

## 'Disi project construction in full force'



**MUDAWARA** - The first three wells of the Disi Water Conveyance Project have been completed, according to project officials.

The mega-project, which entails supplying Amman with 107 million cubic metres of water annually by 2013, is 28 per cent complete and going according to schedule, with the remaining 61 wells expected to be completed in early 2012, they said.

"Management teams responsible for the project's execution are now on site in Qastal and Mudawara. The project is going according to our schedule and expectations," the technical manager of the Disi Water Company (Diwaco), Cormac Odwyer, said on Sunday.

The Disi project is entering its second year, during which the company is expected to finish procuring pipes and construction materials, Odwyer told reporters during a media tour on Sunday organised by the Ministry of Water and Irrigation to Disi project sites.

"During the [project's] second and third years, we will finish construction," he said at the project's offices in Qastal.

"The designs are in place, the pipes are arriving, the pumps are in order and construction is starting with our 14 sub-contractors mobilised at the main sites," Odwyer added.

Diwaco and its sub-contractors are currently drilling wells and preparing a pumping station at the well field, which stretches over 400 square kilometres in the Mudawara region.

Meanwhile, construction on the water conveyance pipelines running between Hassa and Mudawara as well as Madaba and the Abu Alanda reservoir will start in early September, according to Nasser Maragha, logistics and project administration manager at GAMA, the Turkish company implementing the project.

Maragha said that construction on the Abu Alanda reservoir, the largest water reservoir to be constructed under the project, will also start in early September. The Abu Alanda reservoir is to receive Disi water from the Madaba pumping station and pump water to another reservoir in Dabouk, west Amman.

Maragha pointed out that the contractor responsible for the Madaba pumping station has already started building the facility.

In Mudawara, some 300 kilometres to the south of the capital and close to the Kingdom's borders with Saudi Arabia, project officials said they are witnessing peak construction activity.

"We are planning to dig 64 wells, 55 of which are for the generation of water and nine wells will serve as piezometer wells to measure the elevation of water," Loeki Vos, well field resident engineer, told reporters on Sunday.

Vos said that 46 of the 55 water generation wells will be used for water extraction, noting that the remaining nine wells will be "on standby" and only used in case of emergency.

"Water generation wells will be dug at a depth of 600-700 metres, while the piezometer wells will be dug at a depth of 400 metres," she said, adding that wells will generate water for a minimum of 50 years.

A 30-minute drive from the Mudawara offices, 17 kilometres to the south, lies the project's well field site in the Dbeideb area, where local firm Site Group is drilling the 64 wells.

"The company is using high-tech hydraulic drillers, the first time such technology is being used in Jordan," Maragha pointed out.

Waseem Akroush, well field manager, said the 55 water generation wells and nine piezometer wells will be completed within 18 months. He added that 91 per cent of workers at the well field are Jordanians.

Being carried out on a build-operate-transfer basis, the project entails constructing a 325-kilometre pipeline to convey water from the ancient Disi aquifer in southern Jordan to Amman.

The water will be transferred to Amman via a pipeline, which will pass through several water stations, from Maan-Tafileh-Karak-Madaba and finally to Amman.

The project went into effect in June last year after the financial closure was signed. The government's equity in the project totals \$400 million, \$100 million of which is allocated as "standby" funding, to be used if international prices of construction materials, including steel, increase. The European Investment Bank and the French Development Agency extended two \$100 million soft loans to the government for the project.

The price of one cubic metre of water generated by the project is estimated at JD0.74.

Water officials describe the Disi project as "Jordan's first step towards achieving water security".

### **Disi Water Conveyance Project specifics**

Designed to alleviate the Kingdom's water shortage and boost supply to the capital

Entails the digging of 64 wells in the ancient Disi aquifer in the south

Carried out by Turkish firm GAMA and 14 subcontractors

Total price tag stands at \$1.1 billion, \$400 million from Jordan

325-kilometre water pipeline to run through Maan, Tafileh, Karak, Madaba and Amman

Project to pump 107 million cubic metres of water to the capital by early 2013

Price per cubic metre of water generated from the project estimated at JD0.74