



AmericanCoatings

ASSOCIATIONSM

July 27, 2023

Safer Consumer Products Program
California Department of Toxic Substances Control (DTSC)
1001 I Street
Sacramento, CA, 95814

RE: California's Department of Toxic Substances Control's (DTSC's) Safer Consumer Products (SCP) Program's Proposal to add Microplastics to the Candidate Chemicals List

Dear Ms. Williams:

The American Coatings Association (ACA) submits the following comments to the California Department of Toxic Substances Control (DTSC) regarding its proposal to add microplastics (MPs) to its Candidate Chemicals List. ACA is a voluntary, nonprofit trade association working to advance the needs of the paint and coatings industry and the professionals who work in it. The organization represents paint and coatings manufacturers, raw materials suppliers, distributors, and technical professionals. ACA serves as an advocate and ally for members on legislative, regulatory, and judicial issues, and provides forums for the advancement and promotion of the industry through educational and professional development services. ACA appreciates the opportunity to comment and looks forward to working with the DTSC's Safer Consumer Products Program throughout the process.

ACA values DTSC Safer Consumer Products Program's continued efforts to evaluate products for chemicals that may be of concern to human health and/or the environment. ACA and its members understand how important and concerning microplastics are to the environment and human health. While ACA appreciates DTSC's proposal to add microplastics to its Candidate Chemicals List, ACA has concerns about the scope of the proposal, the definition being proposed, and current gaps in scientific data on this topic.

Microplastics are Not a Chemical

As guidance for microplastics classification is limited, ACA recommends that DTSC consider aligning its classification with known guidance on hazardous substances. According to U.S. Occupational Safety & Health Administration's (OSHA) Guidance for Hazard Determination, "the physical properties of a substance can be directly related, in many cases, to the probability of the substance representing a physical hazard. However, the fact that a substance has a certain physical property cannot necessarily be used to predict a physical hazard."¹ DTSC is currently relying on physical properties to assume the hazardous nature of microplastics.

ACA does not agree that a microplastic can be classified as a chemical. While there is global agreement on the size qualifications, microplastics can be made up of a wide variety of chemical structures. In addition, it has been noted by several scientific studies that many identification methods are needed to

¹ OSHA. Guidance for Hazard Communication. <https://www.osha.gov/hazcom/ghd053107#process> (last visited on July 25, 2023).

create an accurate chemical classification of microplastics, as each microplastic is unique in structure.² These studies showcase that microplastics cannot be chemically characterized and therefore do not count as a class of chemicals.

DTSC's Efforts to Define Microplastics Exceeds the Statutory Authority Granted to the Safer Consumer Products Program

Two statutory authorizations permit DTSC to pursue regulatory actions within this area. First, under California Health & Safety Code (HSC), § 25252(a), the DTSC is required “to establish a process to identify and prioritize...chemicals...in consumer products that may be considered as being a chemical of concern.” Furthermore, the DTSC should consider: (1) the volume of the chemical in commerce; (2) the potential exposure to the chemical in a consumer product; and (3) the potential effects on sensitive populations (i.e., infants and children. Second, under HSC § 25253(a)(1), the DTSC must “establish a process for evaluating chemicals of concern in consumer products, and their potential alternatives, to determine how best to limit exposure or to reduce the level of hazard posed by a chemical of concern.”

Since microplastics are made up of a variety of chemicals and chemical structures, microplastics themselves are too broad to be a chemical. As such, the authority in the statutes only permit the classification and identification of chemicals and not the broad classification of products (or small portions of products) that consists of multiple chemicals. The department must specify the particular chemical (or chemicals) of hazardous concern. For example, paints and coatings are subject to air quality regulations. Within those regulations, such as the regulations put forth by the California Air Resources Board, specific chemicals are identified. With respect to microplastics, if DTSC identifies a specific chemical or chemicals to be of particular concern, only then can the DTSC restrict the presence of that chemical(s).

Furthermore, the statute granting authority to DTSC states under HSC § 25257.1(a) and (b) that this statute “does not limit the department’s any other agency’s existing authority over hazardous materials” and does not “supersede the regulatory authority of any other department or agency.” In California, just about every paint and coating is subject to strict air quality rules because of potentially harmful volatile organic compounds (VOC) within the paints and coatings. Although there are many instances where products fall under multiple compliance requirements, the authority granted to DTSC cannot exceed the authority that mandates air quality. Any proposed regulations must address the potential areas of overlap to ensure consistency, and the DTSC has not adequately addressed or acknowledged that paints and coatings already abide by environmental and health regulations dictating VOC emissions.

DTSC's Definition Does Not Align with Proposed Global Regulations

As the global scientific and regulatory community continue to discuss microplastics, it is important that current scientific data and global regulatory perspectives are considered for consistency. The European

² Sarkar S, Diab H, Thompson J. “Microplastic Pollution: Chemical Characterization and Impact on Wildlife,” *Int. J. Environ. Res. Public Health*. 2023 Jan 18;20(3):1745. doi: [10.3390/ijerph20031745](https://doi.org/10.3390/ijerph20031745); (This study indicated that no single technique provides sufficient information for the comprehensive physical or chemical characterization of MPs, which generally requires several techniques to be used in conjunction with one another.)

Vitor H. da Silva, Fionn Murphy, José M. Amigo, Colin Stedmon, and Jakob Strand. “Classification and Quantification of Microplastics (<100 µm) Using a Focal Plane Array–Fourier Transform Infrared Imaging System and Machine Learning,” *Anal. Chem.* 2020, 92, 20, 13724–13733. Publication Date: September 18, 2020. <https://doi.org/10.1021/acs.analchem.0c01324>. (This study indicated that polymer identification is complex and various analytical methods and measurement modes are needed for proper analysis depending on particle size).

Union (EU) is currently in the process of finalizing their proposal to regulate the addition of intentionally added synthetic polymer microparticles.³ ACA requests that DTSC consider amending the proposal to align with the European Union’s current restriction regarding microplastics, which puts forth:

Synthetic polymer microparticles are polymers that are solid, and which fulfil both of the following conditions:

- (a) are contained in particles and constitute at least 1 % by weight of those particles; or build a continuous surface coating on particles;
- (b) at least 1 % by weight of the particles referred to in point (a) fulfill either of the following conditions:
 - (i) all dimensions of the particles are equal to or less than 5 mm;
 - (ii) the length of the particles is equal to or less than 15 mm and their length to diameter ratio is greater than 3.⁴

In addition, the European Union’s current restriction regarding microplastics also includes a clarification on the size of the synthetic polymer microparticles that are covered under the proposed restriction. The language is as follows:

Where the concentration of synthetic polymer microparticles covered by this entry cannot be determined by available analytical methods or accompanying documentation, in order to verify the compliance with the concentration limit... only the particles of at least the following size shall be taken into account:

- (a) 0,1 µm for any dimension, for particles where all dimensions are equal to or smaller than 5 mm;
- (b) 0,3 µm in length, for particles that have a length that is equal to or smaller than 15 mm and a length to diameter ratio greater than 3.⁵

As microplastics and microparticles can drastically vary in size, it is important to delineate a size range. As the EU proposal notes, many currently recognized test methods are only able to identify microplastics of a specific size range. In order to properly test for the presence of microplastics or microparticles, a size range is needed for verification of their presence. ACA urges DTSC to consider including a size range within their definition of microplastics.

While ACA understands that DTSC is trying to align with California State Water Resources Control Board (SWRCB) definition that was adopted in 2020, scientific research has resulted in a more accurate mechanism for defining microplastics. The document titled “Green Ribbon Science Panel Background Document: Microplastics” that was authored by DTSC and the Safer Consumer Products Program acknowledges that there would be several challenges to adding MPs to the Safety Consumer Products Program due to rapidly changing science and the lack of an agreed upon definition for microplastics.⁶ The

³ Annex to the Commission Regulation (EU) .../...of XXX amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards synthetic polymer microparticles. May 8, 2023.

⁴ *Id.*

⁵ *Id.*

⁶ Brushia, Rob, et. al., “Green Ribbon Science Panel Background Document: Microplastics,” Department of Toxic Substances Control, Safer Consumer Products, published Nov. 2021, (p.2) (This report noted that, “To add microplastics as a “chemical” for the purposes of SCP’s regulatory framework, it would be necessary to develop a definition around the particle size, polymer type,

report then says, “[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.” ACA strongly recommends that DTSC follow its own guidance and amend the definition to reflect the current working definition being adopted by the proposed EU definition as it utilizes the best available science and takes into consideration industry feasibility.

As DTSC notes in their proposal, microplastics can be categorized by their origin; ‘primary microplastics’, microplastics which are intentionally added to formulations, and ‘secondary microplastics’, those formed through the degradation and break down of larger plastics (such as packaging) into progressively smaller pieces. While the DTSC notes the differences in origin between primary and secondary microplastics, the proposed definition does not offer any distinction between the two, which negates the distinction. ACA suggests that DTSC could address this issue by aligning with the current EU proposed definition as it incorporates best available scientific data, input from various industries, and only includes intentionally added polymer and plastics within its scope. The proposed EU definition acknowledges that only intentionally added plastics and polymers should be regulated due to the lack of scientific data and standard test methodologies for nearly all industries in scope. The paint and coatings industry continues to conduct research on its products with respect to both primary and secondary microplastics in the environment, but the development of this data is still underway. ACA encourages DTSC to utilize current available science, which focuses mainly on primary sources of microplastics.

ACA believes that it would be advantageous for DTSC to align with the EU as it will promote global consistency. As DTSC notes in its proposal, microplastics are known to be environmentally persistent so alignment with international regulatory bodies would aid in the global initiative to limit the introduction of new microplastics into the environment.

In addition, DTSC’s Safer Consumer Products Program utilizes many of the EU’s consumer product and chemical regulations as a method of determining which chemicals get added to the Candidate Chemicals List. Alignment with the EU would create a consistent approach to limiting microplastics and remain consistent with the Safer Consumer Products Program’s use of European Regulations as a criterion for which chemicals get added to the Candidate Chemicals List.

Other Considerations

ACA appreciates that DTSC’s Safer Consumer Products Program is concerned about the environmental persistence and mobility of microplastics. However, the data on human health impacts is limited. In a report titled “Dietary and inhalation exposure to nano- and microplastics particles and potential implication for human health” the World Health Organization notes, “concern has also been expressed about the lack of standardized methods required for robust assessments [to human health].”⁷ The report also discusses a general lack of methods for determining polymeric composition of particles, as many studies were not able to identify particle composition and therefore risk. ACA encourages DTSC to

shape, and/or other properties and to identify one or more hazard traits and endpoints shared by all particles that meet this definition.”)

⁷ World Health Organization, “Dietary and inhalation exposure to nano- and microplastics particles and potential implications for human health.” August 30, 2022. <https://www.who.int/publications/i/item/9789240054608>.

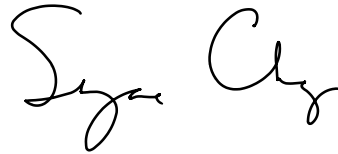
recognize that many necessary studies and standardized test methods are needed to accurately regulate microplastics.

ACA appreciates the opportunity to provide comments on this issue and we look forward to continuing to work with DTSC as this rulemaking progresses. ACA urges DTSC to consider making additional changes as noted in the comments above. Please do not hesitate to contact us if you have any questions or require additional clarification.

Sincerely,

A handwritten signature in blue ink, appearing to be 'KB'.

Katherine Berry
Director, Sustainability & Environment

A handwritten signature in black ink, appearing to be 'Suzanne Chang'.

Suzanne Chang
Counsel, Government Affairs