Irán Municipal Wastewater & Sludge Situation
Zohreh Ekhtiarzadeh
R & D Department Manager, Tehran Sewerage Company, Iran

1. General information

Irán spans approximately 165 million hectares. About 52 percent of the country consists of mountains and deserts and some 16 percent of the country has an elevation of more than 2000 meters above the sea level. The Central or Interior Plateau is located in between two mountain ranges and covers over 50 percent of the country. It is partly covered by a remarkable salt desert (kavir) and partly by areas of loose sand or stones with stretches of better land near the foothills of the surrounding mountains.

In Iran, the most common wastewater treatment processes implemented based on the total flow rate include 1) activated sludge 2) stabilization pond 3) aerated lagoons, with capacities of 2,735,964, 1,116,590 and .858,643 cubic meters per day, respectively. Other processes such as SBR, Wetland, etc. cover about 18% of the total treatment capacity.

Table 1 - shows the development trends of the urban wastewater facilities during 1979-2015

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</thead>
<tbody>
<tr>
<td>Population Coverage</td>
<td>106 PE</td>
<td>1.5</td>
<td>2.5</td>
<td>3.3</td>
<td>5.5</td>
<td>11</td>
<td>19.6</td>
<td>21.4</td>
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<tr>
<td>%</td>
<td>8.5</td>
<td>8.6</td>
<td>9.3</td>
<td>14</td>
<td>24</td>
<td>35</td>
<td>38.8</td>
<td>42.5</td>
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<tr>
<td>Length of sewer</td>
<td>Km</td>
<td>2800</td>
<td>5500</td>
<td>8895</td>
<td>14773</td>
<td>26466</td>
<td>41601</td>
<td>48802</td>
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<tr>
<td>No.WWTP</td>
<td>4</td>
<td>11</td>
<td>30</td>
<td>35</td>
<td>69</td>
<td>126</td>
<td>146</td>
<td>156</td>
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<tr>
<td>Capacity (m³/d)</td>
<td>103</td>
<td>287</td>
<td>388</td>
<td>590</td>
<td>1391</td>
<td>3700</td>
<td>3860</td>
<td></td>
</tr>
</tbody>
</table>

2. Municipal wastewater treatment management in Iran

The first modern wastewater treatment plant in Iran was a relatively small WWTP in Tehran in 1962 and after that a large activated sludge WWTP was built in Isfahan in 1967 with design capacity of 145,000 cubic meters per day.

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