

RAS AL KHAIMAH SEWERAGE SERVICES

Qualitative and cost effective O&M processes



O&M

Overview

The Ras Al Khaimah Sewerage Authority (RAKSA) was faced with an outdated and hard-to-manage sewerage system, which delivered poor service and created environmental problems for the population of Ras Al Khaimah.

With a limited budget available, RAKSA needed to find a low-cost solution, as well as increase treatment flow whilst maintaining effluent quality, whilst resolving environmental issues relating to odour nuisance and network problems.

RAKSA sought an Operations and Maintenance (O&M) operator able to meet the following challenges:

- A low-cost capital solution
- Increase treatment flow
- Maintain effluent quality
- Limit odour nuisance

BESIX Solution

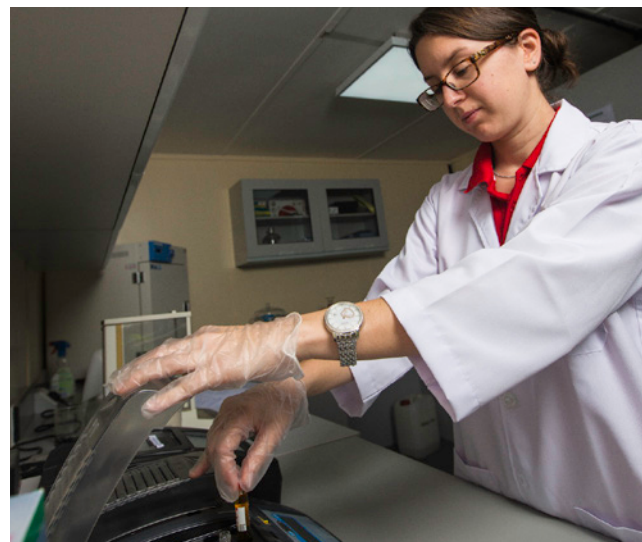
RAKSA appointed BESIX through its subsidiary Moalajah as service operator. Moalajah brought in experienced professionals working under a new and comprehensive O&M structure. The optimisations were based around four key factors:

1. Sweating the existing assets to ensure maximum efficiency
2. Developing effective operating procedures and training programmes
3. Implementing a sustainable maintenance scheme
4. Recruitment and development of capable staff

Initially, a particular focus was made on developing standard operating procedures, safety management systems (e.g. permits to work, electrical isolations, confined space permits) and planned and unplanned operational tasks, preventive and corrective maintenance of mechanical, electrical, instrumentation, control and automation (MEICA) equipment using Moalajah's Computerized Maintenance Management System (CMMS).



9 Treatment Plants
45,000 m³/day Overall Capacity
131 Km Sewer
2,001 Manholes
7,817 Connections





Wastewater



Results & Achievements

Through the systematic approach taken by Moalajah, public concerns about environmental issues and related wastewater nuisances such as odour were reduced and services improved for the population of Ras Al Khaimah.

Treatment plants are now running at the maximum capacity of their design whilst producing a reliable effluent quality reused for landscaping for the benefit of the RAK population and its visitors.

Moalajah is regularly invited by RAKSA to provide additional services out of the initial scope agreement.

99% efficiency

Wastewater infrastructure running with high reliability at maximum designed capacity.

