

**Memorandum of Understanding on Water Use Efficiency between DWAF and Eskom**  
**Speech by Mrs LB Hendricks, Minister of Water Affairs and Forestry**  
**Kwa-Thema Sports Complex, Ekurhleni**  
**19 March 2008**

Honourable Executive Mayor of Ekurhleni, Councillor Duma Nkosi  
CEO of Eskom Mr Jacob Maroga  
Chairperson of Mayoral Committee and committee members  
Programme Director  
Distinguished guests  
Ladies and gentleman

**1. Introduction**

It is an honour to be with you today to celebrate National Water Week. We are pleased to be here in Ekurhleni and for you to join us in witnessing the signing of a Memorandum of Understanding between the Department of Water Affairs and Forestry and Eskom on water efficiency in the power sector. This agreement is an important achievement aimed at building and strengthening our collaborative partnership with Eskom, and will contribute to improved water security for the country. It was at last year's National Water Week when I announced our programme on Water Conservation and Water Demand Management, and today we take pride in witnessing some of the results achieved by this programme.

There is an old saying that we should treat the earth well, we do not inherit it from our parents, we borrow it from our children. As we strive for universal access to clean water we also need to bear in mind that water is a scarce resource and we need to protect and conserve this resource so that it is available for future generations. We celebrate human rights day in two days time and we are very mindful in the water sector that access to clean water is a human right that we should work towards; it is also a right that we need to protect and take steps today, so that it is also available for our children.

A culture of water conservation as well as energy saving is an imperative for our country; and we need to change the culture of wasteful use of these resources. The electricity crisis in our country has brought home the message to people that if they do not save electricity and introduce energy saving in their own homes and in their businesses then there will be a shortfall of electricity, and load-shedding will result. Yet we have seen that there are still people who unnecessarily leave lights, heaters, and other appliances on when they are not needed. Similarly we see that with water, which in South Africa is not an abundant resource, people still waste this resource. That attitude needs to change and we must all work together towards creating a culture of conserving our resources to ensure continued availability of water and energy to support the socio-economic growth and prosperity of our nation.

**2. Sustainable living and global warming**

Programme Director, the reality of climate change caused by the continued and unsustainable release of greenhouse gases is evident through the increased floods, storms, and cyclones, which for the past few years have been experienced in many parts of the world, including our neighbouring countries. In other countries climate change has brought about extended droughts and higher temperatures. Climate change is worrying and requires urgent action by leaders across the globe, by big and small businesses and also by ordinary people. For us in the water sector we are particularly concerned about the impact it will have on our water resources - whether it is worse droughts, higher temperatures, or harder heavier rain when it does rain. When factoring in the impacts of climate change we see even greater need to become more water efficient and use our water resources sparingly.

South Africa is already a water scarce country and we cannot afford to rest on our laurels and think that because we have good infrastructure and have recently had good rainfall that there is a guarantee of long-term water security. I have recently addressed Parliament to give assurances that we do not foresee a water crisis and that we are maintaining our infrastructure and have plans in place to expand our water

infrastructure. But in giving those assurances I made it very clear that because we are in a water scarce country we cannot afford to waste water, we cannot allow people to take more than their allocation, nor can we allow people to use water unlawfully. A major part of our solution to ensure long-term and sustainable water availability lies in embracing Water Conservation and Water Demand Management as a way of life, and a way of operating businesses.

### **3. Water conservation and water efficiency**

Ladies and Gentlemen, my Department has just concluded a reconciliation study on water availability and requirements for the Integrated Vaal River System which supplies over sixty percent of water requirements of Gauteng Province. In this study, we identified the need to have an additional dam to service the Gauteng Province but the study also highlighted that Water Conservation and Water Demand Management are extremely important, and is the most cost effective and reliable option for us to expend our budget. Dams are extremely expensive to build and by implementing improved water conservation measures not only do we contribute to environmental sustainability but also help to delay the date by when we need to start constructing the next water scheme.

Our colleagues from Eskom will be only too aware that the timely implementation of effective and comprehensive energy demand management would have dramatically lessened the current electricity crisis. That experience teaches us in the water sector of the need to ensure that our Water Conservation and Water Demand Management programmes are high up on the agenda and are comprehensively implemented. All water users have to embed water conservation as an essential part of their day to day life.

On Monday at the launch of National Water Week, I addressed a National Water Summit where I spoke about the importance of water conservation, the need for it to be an integral part of the work of my department and that it is gaining increasing importance in my department. I also said that as the Water Sector we have to work closely with other government departments, with all spheres of government, with the private sector, with NGOs, and CBOs to create greater awareness amongst the people of South Africa of the need to conserve our water resources.

We would like to see that when all stakeholders in the water sector allocate resources for planning, operation and maintenance, Water Conservation and Demand Management receives the priority required. I informed the National Water Summit that we must also look to our agricultural and industrial sector to devise ways to use water more efficiently and reduce wastage. The largest percentage of our water goes into agriculture and while we would not want to compromise on food security there are many areas to become more water efficient that can take place in this sector – examples of efficiencies include what time of day crops are watered, the use modern irrigation methods such as drip irrigation, and the type of crops suitable for the area and climate. Studies have been conducted in this field and experience gained, which must now be used to enable farming communities to make the right choices.

Water users at municipal level, including households, must be very conscious of their use of water and to use it sparingly. Measures like watering of gardens must be done at the right time to prevent unnecessary water losses due to evaporation, taking a short shower rather than a bath and installing water efficient devices for the shower, toilet and taps will improve water use patterns by consumers. Such measures along with fixing household water leaks will go a very long way if implemented by millions of households across the country. These measures will also have a positive impact on household monthly expenditure by reducing the water bill.

Among other things the impact of water conservation is sustainability, habitat conservation and also energy conservation – for reduced water usage will result in less water being pumped vast distances and using large amounts of electricity. Sustainability is crucial to ensure water availability for future generations. Habitat conservation helps preserve fresh water habitats for socio-economic growth including among others, opportunities for tourism. An added impact of water conservation is that less waste water would then be put into the waste water system and need to be treated by municipalities.

### **3.1 Social Solutions**

Honourable Mayor, municipalities play a key role in initiating and driving local level water conservation programmes; and along with provincial governments are our partners in ensuring we have a more water efficient South Africa. We are therefore particularly pleased at the level of commitment shown by municipalities across the country in driving local initiatives. There are a number of common strategies that we can implement such as public education campaigns so that people are empowered and are aware of the need to become Waterwise. We can also look at water pricing to influence users to reduce their water consumption levels, for example by having tiered water rates or block tariffs to penalize excessive use of water. It is also possible to promote a reduction in the demand for water by providing subsidies, and I recommend that municipalities consider such incentives. Such subsidies could be applicable to large office blocks for them to install water efficient toilets such as the dual flush toilets and more efficient lawn irrigation; or for industrial users to implement water efficient technologies. Municipalities also need to look at residential water metering and whether this should be an enforced requirement through the municipal bylaws.

### **3.2 Water efficiency solutions**

Through our National Waterwise Campaign we are informing people of the need to conserve water and give a number of simple ways to be more water efficient. Among other measures, some of which I have already mentioned, we are encouraging people to save water by turning off the tap while brushing your teeth - since a running tap can waste over six litres per minute; putting a displacement device into the toilet cistern or using a dual flush toilet can reduce by half the amount of water used when flushing the toilet; fixing dripping taps since a dripping tap wastes thousands of litres of water a year; and using a full load in the dishwasher and washing machine.

We also recommend that people buy water efficient products when purchasing new bathroom accessories or a new washing machine or dishwasher. To this end the Department is working closely with the DTI and SABS to establish a National Water Efficiency and Labelling standards scheme to introduce compulsory labelling of water efficiency of such devices. Such Water Efficient Labelling Standards (WELS) will therefore enable consumers to buy water efficient devices that will also result in financial savings by using less water. Similarly, we support the call by the Department of Minerals and Energy and Eskom for people to buy energy efficient products.

## **4. DWAF-ESKOM MoU**

Programme Director, DWAF and Eskom have a close working relationship particularly on ensuring that there is sufficient water for power stations as well on several hydro-electric power plants around the country; we are also working on the new pipeline that will transport additional water to support Eskom as well as Sasol's water requirements in Mpumalanga [the Vaal River East-Subsystem Augmentation Scheme (VRESAP Pipeline)].

By signing this Memorandum of Understanding (MoU) we are strengthening that collaboration in order to achieve improved water efficiency. The MoU notes the challenges facing both the water and energy sectors, and the need to improve energy and water efficiency. We are looking to work with Eskom to develop innovative solutions and improve current levels of water use efficiency by their power plants. Already a lot has been done on the implementation of dry systems as opposed to wet systems, as wet systems use substantially more water. Both Eskom and DWAF recognise that there is still significant room for improvement in water efficiencies, which will be further explored within the scope of this MoU.

## **5. Conclusion**

To conclude, Ladies and Gentlemen, we call on all South Africans to take collective responsibility for our resources and to conserve our water and also use less electricity. The co-operation between DWAF and Eskom will see us as government 'practicing what we preach' and implementing water saving technologies in the production of electricity. Local government also have a very important role to play in helping us implement water conservation programmes, which must become a way of life for all South Africans.

Ladies and Gentlemen, the economic growth we enjoy as a country, living in a water scarce region and the impact of climate change places a strain on our limited natural resources; and requires that we take water and energy conservation seriously. Our actions today will contribute to a better future, not only for us, but most importantly for our children.

I thank you.