How Cos. Can Mitigate Increasing Microplastics Liability Risk

By **James Maxwell and Whitney Miner** (April 10, 2025)

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Rising global concerns about the potential effects of microplastics on human health have driven increasing awareness about sources of human exposure. The appointment of Robert F. Kennedy, Jr., as secretary of the U.S. Department of Health and Human Services may also add to this scrutiny of microplastics, given his assertion in a 2023 op-ed that plastic is a "crisis for human health and the environment."[1]

A University of New Mexico Health Science study released in February highlighted that plastic particles are being detected in the human body in increasing levels.

Scientists found that the total mass concentrations of plastics found in the brain increased approximately 50% in the past eight years, and that the plastic detected appeared much smaller than previously appreciated — in the range of 1 nanometer, or 1 billionth of a meter.[2]

Polyethylene, which is used in packaging and containers like bottles and cups, was the most common polymer detected in the study.[3]

Developments like these have fueled a growing wave of threatened and actual class action litigation against manufacturers in the consumer product and food and beverage industries over microplastics.

These disputes assert a variety of claims, including failure to warn of the alleged harmful effects of microplastics in products, false labeling of products as "natural" or "BPA free" when they allegedly contain microplastics, and false labeling of products as "100% recyclable" when they allegedly can never be fully recyclable.

This article looks at the growing threat of microplastics litigation, and offers practical tips for consumer product and food and beverage manufacturers to limit liability exposure — including ensuring compliance with labeling laws, considering alternative packaging, carefully managing contracts with suppliers, reviewing insurance coverage and auditing production processes.

U.S. and EU Regulation of Microplastics

"Microplastics" are defined by the U.S. Environmental Protection Agency as plastic particles ranging in size from 1 nanometer to 5 millimeters.[4] California was the first state to formally define microplastics, and borrows from the EPA's definition.[5]

Some microplastics are defined as "primary," meaning they are intentionally manufactured in small sizes for use in consumer products such as cosmetics or biomedical products.[6] Others are defined as "secondary," meaning they are plastic particles that break down from larger plastic materials, such as food wrapping, tires and synthetic textiles.[7]

Larger microplastics are likely to degrade into smaller particles through chemical weathering

processes, mechanical breakdown and even through the digestive processes of animals.[8] These smaller particles are called nanoplastics, and are a subset of microplastics that cannot be seen by the human eye.[9]

To date, the U.S. has not enacted any laws banning microplastics in foods or consumer products.[10] This is because there is no conclusive scientific evidence that justifies such action. Indeed, the U.S. Food and Drug Administration has stated that "the presence of environmentally derived microplastics and nanoplastics in food alone does not indicate a risk and does not violate FDA regulations unless it creates a health concern."[11]

While many studies have reported the presence of microplastics in foods — including salt, seafood, sugar, beer, bottled water, honey and milk — current scientific evidence does not demonstrate that the levels of microplastics detected in foods pose a risk to human health.[12]

Additionally, because there are no standardized methods for how to detect, quantify or characterize microplastics, many of the scientific studies asserting concerns about potential harm have used methods of questionable or limited accuracy, rendering them unreliable.[13]

The FDA has also noted that "[t]here is not sufficient scientific evidence to show that microplastics and nanoplastics from plastic food packaging migrate into foods and beverages."[14]

In contrast to the U.S., the European Union has imposed certain restrictions regulating the use of microplastics. For example, the EU adopted a regulation that restricts the use of synthetic polymer microparticles on their own or intentionally added to mixtures.[15]

The regulation includes a phased implementation, with initial measures like bans on plastic glitter and microbeads, that went into effect in October 2023.[16]

Potential Changes Under the Trump Administration

Now that Kennedy has been sworn in as HHS secretary, it will be important to track whether the agency issues any more guidance or regulations related to alleged microplastics in food and personal care products.

Prior to his appointment, Kennedy vowed to reduce the use of plastics and chemicals. In his 2023 op-ed, he voiced his concerns that "toxic chemicals used in everyday items such as plastic packaging can cause cancer and birth defects."

Since assuming office, Kennedy has not made any further comments about plastics in food and consumer products, and it remains to be seen whether HHS will act anytime soon.[17]

Litigation Trends

Recent litigation trends in this area have revolved around threatened or actual class actions against consumer product and food and beverage manufacturers, alleging failure to warn of harmful effects of microplastics in products, false labeling of products as "natural" or "BPA free" when they allegedly contain microplastics, and false labeling of products as "100% recyclable" when they allegedly can never be fully recyclable.

Federal district courts have been inconsistent in their treatment of such claims. In March,

the U.S. District Court for the Northern District of Illinois dismissed a class action complaint in Daly v. Wonderful Co. LLC.

The plaintiffs brought claims against a distributor and seller of Fiji bottled water advertised as "Natural Artesian Water," when the plastic from the bottles allegedly leached into the water and exposed consumers to substances causing harmful health effects.[18] The plaintiffs cited to various scientific studies about microplastics, but none that related to Fiji Water specifically.[19]

The court found the plaintiffs' allegations insufficient to "[nudge] their claims across the line from conceivable to plausible," and cautioned that:

> [A]llowing a suit of this type to proceed on this basis would basically open the door to enabling any purchaser of any consumable product to file a lawsuit simply saying, "I bought product X, and it contains microplastics" (or "forever" chemicals, or heavy metals, or whatever) and thereby get past a motion to dismiss and into discovery and class certification proceedings. Given the context (consumable products claimed to include contaminants), plausibility requires more.[20]

Conversely, in Miller v. Philips North America LLC, the U.S. District Court for the Northern District of California was asked to decide whether the plaintiffs stated plausible claims against manufacturers for their alleged misleading advertising, marketing, labeling and packaging of infant bottles and cups as being "BPA free." The plaintiffs alleged that the manufacturers failed to disclose to consumers that their products leached microplastics when used as directed.[21]

In February, the court denied a motion to dismiss, finding that the plaintiffs plausibly alleged a material omission for failure to disclose an unreasonable safety hazard, in part because they cited to a relevant 2020 study documenting that feeding bottles made from polypropylene — the same material the defendants used in their products — released microplastics in high volumes.[22]

In contrast to the Daly court, the Miller court found that although the plaintiffs failed to test the specific products at issue, the studies they cited of similar products provided sufficient circumstantial evidence to infer a similar rate of release of microplastics during the use of the defendants' products.[23] The court further noted that the plaintiffs were not required to allege the specific level of microplastics at the pleading stage.[24]

Importantly, however, this case is still in its early stages, and the plaintiffs have merely alleged plausible theories sufficient to withstand an initial motion to dismiss.

Last August, in yet another case, Bruno v. BlueTriton Brands Inc., the U.S. District Court for the Central District of California dismissed a class action complaint against a defendant beverage company that allegedly mislabeled its Arrowhead bottled water products as "100% Mountain Spring Water," despite containing microplastics.[25]

The plaintiffs alleged various claims under state laws, including violations of California's False Advertising Act, Unfair Competition Law, Business and Professions Code, and Consumer Legal Remedies Act.[26]

The court found that the plaintiffs' claims were preempted by the Federal Food, Drug, and Cosmetic Act because they required the defendant to include additional or different information on a federally approved label, and that the "claims necessarily involve questions

regarding the appropriate level of microplastics in bottled water and its impact on human health, which has also been deferred to the FDA."[27]

The court found that the issues raised by the plaintiffs were better suited for the FDA to address, and that dismissal of the complaint was warranted under the primary jurisdiction doctrine.[28] The plaintiffs amended their complaint, and then voluntarily dismissed it days later.

Mitigating Litigation Risk From Claims Over Microplastics in Consumer Products

In the face of rising concerns about potential microplastics in food and product packaging, and the potential for litigation, consumer product manufacturers should consider the following measures to minimize exposure.

Product Labeling

Stay apprised of evolving laws regarding the labeling of products potentially containing microplastics to ensure compliance.

Consider implementing an educational disclosure to consumers by briefly explaining what microplastics are, and how the FDA and EPA are monitoring evolving research on any impacts of microplastics.

Collaboration With Suppliers and Investment in Packaging Research

Organizations should ensure that suppliers are certified and adhere to industry standards related to environmental impacts. Consider requiring proof of compliance with any local, national and international regulations that restrict the use of microplastics.

Consider collaborations between organizations and suppliers to identify alternatives to plastic materials, or investments in research and development to create more sustainable and ecofriendly products.

In 2022, scientists at the Massachusetts Institute of Technology identified silk protein as a potential replacement for plastics, since it is nontoxic, able to withstand processing, and can be sourced from low-quality fiber discarded from textiles.[29]

Contract Management

Incorporate liability clauses in contracts with suppliers of raw materials and products, to hold them accountable for violations of evolving microplastics laws, and to indemnify for any claims arising from use of their materials.

Insurance Coverage

Review insurance policies to ensure adequate coverage against regulatory fines or lawsuits related to noncompliance with evolving microplastics laws.

Audits and Testing

Use a third party to audit supplier facilities to ensure they are complying with all applicable sustainability and environmental regulations.

With regard to testing of microplastics, as discussed above, there is no consistent methodology to utilize at this time. But it is best to stay apprised of industry-accepted and widely utilized methods that test for microplastics, as they evolve.

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[1] Kennedy, Robert F., Jr., "Biden has totally failed to curb plastics pollution; I have a plan to fix it," The Hill, Sept. 15, 2023, https://thehill.com/opinion/energy-environment/4204203-biden-has-totally-failed-to-curb-plastics-pollution-i-have-a-plan-to-fix-it/ (last accessed on April 10, 2025).

[2] Haederle, Michael, "UNM Researchers Find Alarmingly High Levels of Microplastics in Human Brains — and Concentrations are Growing Over Time," UNM Health Sciences News, Feb. 28, 2025, https://hscnews.unm.edu/news/hsc-newsroom-post-microplastics-human-brains (last accessed on March 30, 2025).

[3] Id.

[4] EPA, "Microplastics Research", Water Research, https://www.epa.gov/water-research/microplastics-research (last accessed on March 30, 2025).

[5] See California State Water Resources Control Board Resolution No. 2020-0021 (June 16, 2020). "'Microplastics in Drinking Water' are defined as solid polymeric materials to which chemical additives or other substances may have been added, which are particles which have at least three dimensions that are greater than 1 nm and less than 5,000 micrometers (µm). Polymers that are derived in nature that have not been chemically modified (other than by hydrolysis) are excluded." The Water Board qualified its definition as follows: "Evidence concerning the toxicity and exposure of humans to microplastics is nascent and rapidly evolving, and the proposed definition of 'Microplastics in Drinking Water' is subject to change in response to new information. The definition may also change in response to advances in analytical techniques and/or the standardization of analytical methods." https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2020/rs2020_0021.pdf (last accessed on March 31, 2025).

[6] Id.

[7] Id.

[8] Id.

[9] Id.

[10] Note that certain federal agencies have imposed regulations on microplastics in

different contexts. The EPA, for example, regulates microplastics under the Clean Water Act and the Safe Drinking Water Act. Other states have started passing laws in response to concern about microplastics — including, for example, California, which adopted California's Microplastics Strategy in 2022 to require monitoring of microplastics in drinking water (see Cal. Pub. Res. Code § 35635), and the California Prevention and Packaging Producer Responsibility Act (see CA PUB RES § 42040) aimed at reducing plastic waste generally in the state by requiring producers of single-use packaging and plastic foodware to take responsibility for the entire lifecycle of their products.

[11] FDA, "Microplastics and Nanoplastics in Foods," https://www.fda.gov/food/environmental-contaminants-food/microplastics-and-nanoplastics-foods (last accessed on March 30, 2025).

[12] Id.

[13] Id.

[14] Id.

[15] Seitz, Amanda, "Health and Human Services will lay off 10,000 workers and close agencies in a major restricting," Associated Press, March 28, 2025, https://apnews.com/article/health-human-services-layoffs-restructuring-rfk-jr-fa4e89285e668a3939e20b6cf4c26fd4 (last accessed March 30, 2025) (discussing projected HHS layoffs of over 10,000 people, and promises that HHS is "going to do more with less").

[16] Commission Regulation (EU) 2023/2055 — Restriction of microplastics intentionally added to products, https://eur-lex.europa.eu/eli/reg/2023/2055/oj/eng; https://single-market-economy.ec.europa.eu/sectors/chemicals/reach/restrictions/commission-regulation-eu-20232055-restriction-microplastics-intentionally-added-products_en (last accessed March 30, 2025).

[17] Id.

[18] Daly v. Wonderful Co. LLC, No. 24 C 1267, 2025 WL 672913 (N.D. Ill. March 3, 2025).

[19] Id.

[20] Id.

[21] Miller v. Philips N. Am. LLC, No. 24-CV-03781-RFL, 2025 WL 582160 (N.D. Cal. Feb. 20, 2025).

[22] Id.

[23] Id.

[24] Id.

[25] Bruno v. BlueTriton Brands Inc., No. CV 24-1563-MWF (JPRX), 2024 WL 3993861 (C.D. Cal. Aug. 8, 2024).

[26] Id.

[27] Id.

[28] Id.

[29] Chandler, David L., "Silk offers alternative to some microplastics," MIT News, https://news.mit.edu/2022/silk-alternative-microplastics-0720 (last accessed March 30, 2025); Kempe, Ysabelle, "Silkworms Spin a Potential Microplastics Substitute," Scientific American, https://www.scientificamerican.com/article/silkworms-spin-a-potential-microplastics-substitute/ (last accessed March 30, 2024).