Workshop on Sludge management in the Danube Region for a greener EU 10 June 2021

# Challenges of the sludge management in Romania

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**EU GREEN WEEK 2021 PARTNER EVENT** 











## Sludge – waste, pollutant or product ?

Not clear responsibilities at the central authorities level who is in charge for this issue

Low level of acceptability to be used

Excessive responsibilities for the water operator

Increase costs for waste water services

#### **Existing legislation related to sludge management**

- Governmental Decision no.188/2002 for the approval of norms regarding the conditions for discharging wastewater into the aquatic environment (transposing Directive 91/271/CEE)
- Government Decision 349/2005 on waste storage
- GD no. 128/2002, modified and completed by GD no. 268/2005 regarding the incineration of waste
- Joint Order no. 344/708/2004 of the Ministry of Environment and Ministry of Agriculture for the approval of the Technical Rules for the protection of the environment and in particular of the soil, when sewage sludge is used in agriculture (transposing Directive no 86/278/CEE)

### **Governmental Decision 188/2002**

Provides that:

- Sewage sludge shall be stored properly or used whenever possible. Their storage or use must minimize the negative effects on the environment and be specified in the water management permits.
- The use of sludge may be carried out only with the approval of the competent authorities, depending on its origin and field of use.

### Government Decision 349/2005 on waste storage

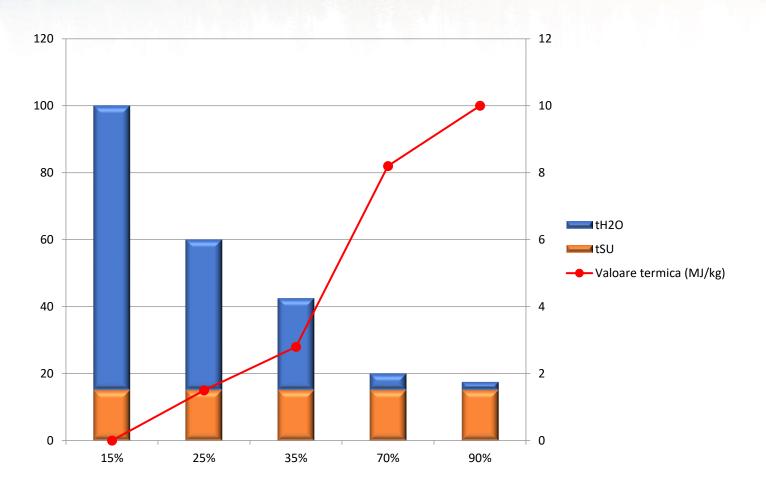
Provides that:

The sewage sludge can be stored, if it is dehydrated (humidity <65%) and if it complies with the provisions of MO 95/2005 regarding the acceptance criteria for the storage of a waste (it took over the provisions of Council Decision 2003/33 / EC). Where the characteristics of the sludge meet the conditions for acceptance for storage as non-hazardous, it can be used to close landfills for household or industrial waste or to rehabilitate historically polluted sites (as fertile soil).

# GD no. 128/2002, modified and completed by GD no. 268/2005 regarding the incineration of waste

The object of the decision is the regulation of incineration and co-incineration activities and of the control and monitoring measures of incineration and co-incineration installations. The regulation of incineration and coincineration activity aims to prevent or reduce negative effects on the environment, in particular pollution of air, soil, surface and groundwater, and any risks to public health by establishing working conditions for air emission limit values, water, residues, their control and monitoring

### Incineration of sludge



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## Joint Order no. 344/708/2004

- Concentrations of heavy metals in soils used for spreading sludge, concentrations of heavy metals in sludge and maximum annual quantities of these heavy metals that can be introduced into agricultural soils
- Sludge characterization indicators and number of analyzes depending on the amount of sludge from the treatment plant used in agriculture
- Methods of sampling and soil analysis
- Conditions to be met when spreading sludge from sewage treatment plants
- Obligations of producers and users of sewage sludge
- Duties and responsibilities of the competent authority

Draft Law on the protection of the environment, and in particular of soils, when sewage sludge is used in agriculture

This law establishes:

- Fields and conditions of application of sewage sludge in agriculture
- Obligations of sludge producer
- Obligations of the sludge beneficiaries
- Tasks of the competent authorities
- Sanctions regarding the non-compliant use of sewage sludge

#### Main objectives of the Draft Law

- Sewage sludge for use in agriculture must meet restrictive conditions regarding the presence and concentrations of chemical and biological pollutants (pathogens)
- The sludge must not contain non-degradable materials
- The transport of sludge from the wastewater treatment plant to agricultural land must be carried out in closed tanks, with suitable vehicles, on routes chosen so as to minimize inconvenience to the public (eg high noise level, unpleasant odors, etc.)
- Sludge must be stored safely and sludge must be prevented from leaking onto roads or adjacent land.
- Agricultural land must be closely monitored

# National Strategy for Sludge Management

- Finalized in 2013 but not yet approved
- Financed the by the Ministry of European Funds
- Not clear which is the authority in charge for this Strategy
- Need to be updated based on the last developments related to climate change adaptation
- In important condition for financing water infrastructure

# The specific recommendations of the national strategy

- Improving the national legal and institutional system and the reporting system
- Minimizing the production of sewage sludge by preventing excessive discharges of waste and prohibited substances into the sewerage network e.g. by improving control over industrial sewers
- Improving the treatment of wastewater and sludge to improve the quality of sludge so that it becomes suitable for beneficial use or storage
- Providing guidance for sludge producers (water and wastewater operators) in the development of ways of beneficial use or storage of sludge
- Providing guidance on improving the capacity to analyze and monitor the quality of sludge produced
- Improving public and institutional information on acceptable uses of sewage sludge
- Providing guidance on monitoring sludge-receiving agricultural lands and potential constraints on beneficial sludge use.

## Main challenges related to sludge in Romania

- Incresed quantity of sludge produced by the Urban Waste Water Treatment Plants
- Reduced possibilities to dispose sludge on the municipal landfill
- Reduced possibilities for co-incineration (closed thermo power plant fueld on coal)
- Resistance on the use of sludge on agricultural land or for forests
- Not clear legislation at the European and national level

