

WORKSHOP - The way forward for micropollutant removal at WWTPs

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50 participants (About 25 for the discussion in four groups)

Part I: Presentations

- Implementation of regulations for pharmaceuticals in Switzerland by the government
- Implementation of treatment for micropollutants at Swedish WWTP with following actions by government

Part II: Discussion on “How to implement sustainable and effective micropollutant removal at WWTPs?” including sub-questions

- Which approach is better for WWTPs?
- Which approach is better for a resource-efficient removal?
- Which approach is better for a continuous development/progress?
- Which approach founds better public acceptance?
- Which approach is more cost-efficient for society/WWTPs?
- Which approach provides a better knowledge transfer and further R&D?

Overall discussion outcome:

- It was stressed several times that WWTPs are just on part of the solution. Measures to reduce emissions have also to be implemented in other sectors and to avoid emissions by phasing out, reducing the use or replacing harmful substances. It was however clear that WWTPs are key location to remove harmful substances from environmental cycles as conflicting interests in society would prevent a complete stop of harmful substances in sewage water.
- Load of micropollutants to WWTPs look different based on e.g. varying restrictions, cultural differences, connected industries, consumption pattern, awareness etc.
- A wider approach to include current but also future emerging substances should be applied. This implies that implementation of extra treatment at WWTPs should consider this and not just focus on few indicator substances if these are limited to a certain focus group. “One fits all” is not the solution.
- Local conditions and requirements such as status of the recipient and actual relevant emerging substances in the effluent and their risk potential to harm the recipient should be included in the evaluation of treatment implementation.
- Before focusing on micropollutants, WWTPs should target a good removal efficiency of more traditional pollutants first!
- More efforts should be put on collecting and making available data from different recipients status, screenings, WWTPs, project etc. The role of databases as knowledge transfer tool is not discussed enough when talking about micropollutants and their removal.
- Water reuse to drinking water quality as the ultimate target could solve some of the issues defined treatment goals, effects and priorities. Well-defined requirements exist and technologies for this has been available and is becoming affordable due to technology improvements and significant cost reductions.
- Knowledge transfer is crucial! WWTPs-Authorities-Consultancies-R&D-organisations-Academia-other related organisations.