Senate Fiscal Agency
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BILL ANALYSIS

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Senate Bills 503 through 505 (as introduced 8-14-25)
Sponsor: Senator Jeff Irwin
Senator Dayna Polehanki
Senator Sue Shink
Committee: Natural Resources and Agriculture

Date Completed: 9-8-25

INTRODUCTION

The bills would govern the use and presence of plastic microbeads and microplastics, which generally are plastic particles no larger than five millimeters that are either intentionally added to personal care products and other cleaning products or breakdown from larger plastic items. The bills would prohibit the manufacture, sale, and distribution of products containing plastic microbeads in the State. They would prescribe a civil fine for each violation of the prohibition and require the Department of Environment, Great Lakes, and Energy (EGLE) to enforce the prohibition. The bills also would require EGLE to establish and administer a microplastics program to determine microplastic baseline conditions in public water supplies. Finally, the bills would require EGLE to develop a statewide plan to assess the occurrence of microplastics in living organisms and waterways and make recommendations for the reduction of microplastics in the State.

FISCAL IMPACT

Senate Bill 503 would have a limited fiscal impact on State government and no impact on local governments. Administrative costs associated with the bill would be relatively minimal and enforcement would allow for the issuance of a civil fine of up to $2,000 per day for any violations of its provisions. Normally, revenue from civil fines goes to local libraries where the fines are levied; however, the bill would require any fines collected to be deposited in the State's General Fund. The amount of additional revenue is indeterminate and would depend on the number of actual violations of the bill.

Senate Bill 504 also would have a minor negative fiscal impact on EGLE. The Fiscal Year 2024-25 EGLE budget included a one-time investment of $2.0 million General Fund/General Purpose for microplastics research, which could provide insights or data that inform the administration required by the bill. It would likely require a small number of FTEs to perform the preliminary research and prepare the requisite report. In FY 2024-25, the average cost of an FTE is $138,900.

Senate Bill 505 would have an indeterminate negative fiscal impact on the State and no impact on local governments. The extent of this impact would depend on the amount of data required to adequately fulfill the requirements laid out in the bill and the accessibility of that data. There could be savings incurred if partnerships with various research institutions resulted in efficiencies in developing a statewide microplastics research and monitoring plan.

MCL 324.14731 et al. (S.B. 503)
325.1005 et al. (S.B. 504)
324.15101 et al. (S.B. 505)

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CONTENT

Senate Bill 503 would add Subpart 3 (Plastic Microbeads) to the Natural Resources and Environmental Protection Act (NREPA) to do the following:

- **-- Prohibit the manufacturing, sale, and distribution of a material that contained plastic microbeads and was intended for use in the State, beginning January 1, 2026.**
- **-- Prohibit the sale or distribution of a personal care product or cleaning product that contained plastic microbeads and was intended for use in the State, beginning January 1, 2027.**
- **-- Prescribe a maximum civil fine of $2,000 per day for a violation of the prohibitions above.**
- **-- Prescribe conditions a court would have to consider in determining the amount of a civil fine for a violation.**
- **-- Require EGLE to administer Subpart 3 and report information to the Legislature.**

Senate Bill 504 would amend the Safe Drinking Water Act to require EGLE to establish microplastic baseline conditions in public water supplies using specific methodologies and considering specific information, beginning July 1, 2027. The bill also would require EGLE to report to the Legislature findings from the baseline conditions study and recommendations for next steps, by July 1, 2031.

Senate Bill 505 would add Part 151 (Statewide Microplastics Research and Monitoring plan) to NREPA to require EGLE to develop a statewide microplastics research and monitoring plan that assessed the occurrence and impact of microplastics on the plants, animals, waterways, and drinking sources of the State. The bill would prescribe specific requirements of the plan and require EGLE to submit the plan to the Legislature by July 1, 2026, and implement the plan by January 1, 2028, depending on available funding.

Senate Bill 503

Subpart 3 Definitions

"Cleaning product" would mean either of the following:

- -- An automotive product, general cleaning product, or floor polish or floor maintenance product used primarily for janitorial, household, or institutional cleaning purposes.
- -- An air care product.

"Air care product" would mean a chemically formulated consumer product labeled to indicate that the purpose of the product is to enhance or condition the indoor environment by eliminating unpleasant odors or freshening the air.

"Personal care product" would mean an article intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body for cleansing, beautifying, promoting attractiveness, or altering appearance, whether or not the article is intended to be rinsed off, and any material intended for use as a component of such an article. The term would not include a prescription drug.

"Person" would mean an individual, partnership, corporation, association, governmental entity, or other legal entity.

"Plastic" would mean a synthetic material composed of organic polymers produced by linking monomers through a chemical reaction, which may include chemical additives or other substances. The term would not include polymers that are naturally occurring and have not been chemically modified.

"Plastic microbead" would mean an intentionally added solid plastic particle generally measuring five millimeters or less in every dimension.

Plastic Microbeads Prohibition

Under the bill, a person could not do any of the following:

-- Beginning January 1, 2026, manufacture, offer for promotional purposes, sell, or distribute a material that contained plastic microbeads and was intended for use in the State; this would not apply to a personal care product or cleaning product.
-- Beginning January 1, 2027, offer for promotional purposes, sell, or distribute a personal care product or cleaning product that contained plastic microbeads and was intended for use in Michigan; this would not apply if the amount of plastic microbeads were less than one part per million by weight.

A person who violated these prohibitions or a rule promulgated to implement the prohibitions would be subject to a civil fine of up to $2,000 per day of violation. The prosecutor of the county in which the violation occurred or the Attorney General could bring an action to collect a fine. A fine collected would have to be deposited in the State General Fund.

In determining the amount of a civil fine above, the court would have to consider the following:

-- The nature and extent of the violation.
-- The number and severity of violations.
-- The economic effect of the penalty on the violator.
-- Whether the violator took good-faith measures to comply with the bill and when these measures were taken.
-- The deterrent effect that the imposition of the fine would have on the violator and other persons regulated under the bill.
-- Any other factor that justice could require.

Finally, EGLE would have to do the following:

-- Administer and enforce the bill's provisions.
-- Provide on EGLE's publicly accessible website a summary of the prohibitions above and a means for persons to report violations of the bill.
-- By July 1, 2028, and each year thereafter, prepare, post on EGLE's website, and provide to the chairs of the standing legislative committees and appropriations subcommittees with primary responsibility for environmental protection issues a report on the enforcement of the bill's provisions and progress in achieving the goals of the bill.

The bill would allow EGLE to promulgate rules to implement its provisions.

Senate Bill 504

Beginning July 1, 2027, and continuing until July 1, 2030, EGLE would have to establish and administer a microplastics program to establish microplastic baseline conditions in public water supplies. As part of the microplastics program, EGLE would have to monitor and test

public water supplies on a quarterly basis using sampling and analytical methods consistent with methods used or described by the International Joint Commission, the American Society for Testing and Materials, the United States Environmental Protection Agency (EPA), the American National Standards Institute, California, or best available methods or technology. The microplastics program would be intended to provide for a preliminary risk assessment to study the effects of microplastics in drinking water.

Under the microplastics program, EGLE would have to consider the following:

-- Shoreline surface water drinking water sources from the Great Lakes.
-- Major tributaries that support public water supplies.
-- Inland surface water lakes that provide drinking water.
-- Direct use of groundwater for drinking water within and near agricultural operations.
-- Use of groundwater or drinking water within 1 mile of a landfill operation.
-- The size of the public water supply.
-- Impacts on environmental justice.
-- Quarterly sample collection and analysis.

By July 1, 2031, EGLE would have to prepare and submit a report to the standing committees and the appropriations subcommittees of the Senate and House of Representatives with primary responsibility for issues under the jurisdiction of EGLE and make the report available on EGLE's website. The report would have to include the following:

-- A summary of findings, including reports or technical memoranda that provided a summary of each quarterly test described above including drinking water source, location and description, sampling date, testing methodology, microplastic shape if available, potential microplastic sources, and polymer type if available; and the quantities of microplastics in public water supplies, including the quantities in the water source that supplied the public water supply.
-- Recommendations for next steps for addressing the effects and presence of microplastics in public water supplies, including the toxicity limit of microplastics based on best available, peer-reviewed research or toxicity studies and findings of EPA; a preliminary risk assessment; an overview of findings and critical issues; and recommendations for continued and expanded monitoring and analysis and public protection.

"Microplastics" would mean a solid plastic material that has at least three dimensions, measures less than five millimeters in size, and may contain chemical additives or other substances. The term would not include naturally occurring, non-chemically modified polymers.

"Plastic" would mean synthetic material composed of organic polymers produced by linking monomers through a chemical reaction and may include chemical additives or other substances. Plastic would not include naturally occurring, non-chemically modified polymers.

The bill would require EGLE to promulgate rules to implement its provisions.

Senate Bill 505

Under the bill, EGLE, in consultation with other State departments and agencies and interested entities, would have to develop a statewide microplastics research and monitoring plan to assess the occurrence of microplastics, including in plants and animals, and the impact of microplastics on human and animal health, the health of the Great Lakes, and the critical drinking water supply. Additionally, EGLE would have to identify proposed solutions to address the impacts of microplastic materials, to the extent feasible.

The bill would allow EGLE contract with State research institutions, including those associated with Grand Valley State University, Michigan State University, the University of Michigan, Wayne State University, and other academic and research institutions that have demonstrated expertise relating to the effects of microplastic materials on the Great Lakes, for research services that would contribute directly to the development of the statewide microplastics research and monitoring plan.

The statewide microplastics research and monitoring plan would have to include the following:

-- Strategies for developing a comprehensive plan to identify and evaluate the ecological, health, and economic impacts associated with microplastics in the Great Lakes.
-- Methods for sampling, detecting, and characterizing microplastics that were consistent with recognized standards from scientific, peer-reviewed research or relevant agencies, including the International Joint Commission, the EPA, the National Oceanic and Atmospheric Administration, and ASTM International.
-- A list of the baseline concentrations of microplastics in the Great Lakes that included an assessment of the associated environmental and human health impacts, solutions Michigan could immediately implement, and factors that should be considered, such as microplastic particle age, size, shape, type, and location.
-- Research actions that were aligned with best practices and actions taken by other Great Lakes states and Canada.
-- An investigation into the sources of microplastics and the significance of pathways related to environmental and human health impacts of microplastics.
-- A list of long-term research objectives and strategies for reducing microplastics in the Great Lakes, which would have to be updated annually and made available to the public.
-- An impact assessment framework for microplastics consistent with best available science and research and based on the best available information on exposure of microplastics to organisms, including humans, through pathways identified under the investigation identified above.
-- Approaches to reduce the introduction of microplastics into the Great Lakes from significant pathways and sources, with an emphasis on the sizes, shapes, and types of microplastics that were associated with significant environmental and human health impacts.
-- Recommendations for policy changes, including statutory changes, or additional research that could be needed, and solutions to control microplastic introduction into the Great Lakes, such as source elimination, pathway intervention, and public education and outreach.
-- A timeline to implement the statewide microplastics research and monitoring plan and reduce the impacts of microplastics on the Great Lakes.
-- A list of potential barriers to implementation that included estimated costs and potential funding sources.

To develop and implement the statewide microplastics research and monitoring plan, EGLE could use existing information and leverage ongoing Federal efforts and efforts of Michigan and other states, when possible.

By July 1, 2026, EGLE would have to submit the statewide microplastics research and monitoring plan to the Legislature. By January 30, 2029, EGLE would have to submit a report to the Legislature regarding the implementation of the statewide microplastics research and monitoring plan.

To the extent that funds were available from bonds and other sources, including Federal funds, by July 1, 2028, EGLE would have to adopt and implement the statewide microplastics research and monitoring plan.

"International Joint Commission" would mean a binational organization established by the governments of the United States and Canada under the Boundary Waters Treaty of 1909, and whose responsibilities were expanded under the Great Lakes Water Quality Agreement of 1972.

"Microplastics" would mean a solid plastic particle that has at least three dimensions and measures less than five millimeters in size and that may contain chemical additives or other substances. Microplastics would not include naturally occurring, non-chemically modified polymers.

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