

**INDUSTRY SPOTLIGHTS**
**Desalination Technologies**

441 Total Projects

## Septech Wins Record Desalination Contract

Installation of the 24 Septech mobile water desalination units started in Oman. Once operational the units will supply 22.7 million liters of water to the residents of Muscat every day. In the largest deal of its kind, Septech, the region's water infrastructure experts, were appointed by the Public Authority for Electricity and Water (PAEW) to install the world's largest mobile desalination plant just outside of Muscat.

The structure of the plant, a series of innovative pre-engineered and manufactured Sea Water Reverse Osmosis containers, allows for rapid deployment. The plant will be supplying nearly 10-percent of the daily potable water needs of 1 million residents in the Omani capital.

"A mobile water project on this scale has never been undertaken by any engineering company in the world. In months, not years, this project that will have an enormous impact on the water supply of Muscat," said David Heffeman, CEO of Septech. "The challenge we face is multi-faceted, but the experience we've gained operating in the region over the past decade has prepared us well. The plant must supply an enormous amount of potable water every day, and it must start doing so quickly, but Oman also has some of the most stringent drinking water standards in the world, so the water produced must be inline the globally recognized drinking water standards."

Septech has chosen General Electric Water and Process Technologies to supply the mobile water assets required to service the plant.

"General Electric are leaders of international business due to the superior



Septech at the Al Ghubrah Site

quality of their products, services and proven track record in providing innovative solutions," said Heffeman. As Oman's population and industry increases rapidly, particularly in urban areas, the challenge is to meet the growing demand for water. Innovative, rapidly deployed systems – like the mobile facility that Septech will soon begin to install – offer a solution to an ever more frequent infrastructure demand.

"Oman is certainly a growing market for Septech; we recently invested in setting up a full office in Muscat to allow us to capture a larger market share of the business we anticipate seeing there over the next decade, but we're seeing similar demand for water solutions in Australia, Kingdom of Saudi Arabia, Pakistan and across the GCC region. The Middle East region has five percent of the world's population and less than one percent of the world's available water, so sound investment in the water infrastructure is an ever growing priority for regional governments," said Heffeman.

Rapid deployment was one consideration of PAEW when they appointed Septech to install a mobile facility,

but the moveable system also means that the plant – in its entirety or in individual sections – can be relocated to other coastal areas in Oman as soon as the planned upgrades and extensions to the permanent desalination facilities that supply Muscat are made.

"The really unique thing about this system is that it can be reconfigured for use in a variety of ways after it has served its purpose in Muscat," said Heffeman. "In the currently planned format, we'll be using 24 systems to convert 60 million liters of sea water into 22.7 million liters of drinking water. But once the city of Muscat's growing needs are met by the expansion of the permanent facility, these units could be split up to supply the water needs of several remote communities with smaller populations."

The Middle East accounts for over 50-percent of the world's total sea water desalination, and demand continues to grow as industry and population swell throughout the region. Septech is committed to providing best practice desalination solutions, both large and small, to governments, developers and the industrial sector. ■