

Evaluation of the Sewage Sludge Directive

CONSULTATION STRATEGY

Background/context

The [Sewage Sludge Directive 86/278/EEC](#) (henceforth the SSD) was created to encourage the correct use of sewage sludge in agriculture and to regulate its use in order to prevent harmful effects on soil, vegetation, animals and humans. The principal objective of the Sewage Sludge Directive is its role in the protection of human health and the environment against the harmful effects of contaminated sludge in agriculture. To this end, it prohibits the use of untreated sludge on agricultural land unless it is injected or incorporated into the soil. The SSD also requires that sludge be used in such a way that the nutrient requirements of plants and that the quality of the soil and of surface and groundwater is not impaired.

The SSD also complements EU waste legislation by encouraging the safe use of sludge (moving it up the waste hierarchy), by promoting health and environmental protection (by placing limits on heavy metals), and by contributing to resource efficiency (through the recycling of useful nutrients such as phosphorus).

The use of sludge in agriculture is an effective alternative to chemical fertilisers, especially phosphorus. The importance of recycling of nutrients is highlighted as a priority area under the [European Green Deal](#) and [new Circular Economy Action Plan \(CEAP\)](#). Transformation of the EU production sector and all the related value chains is required for Europe to reduce the extraction of raw materials and thus the corresponding pollution and resource. Therefore, further evaluation is required to assess how coherent the SSD is with other parts of the environmental acquis, in particular on the circular economy, and which on circular economy objectives are (most) relevant for the SSD.

A 2014 study carried out on behalf of the Commission, "[Ex-post evaluation of certain waste stream directives](#)", also covered the SSD. The evaluation pointed out a number of shortcomings, such as its further contribution to circular economy principles, the concern on pollutants in sludge including contaminants of emerging concern (e.g. pharmaceuticals and microplastics), the potential need to regulate other uses of (treated) sewage sludge, and the potential impact of the [Urban Waste Water Treatment Directive 91/271/EEC](#) (UWWTD).

Since then, there have been scientific progress and technological developments as well as changes in the policy landscape resulting from the [first](#) and [second CEAP](#), the [Bioeconomy Strategy](#), the [Fertilising Products Regulation](#), the [Farm to Fork Strategy](#), the [EU Biodiversity Strategy for 2030](#) and the recently [evaluated UWWTD](#). Therefore, the results of 2014 evaluation need to be validated and complemented, so as to support the Commission in its decision regarding the need to revise the SSD, as outlined in the [New Circular Economy Action Plan](#) adopted on 11 March 2020. An evaluation of the SSD as a stand-alone instrument, not as a part of the whole waste stream framework, will also allow for a deeper assessment of issues specific to the SSD.

In view of the above, a study is being launched to support an evaluation of the Sewage Sludge Directive by the Commission, which will inform the Commission's decision on the need to progress with an impact assessment for a proposal to review the SSD, as outlined in the [New Circular Economy Action Plan](#) adopted on 11 March 2020.

In line with the Better Regulation guidelines, a Consultation Strategy has been put forward for this evaluation (with support of an external consultant) to ensure that all relevant stakeholders are consulted via the right means.

2. Objectives and scope

The objective of the consultation activities is to complement already known data and literature review on the implementation of SSD, among other things, and to understand to what extent the SSD has been successfully implemented, to what extent its objectives have been met, what the challenges were and whether there have been trade-offs in the implementation.

The scope of the consultation is to gather further evidence to substantiate the analysis of relevance, effectiveness, efficiency, coherence and EU added-value as required by the Better Regulation Guidelines¹. In particular, the coherence and links with other European legislation and policy such as the Urban Waste Water Treatment Directive, the new Circular Economy Action Plan, the Fertilising Products Regulation, Waste Framework Directive, Nitrates Directive, will be further analysed.

For the present Evaluation a substantial amount of information is already available through the reporting processes under the Sewage Sludge Directive, and the Urban Waste Water Treatment Directive. A lot of information on these directives also comes from numerous recent and ongoing studies and reports in relation to them (see section 7).

It is expected that the different consultation activities will result in a comprehensive set of information on the management of sewage sludge which go beyond pure implementation of SSD and will help to assess the functioning of the SSD, and the benefits and costs that different stakeholders attach to it. All this will allow the Commission to ensure that the different Evaluation criteria are covered from different angles.

3. Identification of stakeholders

Below is a list of stakeholder categories that will be targeted by the consultation activities. These stakeholder groups are considered as key as they are either affected by the SSD, have to implement them or are interested in it for a variety of other reasons.

- **EU Member States and their public authorities** responsible for the environment, waste management, sewage sludge, wastewater management, health, and economic uses of sewage sludge. It is crucial to reach the regional and local competent authorities as well as cities and municipalities, as they have a key role in the implementation of the SSD. Therefore, the national authorities might also be asked to function as intermediaries in identifying and contacting their regional counterparts.
- National experts from the **Expert Groups** on Waste and on the Urban Waste Water Treatment, with expertise on specific implementation aspects.
- **Industrial/economic actors**, such as associations and companies (including small and medium sized enterprises) with an impact on sludge or impacted by the SSD and technologies and technological development in the given context. This includes water

¹ Better Regulation Guidelines

and wastewater plants and sewage sludge processing, associations of producers/managers of sewage sludge, compost and digestate industry, fertiliser and fertilising products industry, food industry, European waste management industry, biogas industry and associations representing the users of sewage sludge or its derived products and trade unions. Those not directly contacted by the Commission will be encouraged to provide feedback via the open public consultations.

- **Non-Governmental Organisations, consumer organizations, farmers/agricultural associations at European, national and regional level and citizens' initiatives.**
- **International organisations** relevant to the SSD, e.g. through providing funding, advice on health, technical or governance issues, local implementation aid.
- **Academia, research and innovation organisations and institutes:** Representatives from the academic sphere, including umbrella organisations for national institutions carrying out research within sludge-related fields, and health and environmental experts.
- **Citizens.**

The following table is giving an overview of the involvement of the different stakeholders:

	Implementing the SSD	Affected by the SSD	Interested in the SSD
EU Member States and their public authorities	✓	✓	✓
Waste EG and UWWTD EG	✓	✓	✓
Industrial/economic actors		✓	✓
Non-Governmental Organisations			✓
International organisations			✓
Academia			✓
Citizens		✓	✓

Table 1 - Overview of the stakeholder Identification²

² Better Regulation Guidelines (Chapter VII)

4. Consultation methods

The Commission will provide a number of opportunities to the above-identified stakeholders to provide input to the Evaluation through various means, including an open public consultation and several approaches for a targeted stakeholder consultation.

The different methods to be employed for each type of stakeholder are specified here below:

4.1. Open Public Consultation

Through the launch of an open public consultation for the Evaluation of the Sewage Sludge Directive, all interested parties will be given an opportunity to provide information and opinions. This includes citizens, non-governmental organisations, regional and local authorities, small and medium sized enterprises, academia, practitioners, and stakeholder group representatives.

The open public consultation is planned to be held in Q4 2020 on the Commission website "Have your say" and will last for at least 12 weeks³. It will consist of an online survey divided into different sections. The general sections will be aimed at citizens with an ordinary level of knowledge, while respondents with particular expertise or interest will be encouraged to also fill in the specialist section.

On the final page of the online consultation, respondents will be invited to submit additional information in a concise document.

A technical summary of the analysis of the consultation feedback will be published.

4.2. Targeted consultation

Certain stakeholders, such as competent national and regional authorities in each Member State, non-governmental organisations, sludge and wastewater-related business organisations and associations, NGOs, scientific and academic institutions who are experts in the field, working at national or European level will be reached by targeted consultations, i.e. will be invited by the Commission to participate in surveys, interviews, or workshops.

Stakeholders will be consulted regarding key topics of the SSD's functioning and implementation, and/or will be approached regarding information and opinions on specific topics and validation of preliminary findings. The following methods will be used:

4.2.1 Surveys

Targeted surveys will be organised to gather the views of particular stakeholders on subjects specific to their expertise or interest, with a higher degree of detail to get clearer outcomes when additional input is needed. The aim will be to reach a wide range of stakeholders, in particular local and regional authorities, regional non-governmental organisations, small and medium enterprises and relevant sectoral organisations both at regional and national level.

The surveys will be based on electronic questionnaires, which will be tailored to each type of expert/stakeholder group. They will be carried out from Q4 2020.

³ The on-line questionnaire for the open public consultation will be published at this address: <https://ec.europa.eu/info/consultations>

4.2.2 Interviews

Interviews will be organised to gain further in-depth understanding of the views of key stakeholders, or as means to clarify any relevant issues emerging from the other data gathering and consultation activities.

The interviews will be semi-structured, with the option of using technical solutions for distance meetings.

The time for conducting interviews will be determined throughout the process.

4.2.3 Stakeholder workshop

With the aim to allow thematic discussions among experts on key topics and to validate preliminary findings from the in-depth research conducted for the evaluation study, a workshop dedicated to topics identified over the course of the Evaluation will be held in Brussels (assuming that travel will be allowed in the EU, otherwise webinars will be considered as an alternative option). It is expected that the workshop will include stakeholders of both the SSD and the UWWTD.

It will include discussions on the main issues identified in the assessment of the implementation and on the first evaluation activities and contacts with relevant stakeholders. The topics will be related to the regulation and use of sewage sludge taking into account the links between the SSD and the UWWTD.

The date for the workshop is still to be determined, but it will be held in Q4 2020. It will be seen during the course of the work whether another workshop would be required.

	Open public consultation	Survey	Interviews	Workshop
EU Member States and their public authorities	✓	✓	✓	✓
Waste EG and UWWTD EG	✓	✓	✓	✓
Industrial/economic actors	✓	✓	✓	✓
Non-Governmental Organisations	✓	✓	✓	✓
International organisations	✓	✓	✓	✓
Academia	✓	✓	✓	✓
Citizens	✓			

Table 2: Overview of the different types of consultations methods that will be used to consult stakeholders

5. Sources of information

- COM 2019 Fitness Check of the Water Framework Directive and the Floods Directive [https://ec.europa.eu/environment/water/fitness_check_of_the_eu_water_legislation/documents/Water%20Fitness%20Check%20-%20SWD\(2019\)439%20-%20web.pdf](https://ec.europa.eu/environment/water/fitness_check_of_the_eu_water_legislation/documents/Water%20Fitness%20Check%20-%20SWD(2019)439%20-%20web.pdf)
- COM workshop: Technology and innovative options related to sludge management <https://ec.europa.eu/environment/archives/waste/sludge/pdf/workshoppart4.pdf>;
- ECA 2015 - Special report "EU-funding of urban waste water treatment plants in the Danube river basin: further efforts needed in helping Member States to achieve EU waste water policy" objectives https://www.eca.europa.eu/Lists/ECADocuments/SR15_02/SR_DANUBE_RIVER_EN.pdf
- JRC 2013 - FATE SEES - Occurrence and levels of selected compounds in European compost samples https://ec.europa.eu/jrc/sites/jrcsh/files/jrc76111_lb_na_25598_en_n.pdf
- JRC 2014 - End-of-waste criteria for biodegradable waste subjected to biological treatment (compost & digestate): Technical proposals - <http://ftp.jrc.es/EURdoc/JRC87124.pdf>
- JRC 2019 - Technical proposals for selected new fertilising materials under the Fertilising Products Regulation (Regulation (EU) 2019/1009) http://publications.jrc.ec.europa.eu/repository/bitstream/JRC117856/jrc117856_jrc117856_electronic.pdf
- Tonini et al 2019 (JRC) - Environmental and health co-benefits for advanced phosphorus recovery - <https://www.nature.com/articles/s41893-019-0416-x>
- JRC Science for Policy Report 2019 Water quality in Europe: effects of the Urban Wastewater Treatment Directive <https://publications.jrc.ec.europa.eu/repository/handle/JRC115607>
- JRC - Safemanure (ongoing);
- Milieu et al 2010- Environmental, economic and social impacts of the use of sewage sludge on land https://ec.europa.eu/environment/archives/waste/sludge/pdf/part_iii_report.pdf
- Wood et al 2019 - Digestate and compost as fertiliser: risk assessment and risk management options https://ec.europa.eu/environment/chemicals/reach/pdf/40039%20Digestate%20and%20Compost%20RMOA%20-%20Final%20report%20i2_20190208.pdf

Evaluation studies

- BIO Intelligence Service 2014 - Ex-post evaluation of certain waste stream directives - https://ec.europa.eu/environment/waste/pdf/target_review/Final%20Report%20Ex-Post.pdf
- COM 2019 - Evaluation of the UWWTD: <https://ec.europa.eu/environment/water/water->

[urbanwaste/pdf/UWWTD%20Evaluation%20SWD%20448-701%20web.pdf](https://ec.europa.eu/environment/waste/reporting/index.htm) and the underlying study [Water quality in Europe: effects of the Urban Wastewater Treatment Directive](#)" JRC 2019

Implementation reports

- Sewage Sludge Directive implementation reports
<https://ec.europa.eu/environment/waste/reporting/index.htm>
- Individual reports submitted by MS on the implementation of the SSD for the period 2016-2018 (currently being analysed)
- Urban Waste Water Treatment Directive Implementation reports
https://ec.europa.eu/environment/water/water-urbanwaste/implementation/implementationreports_en.htm

Other sources of information

- LUCAS - Land Use and Coverage Area frame Survey
<https://esdac.jrc.ec.europa.eu/projects/lucas>
- The Information Platform for Chemical Monitoring (IPCHEM)
<https://ipchem.jrc.ec.europa.eu/RDSIdiscovery/ipchem/index.html>
- Eurostat data such as
<https://ec.europa.eu/eurostat/databrowser/view/ten00030/default/table?lang=en>
- Relevant R&I projects funded by the EU through its research programmes FP7 and Horizon 2020 <https://cordis.europa.eu/projects/en>; and the LIFE Programme <https://ec.europa.eu/easme/en/life>
- The report from the IWARR 2019 workshop "H2020 Water Innovations for sustainable impacts in industries and utilities" <https://op.europa.eu/en/publication-detail/-/publication/4cac17d6-49bb-11ea-8aa5-01aa75ed71a1/language-en/format-PDF/source-115839553>
- The report from the LIFE Waste Water treatment platform meeting (January 2020), where selected H2020 also projects participated <https://neemo.egnyte.com/dl/3kwWxQlc4y>. (Of particular interest in relation to sewage sludge are the conclusions of the workshop 1 on circular economy)
- Other studies available on the Commission website
<https://ec.europa.eu/environment/waste/sludge/index.htm>