

NEREUS Start Conference

Thursday the 31th of May 2018
 CAPSO St. Omer (France)

Minutes of the Water Reuse session

Participants:

Berlamont	Jean	VLARIO	BE
Cauwenberg	Peter	VITO	BE
Cools	Ben	De Watergroep	BE
DAUTHUILLE	Pascal	SUEZ	FR
de Ron	Jaap	Schieland en de Krimpenerwaard	NL
De Schrijver	Steven	water-link	BE
Decostere	Bjorge	University College Ghent	BE
Derboven	Pieter	BOSAQ	BE
Le Cornu	Dorothee	SCAM FILTRES	FR
Lorain	Marc	SUEZ EAU FRANCE	FR
Manceau	Olivier	SUEZ EAU FRANCE	FR
Martinson	Brett	University of Portsmouth	UK
MAUBERT	Germain	VEOLIA Eau	FR
MILL	Anne-Laure	Agence de l'Eau Artois Picardie	FR
Monsterleet	Christophe	CAPSO	FR
Noblot	Charlotte	PMCO	FR
Poelstra	Anke	Hoogheemraadschap van Schieland en de Krimpenerwaard (regional water authority the Netherlands)	NL
Steenbakker	Tessa	Evides Industriewater	NL
Thibault	Guillaume	SUEZ EAU FRANCE	FR
Thiret	Jean-Pierre	SOFIE	FR
Van Genabet-Harteel	Mieke	Harsonic Biofilm removal without chemicals	BE
Van Houtte	Emmanuel	IWVA	BE
van Schaik	Maria Orhideea	HZ University of Applied Sciences	NL
Vanhille	Adelheid	VMM	BE
Weemaes	Marjolein	Aquafin NV	BE

Notes taken by:

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Moderator of the session:			
Seuntjens	Dries	DuCoop	BE

Discussion

- **When reuse water?**
 - Not only when is important, but also where will the water be used the water and the quality.
 - Look also to the economical aspect is important
 - Consideration of barriers when water reuse - Multiple barriers
 - Energy cost is a killer
 - Cost of technology
 - Multiple technology is necessary

- **Cost sharing? Distinction between local people versus other drinking water customers**
 - Solidarity is important. Some people/organisations around the table found an uniform tarif structure important. The opinions about this question were a bit divided.

- **Is it necessary that all the water has the same quality? Drinking water quality? What about the technology? Is the technology mature for succesful water reuse, upgrade till drinking water quality?**
 - When you do it more locally you may be can offer different water qualities
 - In Flanders rain water is already often used for low-quality uses (e.g. toilet flush/ irrigation garden,...) this in contrast to other EU member states.
 - Legislative framework is necessary to make reuse possible
 - On today there are already technology providers in Belgium who have installations (e.g. based on ozontechnology) for households to make their own drinking water/upgrade of rainwater till drinking water quality
 - Remark: it's out of the legislation/drinking water directive (http://ec.europa.eu/environment/water/water-drink/legislation_en.html)
 - In Flanders/Belgium only allowed to have two different water circuits: tap water and lower quality water as rain- and groundwater
 !!!! No connection between the two water circuits
 - One technology as ozon is not enough to remove all particles/ parameters. !!!
 Combination of technology is necessary
 - If you can prove (via analyses) that the water quality is the same as tap water, then you can use it as shower water. When over 3 years has proved that the quality is ok, then less analyses are necessary.
 - !!! Cost of analyses
 - In the UK is it allowed, you must mark the pipes
 - Now standards per stream -> why not in function of use!? For example: standards for toilet use, for bath/shower, for cooking, etc.
 - complex, because necessity different water circuits + expensive (because of the monitoring) versus cost price tap water
 - Water reuse will become more and more important, otherwise there will not for every application and everyone drinking water. Waterscarcity!!!!
 - Drinking water for households is very important
 - Some industry needs higher quality water, but some industry needs water with lower quality.
 - Most of the technology is available -> push to legislation
 - Huge gap between legislation and technologies e.g. chlorination

- Government and technology providers should work more together/ looking together for solutions
 - Necessity of organisation that forms the bridge between legislation and technology
 - There are already associations who realize the connection as Water Reuse Europe (WRE), WssTP, etc.
 - If there's water scarcity in a region, you have an other situation -> automatically legislation/technology push (e.g. California, Water scarcity in West Flanders 2017)
 - May be also take more into consideration why living/producing on a location/ in a region where water scarcity, why not somewhere else?
- **In the NEREUS project a decision support tool (DST) will be developed. Which criteria should be integrated in the tool? What do you expect as potential user from the tool?**
- Already a lot of tools available -> what will be the difference, why this tool will be used, difference with other available tools? A lot of tools only will be used by the project partners
 - Aspects in the DST – Technology/Legislation/ Social acceptance/Environmental aspects
 - LCA and LCC -analysis is very important
 - Sometimes a technology is not economical interesting, but is interesting because of the C-footprinting
 - C-footprinting as first step, then LCA. You need to start somewhere to made a selection. Some organisations already work like that e.g. SOLVAY (have their own program)
 - Social acceptance – opinions of the participants on this topic are divided.
 - Interesting to use, but some companies/end users don't want their customers to know it...
 - Common practise – already a lot of studies – people accept it (e.g. IWVA Torreele)
 - Communication, responsibility and education is important
 - > Communication: explain it honestly and technically on an comprehensible way. People must feel trus!
 - > Responsibility: In the DuCoop case/Ghent everyone is involved, make them more responsible
 - > Education: coming/ younger generations will automatically be adapted/ will have an other view

SHORT BRAINSTORM in two groups about the Decision Support Tool - What does a interesting DST tool comprise?

Group 1:

- Integration of Risk assessment - risk analysis -> quality!
- Global remarks:
 - DST tools are often not accepted outside the consortium
 - A lot of situations are so different, customized -> complex
 - ➔ University of Portsmouth that's responsible for the tool, doesn't find it impossible to build an interesting, valuable tool

Group 2:

- Input -> divide into categories with attention on quality of water!
Possible search on:
Productdata (LCA, LCC, etc.)
Costs
Legislation
...