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VIA ELECTRONIC SUBMISSION

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RE: **Comments on California Air Resource Board Proposed Amendments to the Consumer Products Regulation for VOC Limits presented at the November 7, 2019 Public Workshop and discussed at the March 10, 2020 Public Workgroup meeting**

Dear Mr. Calavita:

Unilever United States Inc. is pleased to offer additional comments to our letter of December 6, 2019 on the California Air Resources Board (ARB) proposed amendments for Article 2 of its Consumer Products Regulation as presented at the November 7, 2019 public workshop and the March 10, 2020 Public Workgroup meeting.

Unilever is committed to reducing the greenhouse gas impact of our products across their lifecycle as part of the Unilever Sustainable Living Plan and we look forward to working with California ARB to achieve our mutual air quality goals. We thank California ARB for seeking input from a diverse group of stakeholders and we hope that Unilever's comments will help inform on the science to advance an actionable and effective regulation.

We are concerned that the challenging VOC reduction targets proposed by California ARB to improve air quality may not be achievable in the short term without increases in the use of the greenhouse gas such as HFC-152A. We strongly urge California ARB to consider the adoption of Maximum Incremental Reactivity (MIR) targets as an approach to reduce the amount of ground level ozone created while reducing use of greenhouse gases (HFC-152A), specifically in the three personal care product categories under consideration: hair finishing sprays, no rinse shampoo, and deodorant body sprays, which is part of the personal fragrance products with less than 20% fragrance category.

Reactivity is sound science and a reduction in the MIR of a product always leads to a reduction in ozone, whereas, reductions in ozone production do not always result from mass-based reductions in VOC. That is, MIR gives a definite decrease in ozone production, whereas VOC reductions may give much less than expected. It should be noted that CARB has used a reactivity-based approach for regulating aerosol coatings

for over 18 years, and recently implemented this approach for multi-purpose lubricants. The US Environmental Protection Agency has used reactivity for aerosol coatings as well.

Using a reactivity-based approach as an alternative to the proposed VOC reduction targets is a proven approach and it would provide increased flexibility to product formulators to develop new formulations to attain known reduction of smog generation potential in consumer products, while minimizing the use of greenhouse gases, such as HFC-152A.

Further, VOC targets give no incentive for companies to invest in formulation development that use lower reactivity materials, i.e., those that generate less smog, and particularly materials with lower greenhouse gas emissions. Using MIR targets would enable CARB to ensure that formulation changes drive the appropriate ozone reduction rather than using VOC targets, which are easier to administer but less effective at reducing ozone and smog.

During the November 7, 2019 workshop, CARB indicated that “future reactivity limits [are] dependent on industry development of test method procedures.” Further in late February 2020, CARB indicated that it was working on developing reactivity equivalents to VOC values for these product categories and agreed to share them with industry. Unilever, as well as other members of industry, has offered to work with CARB in developing and providing the information and test methods so that CARB can begin to use a reactivity-based approach to regulate these product categories. Unilever has maintained an open dialogue with CARB staff on reactivity, presenting data and information on how and why a reactivity-based approach would be beneficial in order to decrease smog production. Further, industry has provided three years of data to CARB staff, including reactivity data, with the thought that this would be used to provide a more productive rulemaking, which includes reactivity.

In order to assist CARB in allowing for a reactivity-based approach, Unilever would gladly further collaborate with CARB and other members of industry to develop analytical test methods. These test methods would be to aid in the enforcement of reactivity measures for consumer products. Additionally, we encourage additional discussions so that we can align on what MIR targets might look like for different product categories.

If a reactivity limit can be used to achieve an equivalent VOC reduction and provide industry with flexibility, this would be a win for the Agency, industry and, most importantly, the people of California. However, at the March 10, 2020 Public Workgroup meeting, CARB indicated that no reactivity limits would be proposed for the 2023 targets. This was the first mention of this, nearly 10 months into the rulemaking process. We urge CARB to reconsider a reactivity-based approach for both 2023 and 2031 compliance dates within this new rulemaking.

We are appreciative of California ARB’s willingness to work collaboratively with industry. We would like to stress that the proposed targets for personal care products (e.g., hair finishing sprays, no rinse shampoos, deodorant body sprays) are extremely challenging and are very unlikely to be achievable in the short term without increases in the use of HFC-152A. We strongly recommend that CARB reconsider the adoption of MIR targets for these product types to give us the option to balance the required reductions in smog generating potential in California with our mutual desire for a reduced GHG footprint.

Unilever appreciates the opportunity to provide these comments and we look forward to future dialogue on the proposed VOC limit regulations.

Respectfully Submitted,



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