



SEHSC
Silicones Environmental,
Health, and Safety Center

November 21, 2019

Via certified mail and electronic mail

Lori Miyasato, Ph.D.
Panel Liaison
Scientific Review Panel on Toxic Air Contaminants
California Air Resources Board
1001 I Street, 2nd Floor
P.O. Box 2815
Sacramento, CA 95812

Re: Comments on draft proposed updates to the chemical substances list in Appendix A of the AB 2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines regulation

Dear Dr. Miyasoto:

The Silicones Environmental, Health, and Safety Center (SEHSC) of the American Chemistry Council (ACC) appreciates the opportunity to provide these comments for consideration as the Scientific Review Panel (Panel) reviews draft proposed updates to the chemical substances list in Appendix A of AB2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines (EICG) regulation.

We understand that the goals of the AB2588 "Hot Spots" Program are to identify facilities having potential for localized impacts; evaluate health risks; notify nearby residents of significant risks; and ultimately to reduce risks below a level that protects human health.¹ And, per California Health & Safety Code § 44321, the California Air Resources Board (CARB) is responsible for compiling and maintaining a list of substances for inclusion in the Program. In that regard, Section 44321 specifies that the list must contain chemical substances that appear on certain lists as well any substances recognized by CARB as presenting an acute or chronic threat to public health when present in the ambient air.

General Comments

To ensure transparency and to facilitate a rigorous assessment of the scientific basis for adding chemical substances to the Program, the underlying toxicological threat or risk associated with each chemical substance that is being considered for addition should be explicitly identified. This is particularly important for those chemical substances on the draft proposed list that reference "7" as the "Source List," which corresponds to § 44321(f) (i.e., substances recognized by CARB as presenting an acute or chronic threat to public health when present in the ambient air). Simply declaring that a substance purportedly satisfies such criteria absent any supporting

¹ See <https://ww3.arb.ca.gov/ab2588/overview.htm>.

evidence is inadequate. Besides addressing the specific hazard(s) presented by a given substance, the supporting rationale should include evidence demonstrating that the substance can be present in the ambient air. This additional information is necessary to inform an assessment of the extent to which each substance represents a risk to public health from exposure in ambient air.

The draft proposed list includes an individual entry for “Decamethylcyclopentasiloxane (D5)” (Index No. A-143) as well as entries for “Cyclosiloxanes, including but not limited to:” (Index No. A-518), “Decamethylcyclopentasiloxane (D5)” (Index No. A-519), “Dodecamethylcyclohexasiloxane (D6)” (Index No. A-520), and “Octamethylcyclotetrasiloxane (D4)” (Index No. A-521). SEHSC will be providing additional comments on D5 and the potential inclusion of cyclosiloxanes as a group in supplemental comments that will be provided during the regulation amendment process.

D4, D5, and D6 do not warrant inclusion in the AB2588 “Hot Spots” Program. The chemical substances do not present a chronic or acute threat to public health when present in the ambient air. Notably, human health risk evaluations completed by the governments of Canada and Australia both confirmed negligible risks to human health from exposure to D4, D5, and D6. Health Canada’s assessment of each substance included an evaluation of concentrations of D4, D5, and D6 found in ambient air near and away from point sources. The Health Canada assessments for D4, D5, and D6 each evaluated reproductive, developmental, immunological, endocrine, and liver effects. The assessments for D4 and D5 also included an evaluation of carcinogenic effects. For each cyclosiloxane substance, Canada’s human health risk assessment concluded that the substance was “not entering the environment in a quantity or concentration or under conditions that constitute or may constitute a danger in Canada to human life or health.”² The Australian Department of Health’s National Industrial Chemicals Notification and Assessment Scheme (NICNAS) human health assessment of D4, D5, and D6 reached similar conclusions.³ These assessments conducted by competent regulatory authorities demonstrate that the substances do not pose any chronic or acute threats to public health when present in the ambient air.

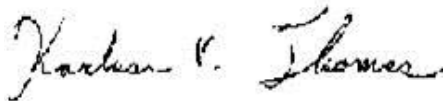
We note also that the U.S. Environmental Protection Agency (EPA) has specifically excluded such cyclosiloxanes from the definition of volatile organic compound (VOC) under the federal Clean Air Act (CAA) for ozone control purposes based on a determination that the chemical has negligible photochemical reactivity. See 40 C.F.R. § 51.100(s)(1), 59 Fed. Reg. 50693 (Oct. 5, 1994).

² <http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=2481B508-1>
<http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=13CC261E-1>
https://www.ec.gc.ca/ese-ees/FC0D11E7-DB34-41AA-B1B3-E66EFD8813F1/batch2_540-97-6_en.pdf

³ https://www.nicnas.gov.au/chemical-information/imap-assessments/imap-assessment-details?assessment_id=2031#cas-A_556-67-2
https://www.nicnas.gov.au/chemical-information/imap-assessments/imap-assessment-details?assessment_id=2030#cas-A_541-02-6
https://www.nicnas.gov.au/chemical-information/imap-assessments/imap-assessment-details?assessment_id=2029#cas-A_540-97-6

The concentrations of D4, D5, and D6 found in ambient air do not pose a risk to human health and, as a result, including those substances would not further the goals of the AB2588 "Hot Spots" Program.

Sincerely,

A handwritten signature in cursive script that reads "Karluss Thomas".

Karluss Thomas
SEHSC Senior Director