UNECE Conference

Denis Le Maoût
Contract Director, Veolia Middle East Africa
October 21st & 22nd 2014, Geneva
Ajman wastewater concession since 2009 (25 years)
Large array of innovative delivery models

<table>
<thead>
<tr>
<th>Options → Considerations ↓</th>
<th>PPS</th>
<th>Alliance</th>
<th>Delegated Management</th>
<th>O&amp;M</th>
<th>DBO</th>
<th>Concession</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of Procurement</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
</tr>
<tr>
<td>Savings and Efficiencies Achieved</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
</tr>
<tr>
<td>Agreeable to Employees</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
</tr>
<tr>
<td>Ease of Cancellation</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
</tr>
<tr>
<td>Rate Mitigation Potential</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
</tr>
<tr>
<td>Speed of Implementation</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
</tr>
<tr>
<td>Allocation of Risk to the Private Sector</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
</tr>
<tr>
<td>Injection of Cash Available to City</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
<td>🟢🟢</td>
</tr>
</tbody>
</table>
**ASPCL at a glance**

- **Type of contract:** Concession between Government of Ajman and Ajman Sewerage Private Company Limited (including a specific O&M contract)
- **Duration:** 25 years starting 1 of June 2009 (substantial completion date)
- **SPC:** ASPCL (Gvt of Ajman 40 % + VW 20 % + Besix 40 %)
- **Turn over:** 223 M AED / 47,5 M €
- **O&M company:** Moalajah (VW 50 % + Besix 50 %)
- **Activity:** a 50,000 m3/days wastewater treatment plant serving 250,000 population equivalent + customer services including collection and billing (1 main Customer Service Centre + 4 satellite centres, 1 Call centre)
Ajman concession perimeter

- 275,000 Ajman residents
- 90,000 Users (100,000 by 2015)
- 12,500 Plots
- 7,500 Plot owners
Challenges of developing a sewage network & implement a high standard of effluent’s treatment

1995
Decision made to involve private sector

• Sewer Law
• Incorporation of Project Company
• EPC and O&M contracts

2001
1st concession agreement

2002

2003
Start of Construction

2004
Project suspended

2005/06
Project restructured with BESIX, Veolia, B&V, GOA and ING/ Ambac

2009
Completion

2010
Start of irrigation program

2011
• Process reinforcement
• Start of tankers discharge
• Expansion of irrigation program to farms
• Extension of network
Ajman model

<table>
<thead>
<tr>
<th>Customer Service, Sales &amp; Marketing</th>
<th>IT Infrastructure – Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>Asset Creation, Management, Training &amp; Planning</td>
</tr>
</tbody>
</table>

- Collection Network
- Pumping
- Treatment
- Fee Collection

TSE Reuse
1 wastewater treatment plant of 75,000 m³/day capacity based on UASB (Upflow Anaerobic Sludge Blanket) technology + activated sludge plant

10,500 connections

310 km of gravity sewer and connection pipes

30 km of rising mains

21 pumping stations (ranging from 10 l/s to 1000 l/s)

Capital Investment Planning Studies to identify major projects that will increase the reliability of the wastewater systems by adding treatment capacity, and reducing energy consumption.

Estimated CAPEX : 280 M€.
Efficient customer service in place

### Customer Service Complaints

<table>
<thead>
<tr>
<th>Service Complaint</th>
<th>%</th>
<th>Average No/Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billing complaints</td>
<td>0.3%</td>
<td>21</td>
</tr>
<tr>
<td>Collection complaints</td>
<td>0.1%</td>
<td>4</td>
</tr>
<tr>
<td>Contact Centre complaints</td>
<td>0.00%</td>
<td>1</td>
</tr>
<tr>
<td>Front Office complaints</td>
<td>0.00%</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>0.4%</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

### O&M Complaints

<table>
<thead>
<tr>
<th>Service Complaint</th>
<th>%</th>
<th>Average No/Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>0.11%</td>
<td>9</td>
</tr>
<tr>
<td>Blocked Sewer / Overflow</td>
<td>0.47%</td>
<td>38</td>
</tr>
<tr>
<td>Construction related</td>
<td>0 %</td>
<td>0</td>
</tr>
<tr>
<td>Other Emergency</td>
<td>0 %</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>0.01%</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>0.6%</strong></td>
<td><strong>48</strong></td>
</tr>
</tbody>
</table>

- **Payment options**
  - Flexible payment period
  - 4 payment centres + 3rd parties (kiosk, bank, online payment)
- **Enforcement**
  - Voluntary/call outs: 77%
  - Sewer tariff officer: 13%
  - Power disconnection threat: 10%
Human Resources, Quality and CSR approach

- **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)
- Quality, safety and environmental management system: OHSAS 18000

- 150 employees and 16 nationalities
- **Ethics campaign** has been launched in 2013
- Development of a **personnel assessment program**
- **Training program** to increase the knowledge transfer of technicians and agents
Ajman: a model that works!

- Willingness to pay
- High collection rate
- Affordable tariff
- Asset well managed
- Highly efficient
- High standard of Service
- Constant improvement
- Financially strong – positive rating