Executive summary

The waste water treatment plant of Aarle-Rixtel consists of two identical parallel purification streets AT1 and AT2. Fine screens will be taken into operation on one of these streets, so the performance of the "fine screen street" can be compared with the conventional street.

The purpose of the monitoring plan is to determine:
1. performance of the fine screen installation (efficiency, energy consumption)
2. impact on wastewater treatment process (compare street AT1 and AT2)

The performance of the fine screen installation will be determined by measuring, sampling and analyzing all flows to and from the fine screen installation. Parameters to be analyzed are for instance the concentration of suspended solids, COD, BOD, nitrogen components, phosphorous components… etc. From these results the removal efficiency for the different parameters can be calculated.

The impact on the waste water treatment process is determined by comparing the performances of AT1 and AT2. Attention points are effluent quality, energy consumption and sludge characteristics like dewatering, settlleability, sludge composition and sludge production.

The monitoring plan provides a first indication of how the research will take place, it will be refined prior to the startup of the fine screen installation. It gives an initial list of required flow measurement and sampling points, to be taken into account during the design of the fine screen installation.

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