

Checklist

Aeration

Design criteria

Installation

Plant size

Project name: _____

Project country: _____

Energy optimised Invest optimised

New plant Rehabilitation

PE _____ or inflow _____ m³/day

Plant elevation _____ m above sea level (NN)

Diffuser type

9" disc diffuser 12" disc diffuser tube diffuser panel diffuser

Basin data (please enclose a drawing)

Round tank



Annular tank



Rectangular tank



No. of tanks: _____ pcs

Diameter: _____ m

Depth: _____ m

Volume: _____ m³

No. of tanks: _____ pcs

outer ø: _____ m

inner ø: _____ m

Depth: _____ m

Volume: _____ m³

No. of tanks: _____ pcs

Length: _____ m

Width: _____ m

Depth: _____ m

Volume: _____ m³

Circulation channel



No. of tanks: _____ pcs

No. of channels: _____ pcs

Straight Length: _____ m

Channel width: _____ m

Depth: _____ m

Volume: _____ m³

Constant water level?

Yes

No

Min. water depth: _____ m

Max. water depth: _____ m

Process data

- preliminary denitrification intermittent aeration
 SBR-process _____

Submersible mixers:

- yes no

If yes:

- simultaneous operation (mixers + aeration)

Minimum requirements per tank

SOTR min.: _____ kgO₂/h

SOTR average: _____ kgO₂/h

SOTR max.: _____ kgO₂/h

If SOTR not given

alpha-value required: _____

(value between 0,5 – 0,8)

AOR min.: _____ kgO₂/h

AOR average: _____ kgO₂/h

AOR max.: _____ kgO₂/h

Please fill in if AOR or SOTR are not available:

BOD_{in}: _____ mg/l

COD_{in}: _____ mg/l

MLSS: _____ kg/m³

NH_{4,in}: _____ mg/l

NO_{3,out}: _____ mg/l

BOD_{out}: _____ mg/l

CSB_{out}: _____ mg/l

NH_{4,out}: _____ mg/l

TKN_{out}: _____ mg/l

Process definition

Based on which value should the selection be done

- SOTR airflow given Number of diffusers other

Additional comments
