



**EEB**

European  
Environmental  
Bureau

European Sustainable Phosphorus Platform  
workshop 4th December 2018, Brussels

## **The use on farmland of sewage biosolids**

**Some thoughts from an NGO perspective**

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# European Environment Bureau

- A federation of citizens' nature protection NGOs all through Europe
- A federation of federations
- Many thousands of grassroots members
  - (in France maybe 800 000 members)
- Such a variety means we can't have a fixed, clear position; but we can have some general thoughts and indications.

# Benefits of using urban sludges on land:

- they contain useful nutrients (notably P)
  - can replace mineral fertilisers (extracted, unsustainable, sometimes contaminated)
- They contain organic matter
- they need to go somewhere, and incineration is not a good solution (energy neutral, pricey)
- it is part of a circular economy

# Problems with urban sludges

- they contain contaminants (anything going down the drain)
  - trace metals – this parameter is improving
  - pharmaceuticals (painkillers, cancer drugs, antibiotics, hormones...)
  - other POPs (flame retardants, PAH...), nanos,...
  - micro-plastics
- they contain pathogens
- they may smell nasty

# How to deal with the problems? - 1

- By treatments
  - biological treatments (composting and/or anaerobic digestion)
  - liming
  - ? acidification
  - extracting struvite etc. (but what do you do with the remaining fraction?)

# How to deal with the problems? – 2

- by reducing pollution at source
  - Some ideas:
    - raising awareness among the public and professionals, and providing alternatives
      - regular inspections for any industry effluents → urban WWTP
    - tracking metals
      - (eg mercury was reduced – dentists, thermometers...)
    - tracking organic contaminants
    - reducing microplastics
      - ecodesign for textiles? Tyres? Cosmetics?
    - collecting cancer patients' excreta?
    - REDUCING TOXICS IN PRODUCTS AND OUR ENVIRONMENT

# How to deal with the problems? - 3

- Better sludge regulation
- Phased targets which become progressively lower
  - See Favoino & Amlinger 2004 for methods to define limit values
- Include more substances
- Transparency and traceability



# Keep a wide vision

- There are many sources of pollution to agricultural soils
- If it is found in sludge it was in our environment or our food
  - So the reduction of substances of concern has to be done over all human activity
- **Part of a wider soil strategy**

# Is human sludge any worse than animal slurry?

- Antibiotics: RISE says 2X more antibiotics per kg of farm animal than per kg human
- Painkillers and cancer drugs: mostly humans
- Visual contaminants: humans
- Road run-off and textile washing: humans

If sludge cannot be recycled to land, this is a failure to achieve a circular economy.

It is essential to tackle pollutions at source

Many knowledge gaps still need tackling

Are dry/composting toilets part of the  
solution?

Thank you