

Reed Bed Treatment System

Sewage treatment plant Bechhofen

Owner and operating company:
VGW Zweibrücken-Land
Landauerstr. 18 - 20
D-66482 Zweibrücken, Germany

Strengthening of a trickling filter
for domestic sewage treatment
with artificial wetlands

Person equivalents:
3500 PE (25 l/s maximum flow)

Planning: 1999 – 2002
Construction: 2003 – 2004

Wastewater treatment plant from 1968:
- trickling filter

Structural alteration measures by:
- new grit chamber and screen
- new filter pond system
- new process, measuring and control
technology

Enhancement of the old trickling filter by:
- 2 reed planted artificial wetlands
- 2 reed planted sludge drying basins

Space requirement for artificial wetlands:
5.400 m²

Design parameters:
560 m³/d (summer) – 1900 m³/d (winter)

Efficiency (2007):

	Influent	Effluent	Legal Limits
COD	832 mg/l	26 mg/l	75 mg/l
BOD ₅	270 mg/l	5 mg/l	15 mg/l
NH ₄ -N	50 mg/l	2 mg/l	5 mg/l
N _{tot}	55 mg/l	23 mg/l	40 mg/l
P _{tot}	9 mg/l	1 mg/l	9 mg/l

n = 53

