Micropollutants in water: the source control approach

Bruno Tisserand – EurEau President
European Parliament, Strasbourg, 28 October 2015
About EurEau

EurEau
the voice of Europe’s water sector since 1975.

Our members are the national water services associations from 28 European countries.

We represent public and private drinking and waste water services providers.

Employing 500,000 people, the sector makes a significant contribution to the European economy.
9 Challenges for EurEau

1. Protecting a vulnerable resource
2. Fostering sustainable economic growth and creating jobs
3. Promoting the value of water in the circular economy
4. **Source-control approach** for **micropollutants**
5. Setting the right price for water services
6. Growing impact of climate change on water
7. Resource efficiency in the water sector
8. Managing long-term assets in a fast changing environment
9. Increasing the public understanding of the water sector
Micropollutants

Households products: detergents, paints

Pharmaceutical products

Dyes and microplastics from textiles

Cosmetics

Pesticides

Veterinary pharmaceuticals
WW and DW

Micropollutants enter the water cycle through different pathways: air, soil (urban and rural), with run-off going directly into water or wastewater. Micropollutants are a challenge not only for:

~ waste water operators (protection of the environment and ecosystems) and
~ drinking water operators (protection of public health)

but also for all industries, farmers and urban activities using those micropollutants.
Waste water

Micropollutants from households in urban wastewater
Waste water

~ WW services are essential to the development of water-related economic and recreational activities such as bathing, water sports, aquaculture.

~ WW represents an important contribution to the circular economy through water reuse and nutrients recovery.

~ WW services are confronted with the consequences of extreme weather events and climate change: the volumes of waste water to be treated can be huge and public health, civil protection and the local economy are the priority.
Drinking water treatments can remove micropollutants today, but what about the future with a growing number of substances at higher concentrations?
The problem

~ Ageing society → population will increase

~ More products → will be used by more users

How can we ensure that also in the future the environment is protected and water resources used for the abstraction of drinking water do not deteriorate so that future generations can enjoy the right to safe and affordable drinking water and sanitation services?
Solutions: treatment

There are innovative technologies that might be applied at the level of WWTP in order to reduce the substances in the treated water effluents but:

1. They are **not economically sustainable** (increased costs for WW treatment could range between 20-80€ pp/y)
2. They are **not environmentally sustainable** (increased energy consumption, increased use of chemicals and sludge handling)
3. The removal rate is **never 100%**
4. End-of-pipe treatements could be seen as the only solution and efforts on source control could be reduced
5. There is **no «one-catch-all» treatment**: treatments are substance-specific.
Solutions: source control

Art. 191(2) of the Treaty on the Functioning of the European Union, stating that “the Union policy on the environment [....] It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay”. 
Call for action

EurEau calls on the EU institutions to:

~ Legislate considering *life-cycle approach* to substances
~ Come up with a *strategic approach* to *micropollutants* based on the *source control principle*
~ Contribute to raise awareness with *citizens*.
Thank you

Bruno Tisserand
EurEau President