First phase of research paves the way for further studies on microplastics pollution

The Government company responsible for motorways and major A roads is committed to minimising the environmental impact of its network and in particular the vehicles using it.

It already has clear assessment and design standards for maintaining and improving drainage systems on its network.

Now it has kickstarted research to see if more can be done, and has just published initial research identifying what evidence exists and to determine what further research needs doing.

The academic desk top findings have also secured funding to investigate the issue further through 'on road' investigations.

Michael Whitehead, Principal Advisor for Water at Highways England, said:

Highways England takes environmental issues seriously and recognises the global concern around microplastic pollution. We have undertaken this research together with the Environment Agency and other industry experts to better understand the potential contribution that road transport has on microplastics.

The outcome of further research will be the evidence base to inform future decision making, enabling us to take positive action to manage identified risks, inform policy and identify further areas of research.

Helen Wakeham, Environment Agency Deputy Director Water Quality, Groundwater & Contaminated Land, said:

This research contributes to the work we do with partners to understand the sources and scale of microplastic pollution.

We supported this research by Highways England as it provided a valuable review into the current knowledge of the potential scale of microplastic and chemical pollution from highways. We look forward to continuing work with Highways England on this important topic as the work progresses. This will help us better understand the contribution from the road network as a source of microplastics and emerging chemicals of concern entering the environment.

Highways England decided to undertake research to identify whether there is a microplastic waste issue from water running off roads. The research will help the company better understand the scale of this issue, the nature of the problem and identify any further detailed research to inform changes to its current policy or design standards.

Alice Horton from the National Oceanography Centre, said:

This research is a key step in understanding the contribution of the strategic road network to microplastic pollution within the terrestrial and aquatic environment. This study has identified the critical knowledge gaps that should be addressed going forwards to enable us to understand the extent and implications of microplastic runoff from roads, and measures that should be put in place to limit this environmental contamination.

A crucial part of this first stage of research, which has just been published, involved identifying suitable methods to collect and analyse samples of road runoff to establish the presence or absence of microplastics.

Judith Brammer, microplastics technical lead for the Atkins Jacobs Joint Venture, said:

This is cutting edge research that has the potential to transform our understanding of the contribution of road runoff to microplastics in the water environment. The Atkins and Jacob Joint Venture sat at the heart of it, gathering and assessing the evidence base to guide future research, informing Highways England's policy and decision making going forward.

This work will ensure that Highways England's understanding of the environmental effects associated with the Strategic Road Network (SRN) is up to date, and that the assessment and design guidance standards which is published and maintained in the Design Manual for Roads and Bridges (DMRB) are robust.

General enquiries

Members of the public should contact the Highways England customer contact centre on 0300 123 5000.

Media enquiries

Journalists should contact the Highways England press office on 0844 693 1448 and use the menu to speak to the most appropriate press officer.