

30 April 2025

Dear Mr Mark Roberts,

Marine litter – an assessment of sources, controls and progress in Scottish seas

The Scottish Government welcomes the Environmental Standards Scotland report on marine litter in Scottish seas, which was published in October 2024. I am writing to set out our response to the report's six recommendations.

Recommendation 1: The Scottish Government should establish a 'source-to-sea' approach to enhance the effectiveness of current and future policy and legislation by improving coordination between terrestrial and marine litter strategies.

The Scottish Government recognises and understands the links between the terrestrial and marine environments, and the sources of litter and routes connecting the two environments that can lead to litter on land becoming litter at sea and on beaches. This was one of the driving elements behind the introduction of the National Litter Strategy at the same time as the Marine Litter Strategy for Scotland in 2014. Both were recently reviewed at a similar time, with updates published including action plans. The terrestrial litter strategy was expanded and is now the National Litter and Flytipping Strategy, and the scope of the Marine Litter Strategy was expanded to specifically include supporting litter removal.

Policy teams within Scottish Government, working respectively on land-based litter and marine litter, do so collaboratively, recognising that effective prevention and reduction of terrestrial litter would have benefits to prevent marine litter. Within the two areas of work there is a large crossover of delivery partners and steering group members for both strategies, meaning that both environmental spheres are being considered within each strategy.

Successful integration and support between the strategies has been demonstrated through the use of marine litter data to inform and prioritise terrestrial policy and legislation. Numerous regulations have been introduced to help prevent litter at source, including: the carrier bag charge; and individual bans on microbeads, rinse-off personal care products, plastic-stemmed cotton buds, and multiple single-use plastic food and beverage items. This work continues with planned legislation on wet wipes containing plastic, single-use vapes, and a charge on single-use cups.

Marine Directorate scientists have recognised the impact of land-derived litter by instigating research and publishing peer-reviewed articles on the subject of riverine litter impacts. A particular focus has been on the input of litter originating from the River Clyde and its tributaries, and the resulting litter accumulations or sinks on the west coast of Scotland including at the head of sea lochs such as at Arrochar.

We continue to fund research and utilise data that addresses the links between land and sea, including the Keep Scotland Beautiful Upstream Battle project. This project utilises terrestrial litter data and expertise to direct effective education, stakeholder engagement and solutions to this hitherto unaddressed conduit of litter from land to sea via the river network.

Recommendation 2: The Scottish Government should specify how they plan to implement improvements to the handling and management of plastic pellets and clarify if they are on target to implement this by the end of 2025.

Plastic pellet pollution is found on some of Scotland's shores, however this is not our problem alone, it is a significant global challenge, and one that requires international solutions. This issue has moved up the agenda in not just Europe, with proposed regulations, but wider, with inclusion in the drafting of the United Nations Global Plastics Treaty. As this is an extremely fast-moving policy area, the target date for implementation of improvements is the end of 2028, as published in our Scottish Biodiversity Strategy Delivery Plan.

To tackle plastic pellet pollution the Scottish Government supports a full supply chain approach, where every actor handling or managing plastic pellets, powders and flakes implements measures to prevent loss of material to the environment. This is based on considerable research and stakeholder engagement which culminated in a Scottish Government report published in 2018. We used information from our work to support the development and publication of the OSPAR background document on pellet production, used by the countries bordering the North East Atlantic that are contracting parties of the Regional Seas Convention OSPAR, including the UK.

Our report and our experience supported the development of a free-to-access handling and management Publicly Available Specification (PAS) published through the British Standards Institute (BSI) in 2021, the first of its kind. We then supported the development of an OSPAR Recommendation with supporting guidelines. The Recommendation encourages the contracting parties of OSPAR to promote the development and implementation of pellet loss prevention standards and certification schemes for the entire supply chain. We have promoted the BSI PAS wherever possible and continue to be active members of the Supervisory Board within the new EU Operation Clean Sweep Certification Scheme to encourage high ambition levels, alignment with OSPAR requirements, and promotion across all actors in the supply chain. We will be conducting a critical evaluation of this scheme in 2025.

The details of the OSPAR publication have also been used by the European Commission in drafting regulations to prevent pellet loss, and we have participated in Impact Assessment preparatory work and communicating the OSPAR approach at the European Parliament as co-convenor of the OSPAR inter-sessional correspondence group on marine litter. We are currently waiting for the conclusions of the trilogue process used in Europe to debate and agree text in proposed legislation. When these regulations are finalised we will conduct an evaluation of its ability to prevent pellet loss across the entire supply chain, and any potential or need for alignment.

In wider pellet work, we continue to support the inclusion of pellet loss prevention as a specific measure in the Global Plastics Treaty. We also encourage the UK Government and the Maritime and Coastguard Agency to push the International Maritime Organisation to make their Circular 909 a mandatory requirement in a timely manner, considerably reducing the risk of pellet loss during maritime transport with specified stowage, packaging and labelling instructions.

By the end of 2025 the international plastic legislative, policy and industry landscape should be clearer. With these many variables defined we will be in a better position to consider how best we can prevent pellet pollution in Scotland, and implementing improvements by the end of 2028.

Recommendation 3: The Scottish Government, working with the UK Government where appropriate, should bring forward legislative proposals to reduce waste from single-use plastic food containers and plastic bottles and adopt a more circular economy approach to reduce plastic production.

The Scottish Government has been working on a number of policy and legislative initiatives to support a circular economy and to shape a system that effectively reduces waste, increases reuse and high value recycling, and aligns with Scotland's ambitious net-zero and sustainability goals, whilst providing continuity for businesses. This includes working with the governments across the four nations to reform existing extended producer responsibility (EPR) schemes and to introduce a deposit return scheme (DRS) for single-use drinks containers.

The packaging EPR regulations were laid in the UK Parliament in November 2024 and are being implemented from 2025 across the four nations of the UK. This will move the full cost of dealing with packaging waste from households away from local taxpayers and councils to the producers, applying the polluter pays principle. It will incentivise businesses to reduce excess packaging, to design and use packaging that is easily recyclable, and encourage reusable and refillable packaging.

We remain committed to the delivery of an interoperable DRS for single-use drinks containers to ensure we realise the environmental and economic benefits which it will bring. We continue to engage constructively with industry and the governments of the other UK nations to support the delivery of a DRS in October 2027.

We are committed to matching or exceeding the standards set out by the EU Directives on Single-Use Plastics and Packaging and Packaging Waste where we are able to do so and in a manner that contributes towards maintaining and advancing standards. We conducted a call for evidence on the size and nature of the market for, and environmental impact of, single-use food containers and other single-use items. The wide range of answers and evidence will be taken into account when developing policies to move to a more circular approach to consumption in these areas. Scotland's Circular Economy and Waste Rout Map to 2030, published in December 2024, commits to develop further measures to tackle consumption of problematic single-use items and promote uptake of reusable alternatives, prioritising action on single-use drinks cups.

Recommendation 4: The Scottish Government should work with the UK Government to bring forward measures to tackle end-of-life fishing gear and should establish a programme of work to identify and address the drivers and causes of fishing-derived marine litter in Scotland

The Scottish Government recognises that to tackle end-of-life (EOL) gear we must work effectively across all four nations, building on the commitment we made together in 2019 at the British-Irish Council Marine Litter Symposium. Therefore, we welcomed the renewed capacity which enabled the four nations to resume work on EOL gear through the Common Framework since 2023.

Between the four nations we have undertaken considerable research to better understand the challenge of improving the waste management of EOL gear. An inventory for fishing and aquaculture gear has been established, which has provided an excellent baseline for waste throughput estimates. Within that study, considerable stakeholder engagement also enabled us to improve our understanding of how this gear is currently dealt with in the sectors, including repair and reuse, access to facilities, storage options, and attitudes to waste, including perceived barriers to sustainable disposal. A joint UK-wide report was published by Defra following this work, including economic analysis of policy options. This research, and work yet to be published, will support the development of solutions, with our fishing and aquaculture sectors, contributing to our circular economy and preventing further marine plastic pollution from these sources. We are expecting to take policy options to stakeholders for direct consultation this year.

We have completed our work with the European Committee for Standardisation with the publication of a voluntary design standard that lists opportunities and options to reduce the environmental impact of gear over its entire lifespan, including at the point of EOL, facilitating reuse or recycling. This standard is being promoted across all four nations.

We are also continuing to work within OSPAR to better understand how to prevent marine litter from these sources and learn from the experiences of Member States that are trying to implement EPR schemes for this gear. We have a shared opinion across the four nations, and supported by economic analysis, that introducing a prohibitively expensive EPR scheme would not be proportional at this time, or as effective as other policy options which we will be taking to stakeholders for discussion in 2025.

Recommendation 5: The Scottish Government should work through OSPAR and with the UK Government to agree a programme to implement suitable indicators and an effective and resilient monitoring programme to assess marine litter.

The Marine Strategy Regulations 2010 provide a comprehensive framework and obligation for the four nations to take a co-ordinated approach to assess, monitor and take action to achieve or maintain Good Environmental Status (GES) in UK

waters. The UK is the signatory to the OSPAR Agreement, and monitoring programmes and common indicators are agreed collectively across all OSPAR Contracting Parties.

The Scottish Government contributes seabed and beach litter data to OSPAR for inclusion in the regional monitoring programme. In addition, we provide data from the plastic content of beached dead fulmars, that are used as an indicator of floating microplastic levels. The OSPAR programme is currently moving towards inclusion of microplastics in sub-tidal marine sediments and is also trialling methodologies for monitoring plastic pellet presence on beaches. We are actively working with the UK Government towards the expansion of the number and distribution of OSPAR monitoring beaches and consideration of participation in the trial of the pellet monitoring methodology.

The principal activities of the Scottish Government's marine plastics science programme are to monitor floating microplastics and seabed litter, and to use sampled sub-tidal seabed sediments to develop a methodology for the extraction and identification of microplastics in sediment. Floating microplastics have been monitored since 2014, with over 10 years of data collected and published. Seabed litter monitoring has been ongoing since 2012, with several years of data published.

Both the Scottish and UK governments acknowledge the valuable contribution made by citizen science to the understanding of marine litter levels across the UK, and to disregard several decades of expertise and data achieved through this route would be to the detriment of our ongoing work on this issue. Citizen science is part of the suite of monitoring conducted in Scotland and across the whole of the UK.

Recommendation 6: The Scottish Government should set out how it proposes to maintain alignment with regulatory developments in the EU that are aimed at reducing microplastics in the marine environment. Relevant developments include:

- recently adopted measures to restrict the intentional inclusion of microplastics (covering all synthetic polymer particles below 5 mm that are organic, insoluble and resist degradation) into products under the Registration, Evaluation, Authorisation and Restriction of Chemicals ('the REACH Regulations')***
- a recast Urban Waste Water Directive that will introduce requirements to monitor microplastics in wastewater inlets/outlets and undertake treatment of wastewater to remove microplastics***
- a proposal to introduce the first regulatory measures to directly tackle pollution from the unintentional release of plastic pellets across the pellet supply chain***
- a recently adopted regulation that sets requirements for manufacturers to measure tyre abrasion and for the EU Commission to define abrasion limits for tyre***

Wherever possible, Scotland aims to align with EU environmental ambitions.

During the preparation of the 2022/23 UK REACH work programme, we agreed with the UK and Welsh governments that intentionally added microplastics was a priority area to better understand environmental risk. For the 2022/23 work programme, Defra initiated a research proposal to investigate the risks of intentionally added microplastics. The evidence project has reviewed their emissions, and the risks they pose both to human health and the environment. It also included a socio-economic assessment. It will advise on the most effective measures to address any risks and help identify wider evidence gaps that need to be addressed to support a more strategic approach to managing intentionally added microplastics. This project is expected to report in early 2025. We, along with the UK and Welsh governments, will consider its findings once complete.

The recast Urban Wastewater Treatment Directive updates existing EU law requirements, which were implemented into Scots Law by the Urban Waste Water Treatment (Scotland) Regulations 1994. The original Urban Wastewater Treatment Directive was a landmark of its time introducing mandatory treatment of wastewater to protect the water environment. It resulted in a huge investment programme in towns and cities across Scotland. The scale of the investment needed was a key driver for the reorganisation of the sector and the creation of Scottish Water in 2002. We will continue to consider future policy options in this area to protect our environment and serve users.

Our approach to addressing plastic pellet pollution is detailed in our response to Recommendation 2. When the European regulations on pellets are finalised we will be reviewing its content and considering next steps based on its capacity to effectively prevent pellet loss across the entire supply chain, as per the OSPAR Recommendation which we fully support.

Issues related to product regulations regarding tyre abrasion remain a reserved matter and would be for the UK Government to address.

I hope you found this information helpful.

Yours sincerely,

A solid black rectangular box used to redact the signature of Caro Cowan.

Caro Cowan
Deputy Director
Marine Directorate
Scottish Government