

Munich

Gut Marienhof Sewage Treatment Plant Wastewater Disinfection



Regierungsbaumeister
SCHLEGEL



Client

Münchner Stadtentwässerung
[Munich Urban Drainage]

Period

2000 - 2005

Project Cost

9.550.000 €

Abstract

In addition to nitrification, denitrification and sand filtration in Gut Marienhof Sewage Treatment Plant, UV-irradiation was also applied for further treatment and effluent disinfection. UV-irradiation proceeded in six parallel channels by using low pressure mercury discharge lamps, installed in two successive banks. The irradiation intensity was regulated by connection and disconnection of channels or banks as well as adjustment of the relevant flow volume. The quartz radiators were equipped with an automatic cleaning system. The disinfection unit fully met the requirements set by EC Directives for bathing waters' quality. The wastewater disinfection was adjusted to the discharge from sewage treatment plant, in consideration of hydraulic aspects.

Scope of Service

pre-design, design, approval design,
execution design, preparation of tender
documents, construction supervision
planning of structural framework
technical equipment

basic evaluation
safety and health protection
process technology
hydraulic calculation

Technical Data

Q_{\min}	approx. 0.50 m ³ /s
Q_t	3.33 m ³ /s
Q_m	5.00 m ³ /s
Q_{\max}	6.00 m ³ /s
Filterable solids	< 3 mg/l
Transmission	> 70% per cm
Minimum irradiation dose	400 J/m ²