

# H.E Abdullah Al-Hussayen Minister of Water & Electricity



## Speech

### Water Situation in Saudi Arabia and MOWE's Initiatives

Distinguished members of SAWEA and workshop participants;

Good morning to you all

It is indeed a great honor to be here today attending SAWEA workshop.

We at the Ministry of Water and Electricity appreciate the efforts of SAWEA in organizing gatherings such as this, which enable us to share our knowledge and to increase our awareness of important issues

I would like to take this opportunity to talk to you about the water situation in Saudi Arabia, and in particular, about the ministry's efforts to meet the increasing demand for portable water and sewage services.



## GENTLEMEN

Water provision , water quality, and wastewater management have long been serious concerns of the government. Saudi Arabia has no natural water resources of any significance and a major share of our potable water is produced by 30 water-destination plants serving 40 cities. The destination plants have a production capacity of about 3 million cubic metres of potable water per day, which makes Saudi Arabia the world's biggest producer of desalinated water. The current daily supply of potable water stands at around 5.5 mm<sup>3</sup>

In recent years, the Ministry of water and Electricity has implemented more than 1,300 water and wastewater projects across the country; from comprehensive city-wide projects, to smaller projects serving villages and hamlets. Despite this, a population growth rate of 3 percent per annum, compounded by rural migration to urban centers, means that water consumption in Saudi Arabia is rapidly increasing, especially in the major cities of the Kingdom. Currently 5 cities in the Kingdom account for almost 55% of the demand and 15 cities account for about 80%. The remaining 20% is shared by over 12000 villages and small settlements.

Projections indicate that water demand over the next 20 years will exceed 11 million cubic meters per day. Over the next 5 years, new desalination plants built by independent Water and Power Producers should supply an additional 3 million cubic meters per day. More desalination plants and ground water capacities are planned, to bridge the gap between supply and demand.

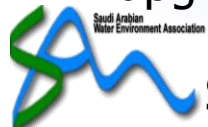
We currently treat around two million cubic meters of waste water to secondary and tertiary level. We will increase this amount within five years to over five million of tertiary level treatment. We hope to reach the 90% population sewage coverage in an equal time span

## DISTINGUISHED GUESTS

To bridge this gap, the Ministry of Water and Electricity has set itself the challenge to transform the kingdom's water sector into a world class utility. The problems of water scarcity, the high cost provision, and the increasingly stringent water quality discharge requirements, mean that alternative strategies to water management are needed.

In addition to the planned organizational restructuring and privatization of its services, water reuse in line with international best practices, is an essential component of the Ministry's Integrated Water Resources Management and Sustainable Development Strategy, and an important economic alternative to developing new sources of water.

Water reuse manipulates the water cycle to create alternative water resources, and at the same time, reduces effluent discharge to the environment. It means that water is conserved, re-used whenever possible, and when discharged, upgraded to the highest standards.





Among its benefits are reductions in fresh water supply and wastewater generation treatment costs. But a key benefit is “sources substitution”, where existing uses of potable water for non-potable purposes, such as irrigation, can be substituted with the “new” resource of reclaimed water.

In many cases, water re-use is both economically attractive and environment friendly. With water coverage in the Kingdom around 90 percent, sewage collection around 45 percent, and only 6 percent of treated water being reused, there is considerable scope and benefit to be had in increasing water re-use.

## DISTINGUISHED AUDIENCE:

During the last 2 year, the Ministry has conducted assessment studies, and also conducted nationwide water-conservation campaigns, and distributed more than 33 million water-conservation kits Free of Cost, with a water saving potential of up to 30 percent to households and public buildings.

With the objective of improving overall performance in key areas and providing better services to consumers, the Ministry has decided to involve the private sector in urban water and wastewater operations through a Public Private Partnership Plan. This is intended to provide investment opportunities in the replacement



and rehabilitation of ageing assets and the provision of new assets, and should lead to enhanced operational efficiency, improved continuity of supply and increased water treatment and reuse.

The privatization plan and the formation of a National Water Company have been approved by the Supreme Economic Council. Once confirmed by Royal Decree, the company will oversee and administer the reforms and privatization process. The National Water Company is expected to start functioning as a separate entity by the beginning of 2008.

In the meantime, the Ministry has already taken a number of steps as a part of its reform initiatives for water and wastewater.

In Riyadh, a performance-based management contract for a period of 6 years will be awarded soon for the city's water services.

In Jeddah, a 7 year similar performance based management contract for the city water & wastewater services is up for tender and is likely to be awarded in the first quarter of 2008.

Consultants are advising on the methodology to be followed for the re-use of treated effluent and sludge in Riyadh and Jeddah. They are also advising on marketing strategies; options being considered are contractual incentive schemes and participation of outside investors.

Other consultants are conducting studies in 200 major residential areas covering over 80 percent of the Kingdom's population. They will be reporting on ways to replace the use of underground and fresh water with recycled water, and on methods of wastewater re-use and sludge disposal.

Royal Decrees have been granted for laws settings standards for all uses of recycled wastewater, including artificial irrigation and industrial purposes, requiring large water consumers like housing compounds to Install their won wastewater treatment facilities and to recycle their wastewater.

## GENTLEMEN

In closing, I would like to express my appreciation once again to the workshop participants, and to all those responsible for arranging this workshop.

The Ministry is prepared to encourage and support industries participating in the re-use of treated water.

It is of utmost importance that the Ministry, Industry, commercial enterprises, and the public, adopt water conservation and water re-use methods and strategies.

It is to everyone's benefit that wastewater never becomes "Wasted Water"

Thank you