

# Enlargement of trickling filter plant Bechhofen by constructed wetlands

## 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 with floating  
islands  
- 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 m<sup>2</sup>

Design parameters:  
560 m<sup>3</sup>/d (summer) – 1900 m<sup>3</sup>/d (winter)

Efficiency (2007):

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

n = 53

