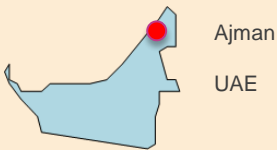


Municipal, United Arab Emirates

Ajman Sewerage: A tailored solution



SEWERAGE MANAGEMENT IN A TAILORED SOLUTION QUALITY, SAFETY & ENVIRONMENTAL SYSTEM



Ajman
UAE

CONTRACT SCOPE

Site: Ajman, United Arab Emirates
Scope: wastewater treatment and sewerage management

CONTRACT DATA

Duration: 27 years

ACTIVITY SECTOR

Municipal
Sewerage management and wastewater treatment

EXPERTISE

- Commissioning of the sewerage plant
- Performance & optimized maintenance
- Customer billing and collection
- Customer care center
- Key account management program
- Trade effluent control and monitoring
- Risk management system

The challenge

Commission the sewerage treatment plant, and manage efficiently the wastewater services of the Emirate of Ajman while taking into account the increase of population.

Maintain the network considering that Ajman wastewater system is subject to specific risks related to its context and to its environment, such as the unprecedented growth of real estate in the Emirate. Organize customer billing and collection.

Veolia's solution

The Emirate of Ajman has awarded Veolia the contract to manage the wastewater services of its capital, Ajman (population of 250,000 inhabitants), via Moalajah the operating company. This is unique in the Middle East region since Veolia helps managing the operations and maintenance of the entire Ajman sewage system.

75,000 m³/day capacity

21 pumping stations

**90,000 clients
110,000 properties served**



It also provides tailored solutions such as: Implementation of a quality, safety and environmental management system, re-crelivered by the ASPCL, establishment of a 24/7 call center, optimization of the management of assets with hydraulic modeling and GIS, maintenance and management of wastewater networks.

The benefits for our client

- Ensure successful service commissioning
- Guarantee treatment plant performance and full compliance with regulations
- Ensure collection system maintenance is carried out rapidly
- Optimize preventive maintenance and repairs
- Implement a mapping system to assist with collection system operation
- Bring excellence in sewerage network management
- Operate a state-of-the-art customer management with billing, collection and customer relationship management

Process description

The Ajman sewerage plant has one wastewater treatment plant of 75,000 m³/d capacity. It includes 10,500 connections, 310 km of gravity sewer and connection pipes, 30 km of rising mains and 21 pumping stations (ranging from 10 l/s to 1000 l/s).

The primary treatment is a UASB (Upflow Anaerobic Sludge Blanket), which is typically an industrial process as it is more efficient with high COD and with high temperature. In order to enhance the wastewater treatment an activated sludge plant has been designed by Veolia. The plant has been retrofitted with the transformation of the submersed aerated filters cells into activated sludge cells. Performance tests have been carried out during summer 2013. The process ensures compliance with the requirement especially in terms of BOD as the initial sand aerated filter did not achieve sufficient pollution degradation due to a high content of H₂S after the primary treatment.

Environmental regulations are likely to become stricter in the next few years. In order to anticipate changes and their impact on the wastewater systems, Moalajah has carried out capital investment planning studies resulting in the identification of major projects that will increase the reliability of the wastewater systems by adding treatment capacity, and reducing energy consumption. Some measures have already been implemented in 2013 and 2014:

- Implementation of a tanker discharge facility to receive effluent from tankers following a change in the local regulations (today a maximum of 120 tankers can be accepted while the number of tankers recorded at the WWTP soared from less than 5 per day to an average of 400 per day).
- Increase of the sludge treatment capacity to meet the need of the new activated sludge plant and the future increase of pollution loads.



PLANET

- Develop a utility management system (UMS) to capture data from the field, issue and track work orders, and collate data at an asset level
- New tanker discharge facility to receive effluents.
- Optimization of energy with advanced online control system (planned for (2016)



WOMEN & MEN

- 150 employees and 16 nationalities.
- Ethics campaign has been launched in 2013.
- Development of a personnel assessment program.

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