

Industrial Recycling Expert Picks Low Hanging Fruit

Growing populations, growing agricultural activity, growing industrialization, and thus growing water needs have led Jordan, which is one of the ten most water poor countries in the world, to act fast in providing alternatives to water resources.

The Kingdom understands that water restrictions may lead to unemployment, a decline in income, rising poverty levels and general national economic regression especially for a country where about 160,000 of the 1.1 million workforce are employed in the industrial sector.

Recently, Dr. Nicholas P. Cheremisinoff, Director of Clean Technologies/Pollution Prevention Programs at Princeton Energy Resources International made a presentation entitled "Encouraging the Reuse and Recycling of Industrial Wastewater" to the National Water Reuse Coordination Committee of the MWI in Jordan. Cheremisinoff is currently working on the Water Reuse Implementation Project, which is funded by the United States Agency for International Development (USAID) and implemented by PA Government Services Inc.

"Jordanian industrialists have welcomed this idea and they are willing to try it in their work as through it they are able to save water and improve their financial performance," he said.

Cheremisinoff, who has more than twenty years of industry experience and has written more than 167 books, stated that the implementation of water reuse and recycling can improve enterprise competitiveness and simultaneously improve economic and environmental performance.

During his visit to key industries in the Kingdom, Cheremisinoff explained how to increase water efficiency and water reuse practices by implementing pollution prevention concepts. "We are currently working at six industrial facilities in Rashidieh and Sahab areas and the industrialists have shown great understanding and willingness to be part of it," he stated.

Cheremisinoff pointed out that by applying the principles of an Integrated EMS, with pollution prevention at its core, companies will not only identify ways to recycle and reuse treated and untreated wastewater, but will improve their environmental performance in other areas. "Because the principles and tools can reduce pollution and waste at the resource, the need for costly end-of-pipe treatment technologies and their add-on costs can be reduced or eliminated," he said.

A workshop on Water Reuse, Recycling and Improving Profitability in which he will be discussing Environmental Management Systems (EMS) and Pollution Prevention is also on Cheremisinoff's agenda. He will use examples of real success stories in water reuse, recycling and improved production efficiencies from the phosphate and petroleum refining industries.

“By giving several international case studies in the industrial sector, the concept becomes very acceptable as they are able to see how others in the same field succeeded,” he said.

Many countries and Jordan is one of them, do not allow industries to dispose of their wastes to public wastewater networks unless they comply with certain standards and are compatible with the sewage treatment system. Jordan’s industrial zones are equipped with sewer pipeline networks and treatment facilities.

The Water Reuse Implementation Project, which is providing this technical assistance to the industrial sector related to wastewater reuse, has also developed three agricultural sites to demonstrate appropriate water reuse.