commend my Department, the Trans Caledon Tunnel Authority (TCTA) and all of the contractors involved for a job well done. This project has once again demonstrated how public infrastructure projects can be used to contribute in a very meaningful way to poverty alleviation and the empowerment of our people. May our water users enjoy the benefit of this new infrastructure for many decades.

I thank you.