Removal of micropollutants in the **Fridingen wastewater treatment plant**

Specification of the plant:

Treatment capacity	[PE]	5,300
Load	[PE]	2,700
Inflow volumes:		
▪ Dry weather flow	[l/s]	14
▪ Max. wet weather flow	[l/s]	45
▪ Annual wastewater volume	[m³/a]	569,833

Process technology:

Mechanical treatment	Countercurrent screen, sand trap, scum seperator
Biological treatment	Pre-denitrification, nitrification, SC
Chemical treatment	Phosphate precipitation: Post-precipitation in SC
Elimination of micropollutants	Granular activated carbon filter (GAC)
Filter	Continuously backwashed GAC filter

STADT FRIDINGEN
an der Donau

Kläranlage Fridingen
Unterer Damm
78567 Fridingen
an der Donau

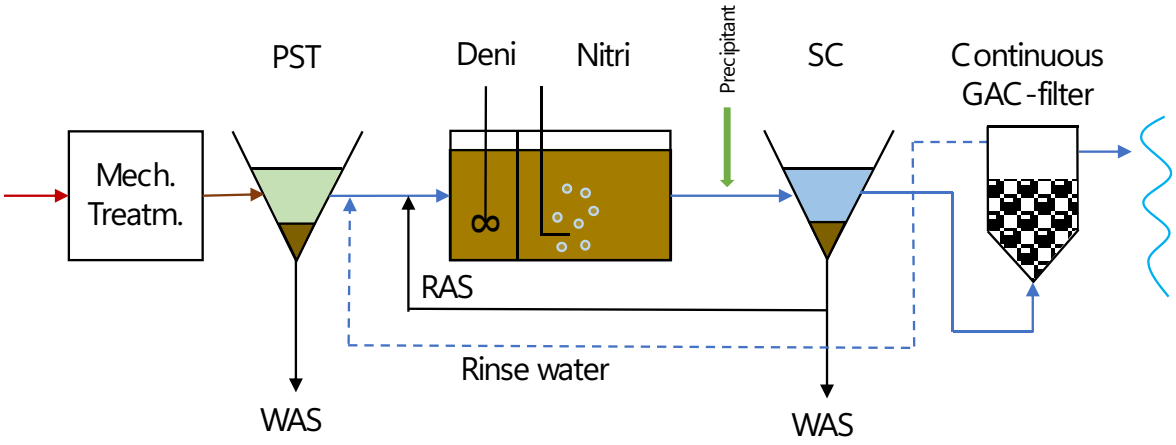

Fig. 1: Process diagram of the Fridingen wastewater treatment plant

Design of micropollutant removal:

Year of commissioning of the advanced treatment stage		2020
Activated carbon filter		
▪ Max. treatable volume	[l/s]	22
▪ Number of filter cells		2
▪ Total surface area of the filter cells	[m²]	14.4
▪ Total volume of the filter cells	[m³]	36
▪ Volume of the activated carbon bed per cell	[m³]	18
▪ Surface area of the activated carbon bed per cell	[m²]	7.2
▪ Max. filter velocity	[m/h]	7
▪ Min. empty bed contact time (EBCT)	[min]	22