

Saudi Arabian Water Environment Association Workshop 2007
Abdulaziz Al-Khayyal Speech
Industrial Relations Senior VP
8:30 AM December 4, 2007



We are honored to have His Excellency, the Minister of Water & Electricity, Engineer Abdullah Al-Hussayen and his support for this Saudi Arabian Water Environment Association Workshop. Saudi Aramco is also pleased and honored to support this workshop and previous SAWEA workshops. SAWEA's efforts to educate our water quality professionals is critical to both Saudi Aramco and the Kingdom of Saudi Arabia as education is the key to maintaining and enhancing our water environment.

SAWEA's parent organization, the Water Environment Federation, has a saying: "Water is Life and Infrastructure Makes It Happen". This ties in well with the theme of this workshop: "Project Management of Innovative Water and Wastewater Technologies". Water and wastewater infrastructure provides clean and safe water for the life of both the public and companies like Saudi Aramco. Water and wastewater projects are life sustaining investments in our water and wastewater infrastructure.

Yesterday, Saudi Aramco planning and project management professionals presented a course on project management. It is our collective hope that yesterday's course and this Workshop will help improve our ability to better manage life sustaining water and wastewater projects.

Water is important to the life of Saudi Aramco's oil and gas operations as well as Saudi Aramco Communities and Home Ownership Areas. Saudi Aramco operates 60 water and wastewater treatment plants. Our 20 water treatment plants produce 25 million gallons of desalinated water per day while the 40 wastewater treatment plants treat 45 million gallons of wastewater per day. The Company has spent over 5 billion dollars over the past 30 years on water and wastewater projects.

Saudi Aramco is planning and constructing significant projects to add to its water and wastewater infrastructure. Currently under construction, we have 7 industrial water and wastewater projects estimated over 750 million dollars and 6 Saudi Aramco Community water and wastewater treatment projects estimated over 200 million dollars. These projects include innovative technologies such as ceramic pressure exchangers for reverse osmosis plants and membrane bioreactors for wastewater treatment. The ceramic pressure exchangers recover 30-50% of the

energy required for reverse osmosis while the membrane bioreactors provide superior effluent for reuse.

Saudi Aramco strongly believes in wastewater reuse. One of Saudi Aramco's corporate objectives is to conduct all our work in an environmentally responsible manner. We look at wastewater as a resource that should not be wasted. Reusing wastewater saves precious groundwater for use by future generations. Currently Saudi Aramco produces 24 million gallons per day of industrial wastewater and 21 million gallons per day of sanitary wastewater. Saudi Aramco is now reclaiming and reusing 20 million gallons of wastewater per day, almost half of our wastewater. Reuse applications include landscape irrigation, sod farming, cooling tower water, and boiler feed water. Our current projects will increase wastewater reuse to over 90 percent and our future goal is to reuse 100 percent of the wastewater generated..

The Kingdom of Saudi Arabia is planning water and wastewater projects worth more than 10 billion dollars over the next 20 years. For our water and wastewater projects to be successful, they must produce high quality water, they must be reliable, and they must be cost effective. Therefore, it is extremely important for our water quality professionals to educate themselves and others in effective project management and innovative technologies. I encourage everyone here to take advantage of this Workshop for the future of the water environment in Saudi Arabia.

Thank You Very Much