

EurEau Position on the Regulation on Preventing Plastic Pellet Losses to Reduce Microplastic Pollution

EurEau welcomes and strongly supports the European Commission's Proposal for a Regulation on preventing plastic pellet losses to reduce microplastic pollution, which will allow for a regulatory framework implementing control at source for a relevant part of microplastics unintentionally released to the environment, and it will contribute not only to protecting water resources but also to meeting the objectives of the European Green Deal, the Zero Pollution Action Plan, as well as the New Action Plan on The Circular Economy.

1. Introduction

The European Commission took the first steps to tackle plastic pollution already in 2018, adopting the Communication 'A European Strategy for Plastics in a Circular Economy'¹, where the risks posed by microplastics were acknowledged. The intention to address microplastic pollution was further reinforced in the European Green Deal² (adopted in 2019), the new Circular Economy Action Plan³ (adopted in 2020) and the Zero Pollution Action Plan⁴ (adopted in 2021).

The new Circular Economy Action Plan set the direction of the actions to be taken to address microplastic pollution, by defining a two-fold goal: restrict intentionally added microplastics in products; and address unintentional releases of microplastics by developing standardisation, certification and regulatory measures and harmonising methods for measuring their releases. In addition, the Zero Pollution Action Plan included a target of reducing by 2030 the amount of microplastics released into the environment by 30%.

Microplastics are ubiquitous, persistent, very mobile and virtually impossible to capture

¹ [EurLex.](#)

² [EurLex.](#)

³ [EurLex.](#)

⁴ [EurLex.](#)



once released into the environment, which makes them baneful to the environment, and potentially harmful to human health. Microplastics are easily transported through the air and water, and are found in soil, lakes, rivers, estuaries, beaches, lagoons, seas and oceans⁵.

As indicated by the European Chemicals Agency (ECHA)⁶, around 176,000 tonnes of microplastics are estimated to be unintentionally released to European surface waters every year.

According to the Impact Assessment accompanying the European Commission's Proposal for a Regulation on Preventing Plastic Pellet Losses to Reduce Microplastic Pollution⁷ (hereon referred to as the Proposal), plastic pellets losses to the environment are the third source of microplastics released and account for 7-10% of microplastics unintentionally released in the EU, with estimates showing that between 52,140 and 184,290 tonnes of pellets were lost to the environment in the EU in 2019. Pellet losses are mainly due to a lack of awareness and poor handling at all supply chain stages, notably production (virgin or recycled), processing, transport and other logistics and waste management operations.

With this in mind, **EurEau welcomes and strongly supports the European Commission's Proposal**, defining the obligations for the handling of plastic pellets at all stages of the supply chain to prevent losses. This Regulation will complement the REACH restriction on microplastics intentionally added to products⁸, and will allow for a sound regulatory framework for microplastics released (intentionally and unintentionally) to the environment in the EU. It will contribute not only to protect water resources but also to meet the objectives of the European Green Deal, the Zero Pollution Action Plan, as well as the New Action Plan on The Circular Economy.

2. Plastic pellets losses and water services

As mentioned in the previous section, plastic pellets losses to the environment are the third source of releases and account for 7-10% of microplastics unintentionally released in the EU. There are different aspects to be considered when addressing microplastics in relation to water services (including both drinking and wastewater).

Microplastics unintentionally released into the environment can reach water resources through different ways, for example:

- ~ By deposition from the air.
- ~ Releases into surface water when being transported by ships.
- ~ Through urban runoff reaching water bodies when discharges from separate or combined collecting systems occur prior to reaching urban wastewater treatment plants (UWWTPs).
- ~ When urban runoff reaches directly water bodies (without sewers).

⁵ [Impact Assessment accompanying the proposal for a Regulation on preventing plastic pellet losses.](#)

⁶ ECHA.

⁷ [Impact Assessment accompanying the proposal for a Regulation on preventing plastic pellet losses.](#)

⁸ Europa.



Microplastics may also be found in surface water bodies intended for drinking water. Although current exposure levels to microplastics do not seem to lead to health risks.

The recast of the Drinking Water Directive, the update of the Groundwater Directive and the Environmental Quality Standards Directive, as well as the proposed recast of the Wastewater Treatment Directive, include provisions to monitor microplastics. A harmonised monitoring methodology is needed, as it will allow for the development of quality standards for microplastics in surface and groundwater. In the meantime, and in order to cover the gap in knowledge related to the risks of microplastics in drinking water, the Commission will submit, no later than 12 January 2029, a report on the potential threat to sources of water intended for human consumption from microplastics, addressing also the potential associated health risks.

Wastewater is not a source of microplastics. Rather, the wastewater treatment infrastructure, including collecting systems (comprising also assets to address urban runoff discharges, both from separate and combined collecting systems) and UWWTPs, is **a pathway for microplastics to the aquatic environment.**

Several studies point at urban runoff discharges (discharges from separate collecting systems) and combined sewer overflows (CSOs) as one of the most common pathways for microplastics to enter the aquatic environment. In addition, when urban runoff reaches UWWTPs, the microplastics can add up to those present in domestic wastewater.

According to EurEau estimations⁹, **conventional WWTPs (typical activated sludge plants) are effective in microplastics removal from the wastewater**, with retention rates of 80% up to 95%, and, with additional steps, up to 99% (figures that are aligned with those included in the Evaluation Report of the Urban Waste Water Treatment Directive¹⁰). **When microplastics are removed from wastewater in one of the treatment steps, they are transferred to the sludge**¹¹. If sludge is spread on agricultural lands (on average 50% of all sludge in the EU is applied in agriculture as fertiliser) microplastics are released into the environment.

There are even studies that suggest that microplastics degrade to a certain amount in the digesters¹², and that anaerobic digestion may reduce microplastics retained in the sewage sludge¹³, more knowledge is needed. Nevertheless, as recognised in the Impact Assessment accompanying the Proposal, implementing an additional treatment step to treat sludge would be very costly, and there are not yet techniques available to do so effectively.

The risk of disseminating microplastics should be balanced against the positive aspects of bringing organic matter and nutrients to farmland, even more so as there are other significant pathways for microplastics to enter soil. In this context, **control at source**

⁹ EurEau briefing note.

¹⁰ EurLex.

¹¹ EurEau briefing note.

¹² 2017 Mahon, A.M. et al., Microplastics in sewage sludge, Effects of treatment, Environmental Science & Technology, 51 (2): 810–818.

¹³ EurEau briefing note.



measures to prevent microplastics reaching UWWTP are the most effective and efficient way to avoid transfer of microplastics from sludge to soils.

Current knowledge and proposed solutions suggest that the water sector cannot be the main sector responsible for solving the microplastics problem and bearing the associated costs. The wastewater infrastructure is not a source of microplastics but one of the many pathways of microplastics to the environment. Requiring additional action at the end-of-pipe would therefore offer limited benefits but come at a high cost.

Control at source measures are both more sustainable and effective. They bring direct benefits for the water sector through fewer microplastics in drinking water resources, wastewater and sludge and other residual products.

In this regard, EurEau **welcomes and strongly supports the Commission's Proposal**, establishing comprehensive obligations for the handling of plastic pellets at all stages of the supply chain to prevent losses (consistent with the non-binding Recommendation of the Convention for the Protection of the Maritime Environment of the North-East Atlantic (OSPAR) on plastic pellets) for all economic operators involved in the handling of plastic pellets in the Union in quantities above five tonnes per year, and EU carriers and non-EU carriers transporting plastic pellets in the Union, as well as defining a standardised methodology to measure pellet losses, thus complementing the reporting requirement on estimates of quantities released, introduced in the REACH restriction. We also welcome the inclusion of a compliance framework to evaluate and demonstrate that requirements are being fulfilled.

The expected reduction of pellet losses stemming from the requirements set in the Regulation (ranging from 25,142 tonnes/year to 140,621 tonnes/year and contributing around 1/4 of the Commission's 30% reduction target for microplastics) will contribute not only to **protect water resources, especially water bodies intended for abstraction of water for human consumption, but will, in addition, allow to decrease the levels of microplastics in urban wastewater and, consequently, in sewage sludge from wastewater treatment.** This will **facilitate the reuse of the resultant high-quality sludge as a source of organic matter and nutrients in a truly circular economy.**

Hence, the **Proposal will contribute to establishing a sound regulatory framework for microplastics released unintentionally to the environment, and will contribute not only to protect water resources but also to meet the objectives of the European Green Deal, the Zero Pollution Action Plan, and the New Action Plan on The Circular Economy.**

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**About EurEau**

EurEau represents Europe's drinking and waste water sector. We encompass 37 national water services associations including public and private operators from 32 countries.

Together we promote the access to safe and reliable water services for Europe's citizens and businesses, the management of water quality and resource efficiency through effective environmental protection.



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