HOUSE BILL 1315

M3 6lr2183

By: **Delegate Pruski**
Introduced and read first time: February 12, 2026
Assigned to: Environment and Transportation

A BILL ENTITLED

AN ACT concerning

Department of the Environment – Vessel–Based Microplastic Particle Removal Technologies – Study

FOR the purpose of requiring the Department of the Environment, in consultation with the Department of Natural Resources, to conduct a study of technologies installed or used on vessels to capture or remove microplastic particles in the Chesapeake Bay and its tributaries; and generally relating to microplastic particle removal technologies.

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That:

(a) The Department of the Environment, in consultation with the Department of Natural Resources, shall conduct a comprehensive study of technologies installed or used on vessels to capture or remove microplastic particles and assess their potential to reduce microplastic pollution in the Chesapeake Bay and its tributaries.

(b) The study shall:

(1) identify, describe, and categorize technologies installed or used on vessels to capture or remove microplastic particles, including:

(i) microplastic collection devices that use the cooling–water return flow of outboard motors to filter and capture microplastic particles, including devices marketed for outboard engines;

(ii) filtration systems designed for installation on commercial vessels or larger vessels that work by drawing in water and removing microplastic particles before discharge;

EXPLANATION: **CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.**
[Brackets**]** indicate matter deleted from existing law.

(iii) floating or stationary systems that remove microplastic particles from surface waters, rivers, or harbors; and

(iv) any emerging or experimental technologies designed for installation or use on vessels to capture or remove microplastic particles;

(2) assess the technical performance of the technologies identified under item (1) of this subsection, including, to the extent available:

(i) microplastic particle size ranges targeted by the technologies;

(ii) how efficiently each technology collects or removes microplastic particles under typical operating conditions;

(iii) the volume of water treated or filtered during normal vessel operation; and

(iv) maintenance requirements, filter service intervals, and operational considerations for vessel owners;

(3) evaluate the environmental and water quality benefits and drawbacks of using technologies installed or used on vessels to capture or remove microplastic particles in the Chesapeake Bay and its tributaries, including:

(i) potential reductions in microplastic concentrations in surface waters and nearshore habitats;

(ii) the potential for supporting existing efforts to reduce plastic and microplastic pollution in watersheds, stormwater, and wastewater; and

(iii) any adverse environmental impacts associated with the installation, operation, or maintenance of the technologies;

(4) analyze the practicality of large–scale or targeted use of technologies installed or used on vessels to capture or remove microplastic particles in the Chesapeake Bay and its tributaries, including:

(i) integration with recreational and commercial outboard engines, including charter vessels, marinas, and rental fleets;

(ii) use on workboats, research vessels, and other State–owned or locally owned vessels; and

(iii) prioritizing use in areas with higher microplastic particle loads, including urban tidal waters, marinas, and shipping channels;

(5) assess the economic and implementation factors for using technologies installed or used on vessels to capture or remove microplastic particles, including:

(i) capital and operating costs for vessel owners and operators;

(ii) incentives, grants, or pilot programs to encourage voluntary adoption;

(iii) partnerships with manufacturers of outboard motors, boat builders, or distributors to integrate microplastic filters or collectors as standard or optional equipment;

(iv) workforce and training needs for the installation and maintenance of the technologies; and

(v) opportunities to use federal funding or public–private partnerships for demonstration projects;

(6) review regulations, permitting requirements, and policies impacting technologies installed or used on vessels to capture or remove microplastic particles, including:

(i) federal or State requirements related to onboard water treatment or discharge that impacts the use of the technologies;

(ii) whether there is a need for regulatory clarification or guidance on the use or disposal of collected microplastic particles; and

(iii) integration of the technologies into Chesapeake Bay restoration, total maximum daily load, or other water quality improvement programs; and

(7) identify data and research needs for technologies installed or used on vessels to capture or remove microplastic particles, including:

(i) long–term performance and durability;

(ii) reductions in microplastic loads throughout the Chesapeake Bay; and

(iii) ecological effects of large–scale microplastic particle removal.

(c) The Department of the Environment shall:

(1) review research, pilot projects, and technology inventories on microplastic removal in marine and estuarine waters, including those relating to technologies installed on or used with vessels and corresponding performance data;

(2) assess opportunities for the State to host or participate in pilot or demonstration projects to test technologies installed or used on vessels to capture or remove microplastic particles in the Chesapeake Bay;

(3) consult with the Department of Natural Resources and other State agencies responsible for water quality, boating, fisheries, and Chesapeake Bay restoration; and

(4) solicit input from stakeholders, including:

(i) manufacturers and distributors of outboard motors and technologies installed or used on vessels to capture microplastic particles;

(ii) recreational and commercial boat builders and dealers;

(iii) representatives of the charter boat and for–hire fishing industries operating in the Chesapeake Bay and its tributaries;

(iv) marina operators and boating trade associations;

(v) environmental and watershed advocacy organizations working to reduce plastic and microplastic pollution;

(vi) academic and research institutions specializing in microplastics, estuarine ecology, and marine engineering; and

(vii) local governments and regional entities involved in Chesapeake Bay restoration.

(d) On or before December 1, 2027, the Department of the Environment shall submit an interim report to the Governor and, in accordance with § 2–1257 of the State Government Article, the General Assembly that includes:

(1) a description of all technologies reviewed and preliminary findings on performance and potential environmental benefits;

(2) an initial assessment of practicability, costs, and stakeholder input; and

(3) identification of questions and data needs to be addressed in the remainder of the study.

(e) On or before July 1, 2028, the Department of the Environment shall submit a final report to the Governor and, in accordance with § 2–1257 of the State Government Article, the General Assembly that includes:

(1) the results of the study;

(2) an analysis of the effect of technologies installed or used on vessels on microplastic pollution in the Chesapeake Bay and its tributaries;

(3) recommendations for policy changes, pilot programs, funding mechanisms, or incentives to support the use of technologies installed or used on vessels to capture or remove microplastic particles where appropriate; and

(4) any recommended statutory or regulatory changes necessary to integrate technologies installed or used on vessels to capture or remove microplastic particles into State water quality and Chesapeake Bay restoration programs.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect October 1, 2026.