

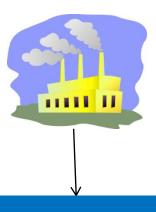


# Indirect discharges

Roel Kwanten 12 September 2023



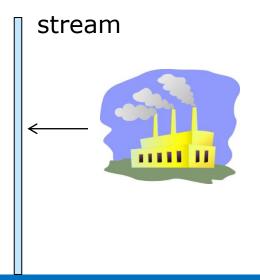
## Discharge in main surface water



Meuse

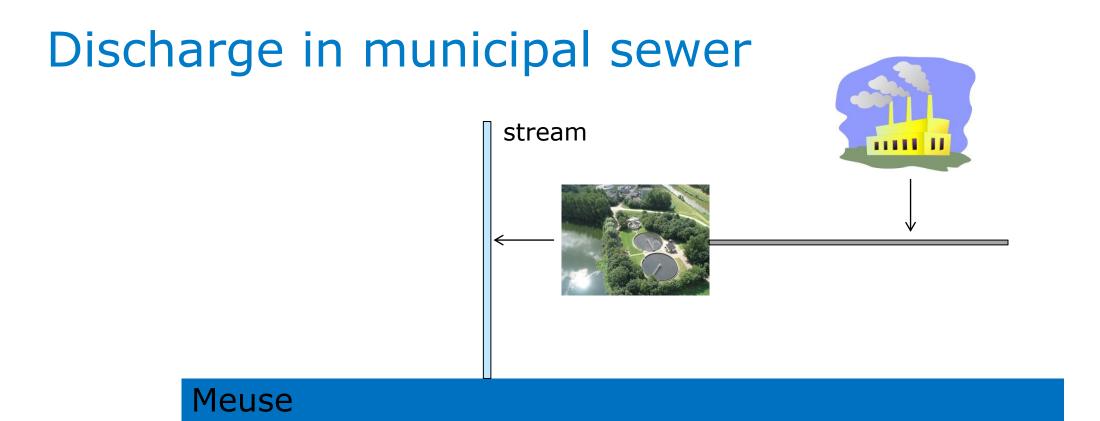


### Discharge on regional surface water



Meuse









- Authority for permit: municipality or province
- Advice from waterboard (waterschap) for water issues





### Situation in Flanders

- Authority for permit: municipality or province
- Advice from Vlaamse Milieumaatschappij for water issues





### Situation in Wallonia

- Authority for permit: département des Permis et Autorisations (DPA)
- Administration for permit: municipality
- Advice from Direction des Eaux de surface for water issues



# Situation in Germany





### Situation in France





# Situation in Luxembourg





### Two examples of indirect discharges

 Indirect discharge at a waste processing plant via municipal wastewater treatment plant (WWTP) on surface water

Hotspot analysis WWTP



# Indirect discharge at a waste processing plant via wastewater treatment plant WWTP on surface water

Meuse

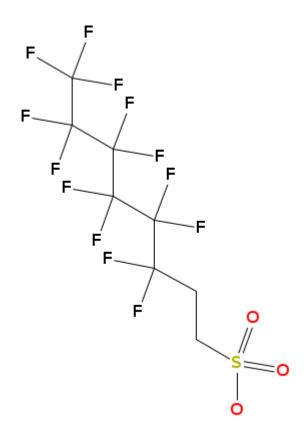




### **PFAS**

6:2 FTS

Fire extinguishing foam





### Waste processing plant takes measures

granular activated carbon





### Hotspot analysis WWTP

Search for specific groups of substances discharged by WWTPs

three main questions:

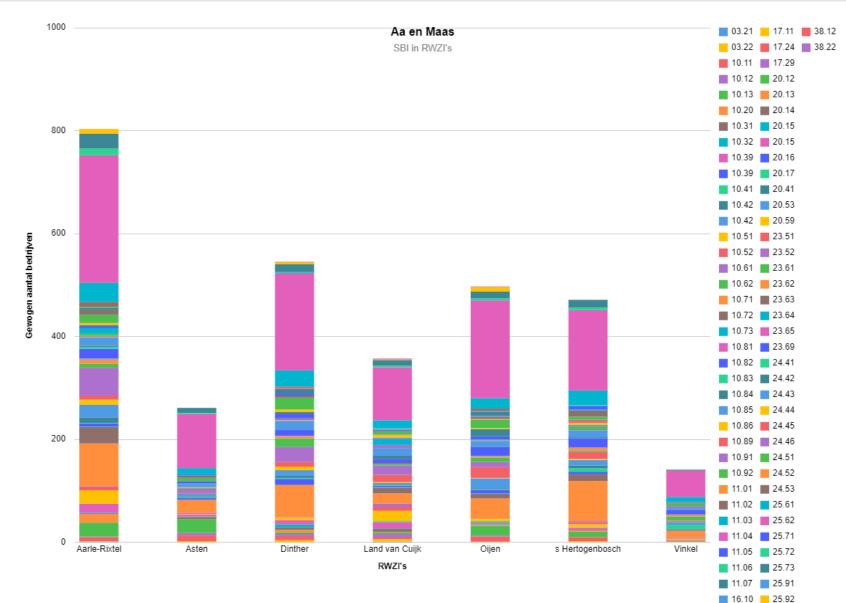
- which substance groups can be expected per business category?
- within which industrial categories and at which WWTP is it expected that the substance groups will be discharged?
- which business categories can be identified?



### SBI code

• SBI = standaard bedrijfsindeling (standard business category)





Most frequently found business categories:

- Metal processing industry 34%
- Bakery and bakery goods 10%
- Surface treatment metal 5%



### Metalworking

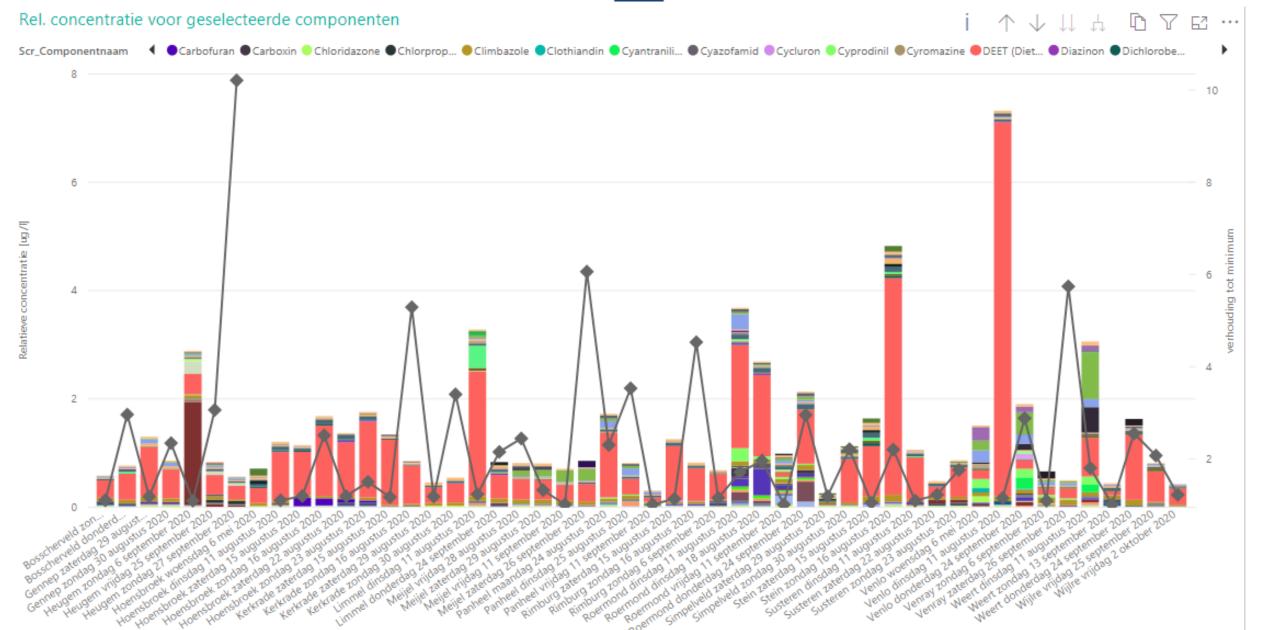
### Discharges of this category:

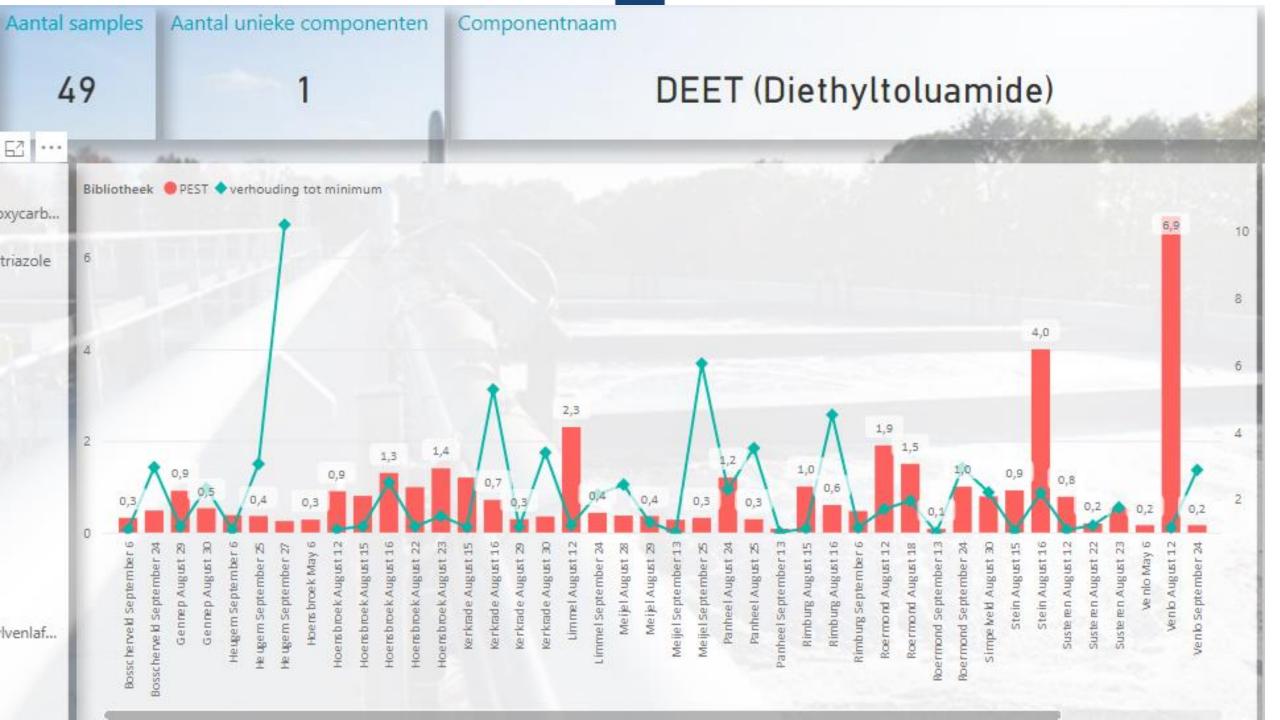
- Chrome (VI)
- Phenol
- Dyes
- Mercury
- Fibres
- Polycyclic aromatic hydrocarbons



### pesticides







#### Rel. concentratie voor geselecteerde componenten

