

Wastewater Treatment And Reuse Constructed wetland Jleep Camp - Kuwait



Start of construction work June 2008

Constructed wetland to purify all wastewater coming up at the Jleep Camp. All the material which was needed to built the plant was available in the country.

The investment of operation and maintenance for the whole system is reduced to a minimum by using this natural kind of wastewater treatment plant. It demonstrates a valuable contribution for an economical and ecological environment protection.



The pre - treatment based on a septic tank (75m³) in three chambers. In case of the scope it was necessary to use a small pump station to deliver the wastewater onto the reedbeds (1800 m²). The ingredients of the filter are special types of local sand and gravel.

After the first vertical flow the whole biological purification system is in function. The effluent is used for irrigation the greens.

The benchmarks for Kuwait to be matched have been
COD 70 mg/l, TOC 10 mg/l, BOD 20 mg/l, NH-4 < 10 mg/l
Achieved results after 4 weeks in operation .
COD < 30 mg/l, TOC < 5 mg/l, BOD 10 mg/l, NH-4 < 1 mg/l.

The first construction period was designed for a daily load of 50-70 m³.
An extension for 150 m³ can be designed.

