

Contribution of EFAR European Federation for Agricultural Recycling to the public consultation on the proposed amendment to Legislative Decree no. 99 of 27 January 1992, "Implementation of Directive no. 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture".

Introduction of specific quantitative indicators to verify the fermentability of the sludge subjected to treatment.

**EFAR** European Federation for Agricultural Recycling, established in 2006, which brings together and represents the major European companies active in the agricultural recovery of organic biomass, **presents its contribution** to the proposed amendment to Legislative Decree no. 99/1992, notified by the Italian Government to the European Commission under the TRIS procedure.

#### Technical remarks

The amendment to Legislative Decree n. 99/1992 proposed by MASE and sent to the European Commission by MIMIT, regarding the introduction of new parameters aimed at evaluating the stabilization of biological sludge, starts from a completely shared assumption, namely the need to evaluate the stability of biological sewage sludge intended for agronomic recovery in order to minimize the odorous impact that can be generated during distribution activities on the soil.

In compliance with art. 2, paragraph 1, letter b), of the aforementioned decree, the sludge is subjected to treatment with different methods in order to reduce



said fermentability and consequently minimize the health problems deriving from its use.

In this regard, MASE has notified the EU Commission with the TRIS procedure of a modification that introduces the verification of two stabilization measurement parameters based on the oxygen absorption rate (OUR) and the determination of the methanogenic potential (BMP).

In the Regulatory Impact Analysis (AIR), MASE itself highlights that the parameters have been identified "in coherence with those identified for compost and digestate pursuant to Regulation 2019/1009/EU on fertilising products".

While there is no doubt that biological treatments such as biodigestion and composting can be subjected to such determinations and limit values, the same cannot be said for other treatments that the same art. 2 lists, however, not exhaustively and it is certainly not possible, due to their very nature, that such parameters are applicable to untreated sludge recovered directly in agriculture according to the regulations applicable to waste (activity R10).

The application of certain methods on matrices different from those contemplated by Regulation 2019/1009/EU deriving from thermal or chemical treatments (or from treatments different from those referred to in the aforementioned Regulation) may provide strongly dissonant data, even in the presence of adequately stabilized material.

In relation to this, precisely because of the importance of the topic and the need to have a real statistical sample of data on which to base a regulatory update, the Lombardy Region has started a **monitoring campaign, currently underway**, which in an experimental and pragmatic way aims to quantify the values of these and other methods of stabilization evaluation with respect to different treatments of sludge intended for agriculture.



The experiment also includes the application of this type of analysis to other similar matrices in order to deepen and broaden the terms of comparison of the results obtained.

Other regions such as Emilia-Romagna, taking up the provisions of Legislative Decree n. 99/1992, have introduced qualitative and management conditions to limit the fermentable power of the sludge.

The automatic attribution of specific values and methods of determining stability to the entire variety of treatments that can be implemented <u>without prior adequate and in-depth scientific investigation</u> therefore appears limited and potentially misleading.

# Impact on competition, the market and operational sustainability

The impact that the introduction of these parameters and limits would have in the absence of an adequate investigation, in the management of millions of tons of sludge intended for agriculture, can potentially create a probable emergency in the sector, hindering the continuation of the activities currently underway for the recovery of sludge, especially urban sludge.

Furthermore, one cannot agree with what is stated in point 3.2 of the AIR analysis regarding the impact on PMI, since several companies in the sector of this size operate with techniques other than biological ones and therefore the introduction of these parameters ipso facto entails strong elements of uncertainty in business continuity. Added to this is the not secondary impact of the amendment on the Integrated Water Service, an essential public service that would suddenly see numerous recovery activities of the sludge produced by the purification of urban waste water precluded with the risk of repercussions on the efficiency of the service and on the costs that then affect the tariffs to citizens.



The above could have an immediate **effect of strongly distorting competition** as companies, simply for having used completely legal and effective treatments up to now, could find themselves immediately **excluded from the market**.

### Scientific evidence: studies promoted by EFAR

In support of the need for an evidence-based approach, EFAR refers to studies and experiments carried out and underway such as:

## 1) Study on the quality of Italian sludge

In 2023, in light of the 2022 JRC study, EFAR member companies, in collaboration with other companies, promoted research conducted by the University of Turin and the University of Milan – Gruppo Ricicla, which reconsiders all the pollutants assessed by JRC, adding further insights into other important molecules: PAHs, PCBs, Dioxins, Dioxin -Like, Phthalates ( DEHP, DINP ), Nonylphenols, Pfas, pharmaceutical residues, Triclosan, Bisphenol A.

The results of the research were presented on 9 May 2025 at an EFAR conference at the headquarters of the Lombardy Region , and confirm and strengthen the evidence of the quality of the sludge distributed in agriculture in relation to the current legislation .

## 2) Sludge stabilization

During 2024, in implementation of the current Regional Waste Management Plan, the Lombardy Region proposed to all the subjects included in the agricultural biosolids recovery chain, an 'Operational protocol for voluntary



adhesion for the evaluation of the biological stability of sludge for agricultural use as a measure of odorous potential'.

The Protocol to which all EFAR members have adhered was prepared by a group of university professors Prof. F. Adani, of the University of Milan, Prof. Canziani and Prof. S. Sironi of the Polytechnic of Milan, Prof. Bertanza of the University of Brescia, in collaboration with the regional offices, Arpa, Provinces, operators and stakeholders in the recovery chain, in order to evaluate whether the SSV/SST parameter could be replaced or integrated with other measurements, with the aim of ensuring a progressively better guarantee of the absence of olfactory nuisances.

The trial will last throughout 2025 and the results will be disclosed in early 2026.

#### Conclusions and recommendations

Agreeing on the need to introduce appropriate parameters and limits for sludge stability, **EFAR** proposes that:

- complete review of the national regulatory framework is adopted, supported by the most recent and up-to-date research and experiments carried out or underway, and above all by the validation of new analytical methodologies;
- 2) a <u>differentiated analytical approach</u> should be adopted based on the different matrices applied to the soil;
- 3) <u>adaptation periods</u> (transitional phases) of existing plants should be foreseen, in order to avoid unjustified damage to companies operating in the sector and seriously distorting effects on competition;



4) <u>permanent table</u> be established at the Ministry of the Environment and Energy Security involving all the subjects involved in the entire chain of agronomic recovery of sewage sludge - institutions, control bodies, research bodies, water managers, companies operating in the treatment, recovery and distribution of sewage sludge - aimed both at sharing knowledge and the most recent technological innovations, and to ensure a useful comparison within the entire process of reviewing the sector legislation.

Wien, 29 May 2025

President

Horst Mueller

Milan, 29 May 2025

Italian delegate

Pierfrancesco Visconti