



*Employers entrusted to deliver
Sustainability Growth Innovation*

Position Paper

On the Urban Wastewater Treatment Directive
COM (2022) 541 final (UWWTD)

14 April 2023

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Summary

- SGI Europe welcomes the fact that the European Commission intends to anchor the **Extended Producer Responsibility (EPR) scheme and the Polluter-Pays Principle** in the new legislative proposal. SGI Europe hence calls on the European Parliament and Council to support the Commission's proposal and ensure that a strong EPR system is implemented through this directive.
- **SGI Europe is of the opinion that all control at-source measures must have priority over one-sided end-of-pipe measures.** It makes economically and ecologically more sense to avoid pollution at the source instead of removing substances once they have entered the water cycle, which is difficult and costly for wastewater treatment plants.
- **SGI Europe generally supports the approach for additional treatment stages for Wastewater Treatment Plants, but in a realistic manner.**
 - It must be ensured that further treatment stages are designed to be **practical and give the operators the necessary planning and investment security.** Official permit granting procedures are tight and there is a massive shortage of staff at the wastewater treatment plant side.
 - Additionally, the **financial burden on wastewater customers resulting from further treatment costs and the proposed energy neutrality efforts must not be overlooked.** In doing so, the broader framework conditions and challenges facing the wastewater industry need to be taken into account before imposing further measures.
- SGI Europe supports the coherent approach by the European Commission to reach the overall climate ambition, yet we remind that **the goal of energy neutrality must be in line with the European water protection goals** and the new requirements for the energy neutrality of UWWTP must not impede this goal.
- **SGI Europe oppose the inclusion of delegated act (4:3), binding technical requirements at the European level and underlines that small agglomerations are an adequate solution for the treatment of wastewater** and should be regulated within the Member States, where requirements account for local and regional conditions and the local pressure on the environment.
- SGI Europe deems it as crucial to implement an exemption for the construction and expansion of treatment plants in growing regions or cities due to the effects of the Weser Ruling. **The revised UWWTD has to be fit for the future and should ensure coherence between different EU water legislations. The consequence without such an exemption in the revised UWWTD will be that cities, with already high standard wastewater treatment in place and not yet the highest ecological and chemical status in the receiving water, otherwise will have to stop their population growth.**
- **SGI Europe calls to revise the UWWTD accordingly to address the labour shortage in the wastewater treatment sector** by launching initiatives that specifically promote the training and integration into the wastewater sector of European skilled workers.

General remarks

SGI Europe welcomes the European Commission's revision of the Urban Wastewater Treatment Directive (91/271/EEC) (UWWTD) and is in particular very supportive of the close link with the EU Green Deal, the Zero Pollution Ambition and the Circular Economy Action Plan. The revised directive is also a right step towards linking the various European directives such as the Water Framework Directive (WFD), the Industrial Emissions Directive (IED) and the Drinking Water Directive (DWD).

The UWWTD has provided a foundation for the protection of water resources and has brought significant improvements in European waters over the decades. Addressing the new challenges such as climate change and increasing pollution from various sources such as pharmaceuticals, micropollutants and other emerging substances is vital and the European Commission has timely tackled this approach with this revision.

Extended Polluters Responsibility and Polluter-Pays Principle

SGI Europe is of the opinion that all polluter-related prevention at the source measures must have priority over other reduction measures. It makes economically and ecologically more sense to avoid pollution at the source than removing substances once they have entered the water cycle, which is difficult and costly for both the urban wastewater treatment plants (UWWTP). At the same time, SGI Europe welcomes the fact that the European Commission intends to ensure the long-awaited paradigm shift by anchoring the **extended producer responsibility (EPR) and the Polluter-Pays Principle** in its legislative proposal. For the first time in water legislation, manufacturers and producers responsible for polluting the environment should also be held financially responsible. This can significantly improve the protection of water bodies pollutants:

SGI Europe fully supports the introduction of the Extended Producer Responsibility (EPR) as a key instrument of the new directive. EPR as a financing measure for quaternary treatment represents a milestone in financing wastewater treatment according to the polluter-pays principle. SGI Europe hence calls on the European Parliament and Council to support the Commission's proposal and ensure that a strong EPR system is implemented through the directive.

SGI Europe deems it as important that the EPR scheme together with Polluter-Pays principle operates like a **red thread through all other European policy areas** in the future and that the instrument of producer responsibility is consistently applied in each case.

This also applies, for example, to the implementation of **the EU strategy on pharmaceuticals in the environment and the use and approval of chemicals and plant protection products**. The other initiatives of the Green Deal should also contribute to the zero-pollution target. From the point of view of municipal wastewater management, the anchoring of extended producer responsibility is therefore a backbone of the Commission's proposal to revise the directive. It represents the basic prerequisite for the following demands for more extensive wastewater treatment (4th stage of treatment) and its financing.

Further Treatment Efforts

SGI Europe supports the approach for an additional treatment stage where they are economically and ecologically reasonable and lead to an improvement of the receiving water body.

The reduction levels proposed for the 4th treatment stage will create a new level of ambition for the removal of micropollutants. SGI Europe would like to highlight that in cases in which the concentration is very high, an

80% reduction rate might not be sufficient to reach the desired goals, while in cases of low concentration, a reduction of 80% would not be an effective and cost-effective measure and would do little to improve the overall status of the receiving water body. SGI Europe, therefore, encourages policymakers to discuss which type of standards could be most beneficial to achieve the greatest benefit to the water bodies in a cost-efficient manner for wastewater treatment plant operators.

For **SGI Europe**, it must be ensured that the further treatment stages are designed to be practical and that operators are given the necessary planning and investment security. It is unrealistic that the ambitious deadlines can be met, given the time periods currently required for planning and for approvals. Larger urban wastewater treatment plants are all subject to an environmental impact assessment or preliminary assessment, which in turn takes a considerable amount of time for the preparation of the documents. This applies in particular if the urban wastewater treatment plant is located in an area relevant to nature conservation, such as protected areas, Natura 2000, etc. In addition, the official permitting processes already require significant time due to a shortage of staff in the authorities and the complexity of authorisation processes. Improvement is not in sight and further actions are needed. The time period for planning to commission new treatment stages or upgrading wastewater treatment plants of ten years and more are therefore to be expected.

Furthermore, with regard to upgrading plants between 10,000 PE and 100,000 PE, it can be said that the limit of 10,000 PE would pose a major challenge for many plant operators, also in terms of achieving the targets within the proposed deadlines. At the same time, the limit of 10,000 PE is set very low, also with regard to the effectiveness for lower water pollution.

Article 18.2 is very problematic in its current version. The points b, c, d and e can give as a result that a wastewater operator has to install quaternary treatment in an agglomeration of only 10 pe. It is therefore necessary to set a floor for the minimum size of agglomerations that these articles are referring to. A relevant number would be 500 pe for Article 18.2 b and 1000 pe for Article 18.2 c, d and e.

Small agglomerations

Individual systems are an adequate solution for the treatment of wastewater in isolated and sparsely populated areas if regulated appropriately. Collection of wastewater in these areas is costly and inefficient and does not necessarily provide better environmental benefits. Decentralised nature-based solutions with adequately functioning individual systems should be a promoted alternative under these conditions. **Instead of being generally regulated, individual systems should be regulated within the Member States, where requirements account for local and regional conditions and the local pressure on the environment.**

Agglomerations should therefore be stipulated to 50 p.e. per hectare or above, instead of 10 p.e. per hectare or above. The change is needed to exempt individual systems in sparsely populated areas where collecting wastewater is not an alternative due to excessive costs with small or no environmental benefits.

There are troublesome requirements in articles 4 and 18 regarding the IAS. We oppose the inclusion of delegated act (4:3), binding technical requirements at European level risk discouraging local adaptations and innovative solutions. Article 4:2 and the requirements that small agglomerations should ensure the same level of treatment as the secondary and tertiary treatments referred to in articles 6 and 7 should be rewritten. It should be based on the requirement of "sufficient removal" as stated in the current directive.

3rd Treatment Stage-Elimination Rates of Nitrogen and Phosphorus (Annex 1)

The legislative proposal provides for new concentration and elimination rates for nitrogen and phosphorus for wastewater treatment in the third treatment stage. **The new limits for total nitrogen (6 mg/L or 85%; according to Annex I, Table 2) will pose major challenges for many operators.** The volume or size of wastewater treatment plants is essentially determined by the requirements for nitrogen elimination. In this respect, stricter requirements will inevitably lead to further high investment and operating costs, which will presumably be incurred at the same time as the expenses for the 4th treatment stage. In addition, **the energy demand, and subsequently the climate footprint, for nitrogen elimination will increase significantly, so that the goal of energy neutrality (see Article 10) will be even more demanding.**

Moreover, the resources required for further improvement of nitrogen elimination exceed the achievable improvements in the water bodies. In this respect, the overall environmental impact would be negative. However, **SGI Europe calls for stricter limits than provided for in the current directive (1991) and should be set in individual cases considering the risk-based approach, ecological sensitivity, and the catchment area,** taking into account local conditions.

4th Treatment Stage Risk Based Approach

Regarding quaternary treatment, the decision as to whether a further reduction of micropollutants is necessary and thus whether an advanced treatment stage at a wastewater treatment plant should be implemented should not be made solely based on the size of the wastewater treatment plant. Instead, a risk-based approach should be pursued. Both spatial conditions and the whole catchment area should be taken into consideration. Hence, **SGI Europe supports the risk-based approach included in Article 8(2) regarding the implementation of quaternary treatment for agglomerations between 10 000 and 100 000 p.e.** This approach should also be used when it comes to wastewater treatment plans above 100.000 p.e.

Amongst other considerations, it prioritises water bodies used for the abstraction of water intended for human consumption and thereby establishes a useful framework to make sure quaternary treatment is implemented where it will bring the greatest benefit to the receiving water bodies.

Energy Neutrality

While the European Commission is proposing to broaden the objective of the directive from environmental protection to health protection, reducing greenhouse gas emissions and improving the energy balance, as well as access to sanitation, governance and transparency of the sector and regular monitoring of relevant public health parameters, the **improvement of the water quality should remain the primary goal of the Directive.** The goal of energy neutrality must be in line with the European water protection goals and the new requirements for the energy neutrality of UWWTP must not impede this goal.

SGI Europe supports the coherent approach by the European Commission to reach the overall climate ambition and to set the EU on a sustainable path to achieve climate neutrality by 2050. It is positive that the directive also takes up green and blue measures linked to the EU strategy for adapting to climate change. **SGI Europe underlines the need to reduce the energy footprint of WWTP and support the Commission's ambitions to use own resources in addition to increased use of renewables. It will be important to stress that the definition of energy neutrality and its deadlines becomes more flexible according to local conditions.**

Hence, **energy neutrality of the water sector should be possible to achieved by exploiting all renewable energy potentials.** It is recognised that the range of renewable energies will vary greatly depending on the respective operation and local conditions. The safe operation of the UWWTP and the safe cleaning

performance have higher priority than the obligations for energy neutrality. Cost-benefit analyses take into account the respective options, especially for small sewage treatment plants <50,000 p.e. Subsidy programs should be created for small urban wastewater treatment plants. The water industry must be supported by an extensive reduction in bureaucracy and short approval procedures.

Wastewater monitoring

SGI Europe generally welcomes the introduction to implement a coordination of water and health authorities monitoring pathogens and pollutants. Indeed, in the event of abnormalities that give cause for concern, further investigations can be initiated at an early stage and measures can be derived.

However, the monitoring of parameters relevant to public health would be an additional and new task for urban WWTP, which would not correspond to the primary objective of the Directive, which is the protection of water from pollution. **It must be clarified that the associated costs and personnel expenses are financed by national health authorities.**

Stormwater overflow 1%

SGI Europe supports the Commission's efforts for a comprehensive consideration of stormwater overflows in the catchment areas. The integrated urban wastewater management plans will create clarity on which efforts are needed and should be prioritised, thereby channelling investment. However, instead of a fixed one-size-fits-all target for the maximum annual load to be released by stormwater overflows of 1% in dry weather conditions, SGI Europe calls for specific targets to be set locally, taking the risk-based approach and the status of the water body into account. This will enable a better channelling of investments to where they are most urgently needed while respecting the heterogeneity of local conditions within the EU.

The Weser ruling

The revised UWWTD should ensure coherence between different EU water legislations and allow for the construction and expansion of treatment plants in growing regions or cities to be permitted. Cities and regions must have the possibility to expand in accordance with population growth. The lack of coherence between the Water Framework Directive (WFD) and the UWWTD has already led to counter-productive bans on expansions of high-performing wastewater treatment plants. **To have the directive fit for the future, it is of vital importance that an exemption from the non-deterioration ban can be provided when technical treatment measures cannot further compensate for a growing population.**

The risk for cities to not fulfilling the detailed and strict non-deterioration requirement in Article 4 of the Water Framework Directive and its interpretation in the so-called Weser-ruling, can be forecasted to increase significantly for many cities in Member States using the Water Framework Directive properly – and especially having in regard the Commission's proposed requirements in the EQS Directive. Today there are cases from Sweden, and Finland and also an ongoing discussion in Denmark. In Germany, it can be foreseen that this will be a concern in the near future.

The consequence will be that cities have to stop their development and growth, or the urban wastewater treatment plant will be overloaded in cases where:

- **the cities have a growing population**, the receiving water bodies have not high status and there are no alternative recipients or discharge point, and all feasible technological improvements for wastewater treatment are already in place. Then it is not anymore possible to compensate for the growing population by increasing the percentage of treatment in the UWWTP, already having a 98-99% removal of phosphorus,

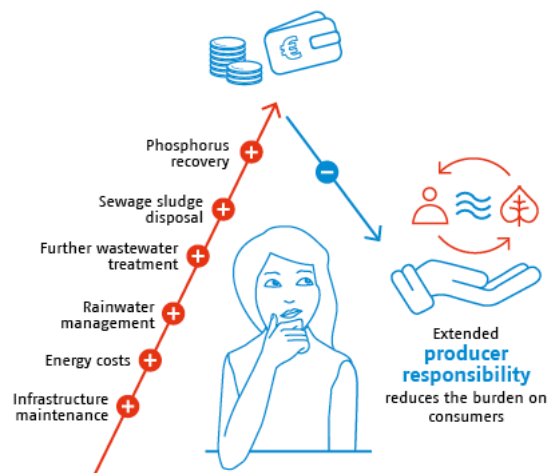
- the newly proposed EQS-directive with stricter requirements for EQS and more regulated chemical substances as e.g. pharmaceuticals will be adopted.

The social dimension

Overall, SGI Europe would like to highlight that care must be taken during the revision to avoid obligations for **economically disproportionate measures**, in particular rainwater management and wastewater treatment, referring to the new provisions both regarding the tertiary and the quaternary treatment. The Commission's proposal contains a whole range of new requirements, from more extensive wastewater treatment and rainwater management to sewage sludge disposal and phosphorus recovery to energy neutrality, wastewater monitoring and infrastructure maintenance, which not only in total but also individually will lead to a significant increase in costs.

In the overall assessment of the proposal, the **financial burdens on wastewater customers resulting from the proposed changes must not be overlooked**. In doing so, the broader framework conditions and challenges facing the wastewater industry must not be ignored (see figure 1.).

Easing the burden can only be achieved through the introduction of extended producer responsibility



Source: Verband kommunaler Unternehmen (VKU)

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Consumer Information

Furthermore, SGI Europe welcomes the aim of informing the public in a targeted manner about the importance and the services of municipal wastewater disposal. However, the scope of information provision now required under Annex VI is far too comprehensive. **The information to be provided should be limited to information that clearly represents added value for consumers**. In doing so, the **principle of proportionality** should be respected, and a reasonable period of time should be available to prepare for the provision of the information.

The Importance of integrating skilled Workers into the Wastewater Sector

Many wastewater industries across Europe, especially outside of urban areas, facing similar challenges with regard to an increase in the shortage of skilled workers, resulting from the retirement of a high proportion of the workforce and the lack of young, skilled workers entering the industry.

This particularly applies to industrial staff at WWTPs. Without far-reaching measures, this trend will exacerbate in the future. It should be noted that the sector of the wastewater industry can offer long-term prospects, secure jobs, an attractive working environment, and an enormously wide range of interesting fields of activity.

As an EU Social Partner, active in many promoting self-initiated and joint projects such as the "Green Skills in VET" in cooperation with EFEE and supported by the European Commission, **SGI Europe calls upon the EU Institutions to meet these challenges of the wastewater Industry by revising the UWWTD accordingly to this specific issue and by launching initiatives that specifically promote the training and integration into the wastewater sector of European skilled workers**.