



This document is an output of the second OSPAR Regional Action Plan on Marine Litter (RAP ML 2)



OSPAR Best Practice guidance to prevent the loss or leakage of plastic biomedica in wastewater treatment plants

OSPAR Agreement 2025-14<sup>1</sup>



Cover photo: Soccer balls found on a beach in France, 2018 © Maria Vivu

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Plastic biomedica can escape into the environment if not properly retained, causing litter which is difficult and costly to recover, contributing to the already significant accumulation of plastic pollution in the marine environment. Preventing loss at source is more effective than clean-up and the different stakeholders responsible for managing biomedica throughout its life cycle can play a key role in risk mitigation. OSPAR's best environmental practice provides a practical framework for different stakeholders to integrate biomedica loss prevention: from regulators to WWTP designers and operators.

The Best Environmental Practice guidance includes actions that can be taken:

### By regulators

Measures for design, operation, and incident response, and includes guidance on setting permit conditions, requiring risk assessments, and ensuring monitoring and reporting obligations are met.

Examples of suggested actions: Integrate biomedica-related environmental risks into permitting procedures by requiring process declarations, retention measures, and national-level data on biomedica use.

### By designers and engineers

A lifecycle-based framework to minimise biomedica loss through robust plant design and engineering solutions. It covers retention systems, fail-safes, flow paths, and accessibility for inspection and maintenance - from early design to commissioning and handover.

Examples of suggested actions: Design for rapid detection, containment, and response to biomedica loss incidents; contribute to crisis management planning.

### By operators

A lifecycle-based framework to prevent biomedica loss, covering delivery, storage, operation and incident response including guidance on risk awareness, safe handling maintenance, effluent monitoring and crisis management.

Examples of suggested actions: Implement targeted staff training programs on biomedica risks, safe handling, maintenance, and incident response.

The full OSPAR Best Practice guidance is available at:  
<https://www.ospar.org/documents?v=63767> or via the QR code

OSPAR is the mechanism by which 15 Governments and the European Union cooperate to protect the marine environment of the North-East Atlantic.

The fifteen Governments are Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

