South African Institute of Civil Engineering (SAICE) SAICE-DFC Water "Centenary Schools Water Competition" Speech by Ms TR Mabudafhasi, Deputy Minister of Water and Environmental Affairs Sci-Bono Discovery Centre, Newtown, Johannesburg 24 July 2009

Program Director Council Members of South African Institute of Civil Engineering (SAICE) Managing Director of DFC Water: Mr. Brian Holford Professor Kobus van Zyl from University of Western Cape (UCT) CEO of the Sci-Bono Discovery Centre Mr. David Kramer Members of the media Ladies and Gentlemen:

We are gathered here today to celebrate the innovation of our vibrant youth who are demonstrating eagerness to become leaders and environmental ambassadors, particularly with regard to equitable distribution, efficient use and conservation of water. Investing in youth gives satisfying hope for tomorrow. I have no doubt that our future is in good hands only if we continue in this trend. When the time comes for me to pass on the baton, it will be an experience I will do without regret.

In a water-scarce/arid country like ours it is necessary that we understand the importance of all the issues, from conservation of water, the quality and quantity of water, the distribution of water and how it impacts on our daily lives. As government we have succeeded in providing millions of people with potable water where they previously had no water. However, we are continuing as there are still many people without water and there are millions of our citizens without adequate sanitation.

Distribution of water to all corners of South Africa requires laying the best and costly infrastructure suitable for a variety of terrains and the best trained minds to ensure quality work.

Water distribution networks/systems are important to supply safe and clean drinking water to people. In designing, constructing and operating these networks you have possibly come across some of the intricacies that engineering professionals are faced with and I am sure that you now have a better understanding of the challenges there are to distribute water equitably in towns and cities. I believe the learners who are here are representatives of the nine provinces in our country. You have probably noticed that each of your areas have different needs regarding water.

I have been informed that the competition you went through tasked you to design and build a model water distribution network and to distribute three litres of water equally between three points on the grid using two different diameter pipes and connection pieces. You were judged on how well you executed the task – working on a penalty points system. Without any doubt, this competition exposed you to the practical application of processes that influence your daily lives - how water gets to your homes.

From your personal experience, you have realized that getting water to people involves creating infrastructure, which is very costly. The Department of Water and Environmental Affairs has recently completed the Berg River Dam, which provides Cape Town with water and is currently building the De Hoop Dam in the Steelpoort Valley. From the dams the water is transferred to water board facilities where the water is purified and then sold to municipalities. They provide the citizens with water through the water distribution networks. These are costly processes and that is why you and I pay for the water we use. However, every household gets 6 000 *l* per month free.

Background

South African Institution of Civil Engineering (SAICE) and Rand Water celebrated a hundred years

of existence in 2003 and as part of their centenary celebrations they launched this joint competition for high school learners devised by Professor Kobus van Zyl and his students at the University of Johannesburg. This competition is solely designed to impart specialized knowledge to you as future leaders of this country and I think SAICE and Rand Water deserve a round of applause for empowering you for tomorrow.

As government we are also delighted to note the intention of SAICE to rename the competition **AQUALIBRIUM** and introduce it to more schools. Just to share with you, early this month our department hosted a week-long Aqua-Enviro Youth Summit which involved learners from all provinces. They competed in various environmental related topics and I'll be taking two best winners to Sweden in August where they will represent our country in the final stage of the competition at international level. Now you can realize that my expression of hope for our future is dependent on your shoulder and I wish more and more young people can get involved in conservation initiatives as they provide opportunities for rewarding career paths.

I do hope that this competition has created an awareness regarding the issues surrounding water in South Africa among all the learners and educators. You are now the ambassadors who must spread the message that water is a precious commodity, which should be conserved, respected, recycled and re-used in order to ensure that there will be 'some water for all, forever' in our beautiful country!

It is heartening to see that the private sector is playing a pivotal role to ensure the continuation of this worthwhile and exciting competition and I would like to commend DFC Water for their involvement over the past two years.

DFC Water (Pty) Ltd, the major sponsor, and SAICE took the responsibility of spreading the news that water should be used wisely, that infrastructure should be maintained and that new infrastructure should be created to provide potable water to those without water. Good news is that the Water Research Commission has also joined in this effort.

A competition like this strengthens government's initiatives aimed at encouraging learners to take Mathematics and Science and follow a career as a scientist or civil engineer to alleviate the scarcity skills situation in South Africa!

Only in this way can we assure that the quality of life of all South Africans will be better in future!

Thank you.