



EEB

European
Environmental
Bureau

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The use on farmland of sewage biosolids

Some thoughts from an NGO perspective

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- 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