Process Water Treatment
Food & Beverage | Reference: Soft Drinks Production, Egypt

Client

Our customer is a subsidiary of one of the largest corporate players in the global soft drink industry. The company is the anchor for the group’s North African operations in one of the most important and promising markets.

Promoting its sales success the customer invests in expanding production facilities in Egypt, complemented by the latest bottling technology.

Benefits

The BERKEFELD PurBev® hygienic standard is based on the expertise of our engineers specializing in beverage water solutions. It takes into account both legal requirements and international standards & directives applicable to beverage water production.

• Optimum product quality & product safety
• Maximum system availability
• Economical operation

Assignment

The customer expands the production facility in Cairo by a new water treatment line for carbonated soft drinks with a capacity of 200 m³/h. The main goal is to implement an efficient and sustainable water treatment solution by using the best available technologies in accordance with the international system design standards of the customer.

Solution

Veolia’s BERKEFELD PurBev® hygienic process design complies with the company’s requirements and supports the targets of multi-barrier membrane systems and sustainability:

• Rejection of contaminants in source water by incorporated reserve osmosis treatment
• Prevention of formation of disinfection by-products
• Posttreatment without chlorine

The new water treatment plant will be installed in 2015 under consideration of the existing facility. By 2016 the new water treatment line will support the expansion of the carbonated soft drink production.
Process Water Treatment

Process Description

<table>
<thead>
<tr>
<th>Treatment Process</th>
<th>Main Component</th>
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<tbody>
<tr>
<td>Removal of dissolved solids and large molecular weight organics</td>
<td>BERKEFELD PurBev® Ultrafiltration</td>
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<tr>
<td>Improvement of taste and odour</td>
<td>BERKEFELD PurBev® Activated Carbon Filter</td>
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<tr>
<td>Removal of oxidation agents and disinfection by-products</td>
<td>Lead Lag</td>
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<td>Disinfection by UV radiation</td>
<td>Ultraviolet Light</td>
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<td>Reduction of NDMA &amp; micro load</td>
<td>Dosing Station Antiscalant</td>
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<td>Avoiding Scaling</td>
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<tr>
<td>Desalination</td>
<td>BERKEFELD PurBev® Reverse Osmosis</td>
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