

Al-Mukallah Water Supply System (First Stage)

Client

National Water and Sanitation Authority (NWSA)

Scope of Work

Phase 1: Pre-construction Services:

- Review and approve tender documents for the supply and delivery of water well casings and screens.
- Review and approve tender documents for drilling and testing of boreholes.
- Review and approve tender documents for construction of pump stations, reservoirs and pipelines.
- Contractor's prequalification procedures and preparation of prequalification list.
- Assist NWSA in tender evaluation and award of contracts.

Phase 2: Construction Supervision Services:

Provide complete construction supervision services including: review and approval of contractor's furnished

designs and drawings; continuous site supervision of construction and electromechanical installations, and outside inspection in suppliers factories.

Phase 3: Technical Assistance:

Provide NWSA with technical assistance services during construction of the project, on-the-job and overseas (Egypt) training.

Location

Al-Mukalla, Yemen

Types of Activities

Civil works

The objective of the project was to increase water production to meet the actual demand required for Al-Mukalla. Water was conveyed to Al-Mukalla from the existing Wadi Buwaysh wells producing 40 l/sec and the new An-Naga'ah wellfield which adds 138 l/sec.

The project comprised the development of a new wellfield at An-Naga'ah by drilling twelve boreholes equipped with wellscreens and borehole electrosubmersible pumps. Water was conveyed through a 400 mm pipeline to a

400 m³ collection tank. At Wadi Buwaysh additional three boreholes were drilled and developed to replace existing wells. Water from the collection tank at An-Naga'ah was conveyed through a 600 mm pipeline to Al-Sedad by means of a new 800 m³ reservoir at Al-Huwayrah. From Al-Sedad reservoir a 400 mm pipeline was laid around Al-Mukalla to Bagrain and Al-Omal areas. Booster pump stations were built at Wadi Buwaysh. Moreover, two reservoirs were built at Al-Sedad (1,200 m³) and at Al-Omal (2,000 m³).

