

## REFERENCE 2006-11

MUNICIPALITY NEAR SOEST, GERMANY,  
217 PE



### Edge conditions

Municipal Wastewater of 217 PE  
High nitrogen concentration  
Denitrification und P-Elimination required

### Inflow data

CSB 26 kg/d  
BSB<sub>5</sub> 10,9 kg/d  
P<sub>ges</sub> 0,48 kg/d  
N<sub>ges</sub> 4,3 kg/d

### Effluent requirements

< 90 mg/l  
< 25 mg/l  
< 55 mg/l  
< 5 mg/l

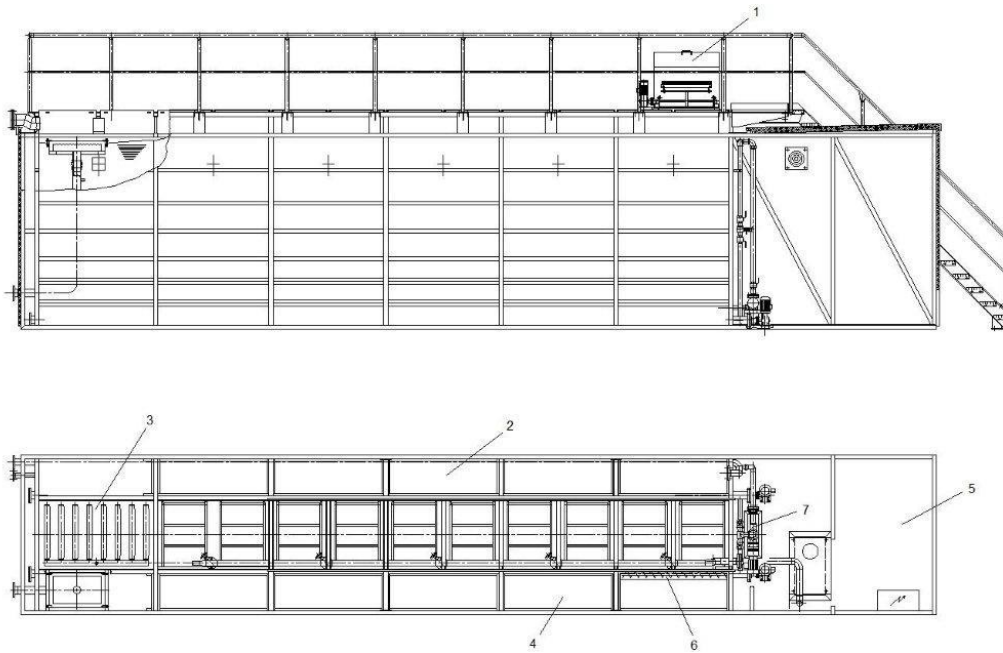
The denitrification is realized by recirculation of treated wastewater into the first chamber of biology. The P-elimination is realized via precipitant .

### Effective treatment with an ENVIMAC SFBBR-System

Fixed bed volume	24 m <sup>3</sup>
Specific surface	200 m <sup>2</sup> /m <sup>3</sup>
Surface area	4800 m <sup>2</sup>
BOD-Surface load B <sub>A, BOD5</sub>	7 g BSB <sub>5</sub> /m <sup>2</sup> *d
Nitrogen surface load B <sub>A, TKN</sub>	1,3 g BSB <sub>5</sub> /m <sup>2</sup> *d
Pre/post sedimentation	14,2 m <sup>3</sup>

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SFBBR Mobile Treatment Unit [1 Screen, 2 Presedimentation, 3 Submerged fixed bed, 4 Postsedimentation, 5 Engineerroom, 6 Covering, 7 Water and sludge pumps]

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