

May 1, 2020

Joe Calavita Manager Consumer Products Implementation Section California Air Resources Board AQPSD P.O. Box 2815 Sacramento, CA 95812

By email: csmrprod@arb.ca.gov Re: Comments on Consumer Products Regulation amendments – Workshop, April 14th, 2020

Mr. Calavita,

I am writing on behalf of Women's Voices for the Earth, a national environmental health advocacy organization whose mission is to eliminate the toxic chemicals that harm our health and communities. We represent thousands of people in the state of California, interested in protecting environmental and human health from toxic chemicals exposure.

We strongly support the proposal to sunset the 2% fragrance exemption in the CARB regulations. We believe that the exemption erroneously fosters "special" treatment of the fragrance industry that is unmerited, given current technology. An argument has been made that both trade secrets and the "inherent complexity of fragrance mixtures" should allow for more lax regulations of fragrances compared to other VOC-emitting substances. While the need for trade secret protection may historically have been true to an extent – it certainly is no longer valid. Advances in GC/MS technology make the very specific speciation of fragrance houses – all of whom have the capability of reverse engineering their competitor's fragrances. There are no valuable secrets of fragrance ingredient formulas being kept between competitors anymore – the secrets of ingredients are merely being kept from consumers and regulators – at a cost to our health and our air quality. (This is not to say that there isn't valuable confidential business information currently held by the fragrance industry. Certainly, there are plenty of secrets of fragrance from suppliers to sourcing to extracting and blending techniques – it is just that these valuable secrets are not affected by simple disclosure of fragrance ingredients.)

We do not support the proposal to extend the deadline for sunsetting the exemption until 2031. The deadline in 2027 should be long enough to make the changes to the small percentage of products actually using the fragrance exemption. Extending the deadline to 2027 does little to inspire innovation – and merely continues greater exposure to fragrances and greater emissions of VOCs for a longer time at the expense of our health and environment.

VOCs affect our outdoor air pollution and our health equally whether they come from fragrance or from any other source. CARB should be treating all industries equitably when it comes to reducing VOC emissions. The special treatment for fragrance, is really an artifact of a former time (and is unfortunately perpetuated by other laws as well.). But the reality is that there is nothing more inherently complex about fragrance compositions than other types of chemical products, and fragrance is not inherently more difficult to speciate and understand. The exceptions and exemptions granted to fragrance are merely leading to unnecessary excess emissions and increased adverse health effects from exposure to fragrance.

Public Health Benefits of Sunsetting the 2% Fragrance Exemption

In addition to the reductions in VOCs that would result from sunsetting the exemption, there are potential public health benefits as well.

Sunsetting the exemption could result in a greater availability of fragrance-free products. Research has shown that there is a considerable proportion of the population that have reported adverse reactions to fragranced products. In a national survey, **over 34% of respondents in the U.S. reported health problems, such as migraine headaches and respiratory difficulties**, in response to exposure to fragranced products.¹ In addition, skin allergies to fragrance are well documented in the scientific literature. Between 2-11% of the general population experience skin allergies to fragrance.^{11,111} The only way to avoid an allergic reaction to fragrance consistently is to use fragrance-free products. But for some product categories, fragrance-free options are difficult to find. Sunsetting the exemption could encourage manufacturers to develop more fragrance-free alternatives for these audiences.

Sunsetting the exemption could also lead to reductions in overall fragrance exposure by the public, which will also have public health benefits. There are numerous adverse health impacts known to be caused by exposure to fragrance. For example, **exacerbations of asthma and COPD** can be triggered by fragrance exposure.^{iv,v,vi} **Neurological impacts such as migraines** have also been associated with fragrance exposure.^{vii,viii} And, as mentioned above, between 2-11% of the general population suffers skin allergies to fragrance. Encouraging a market of products with either less fragrance or no fragrance would reduce these outcomes.

Sunsetting the exemption could also result in greater innovation in the fragrance industry. Clearly, CARB's VOC limits (and the lowering of these limits over the years) has led to considerable innovation in many industries towards creating products with lower emissions of VOCs. The ongoing exemption, however, has not spurred innovation of this kind in the fragranced products industry – and in fact, it may have encouraged higher VOC emissions than necessary.

Specific additional concerns:

Proposed estimate of 25%VOC/75%LVP for some fragrance needs quality data for justification

We also disagree with the proposed policy of allowing most fragrance categories to be estimated at 25% VOC/75%LVP. Again, this is an unjustifiable exception being made just for fragrance, and a significant benefit that is not afforded to other industries. While the speciation of fragrance was only infrequently submitted in the 2016 CARB survey, (due perhaps to claimed trade secrets) it is untrue that the speciation is unable to be done or even difficult to do. CARB had extremely limited data to work from to develop its estimates, solely due to a lack of transparency from the fragrance industry. No doubt there are fragrances with less than 100% VOCs, but similarly there are certainly fragrances that have greater than 25% VOCs. It is not in the interest of environmental health to underestimate VOC emissions when they can in fact be calculated more accurately. We believe it would be much more equitable, and encourage greater transparency to continue to assume that all fragrance is 100% VOC, but allow manufacturers to submit full speciation of their fragrance compositions to demonstrate a different VOC/LVP ratio, if needed to comply with limits.

For the cleaning products sector particularly, speciation should be considerably simpler today than it was just a few years ago when the CARB fragrance manufacturers survey was conducted in 2016. Since the passage and implementation of SB 258 in California in 2017, many cleaning product manufacturers now disclose online the vast majority of the fragrance ingredients in their fragrances (commonly down to .01% of the product formula).^{ix} Several major personal care product manufacturers, such as Procter and Gamble and Unilever have also provided this specific fragrance ingredient information online for their products.^{x,xi}

Clearly there are now many fragrance houses much more willing to disclose fragrance ingredients to their customers than there were in 2016. In turn, manufacturers are much more willing to disclose fragrance ingredients to their customers – and should be equally willing to share this information (as it pertains to VOC emissions) with CARB.

Industry claim that certain product categories would be infeasible without the exemption is not supported.

We noted that the comments letter received from the Fragrance Creators Association in November 2019, made the following statement:

"Fragrance Creators and its members intend to submit data over the coming months to demonstrate the impact of eliminating the 2 percent exemption on specific product categories and to explain why maintaining the exemption—at least at some level—is necessary to ensure that products in these categories remain viable."

However, in a later letter from the Allied Trades (dated March 27, 2020) no further data was submitted. Instead the letter repeats the claim by stating:

"The exemption is an important tool in the formulation toolkit to deliver efficacious products to the market that meet consumers' needs. Without this tool, it is likely that some products (or products with certain scents) would no longer be technologically and/or commercially feasible, because they could not comply with the low VOC limits for the product category with fragrance included in the formulation. Moreover, loss of the exemption would also significantly alter the existing process for formulating and manufacturing consumer products."

It is unclear how these claims are being substantiated by the industry- without specific data – or even examples of products that would not be able to comply. It is unclear how any challenges in complying with new VOC limits are inherently different for products that contain fragrance, than they are for unfragranced products also facing stricter VOC limits. Sunsetting the 2% exemption results in (at most) a 2% reduction in VOC limits for fragranced products. Other categories of products such as Aerosol Crawling Bug Insecticides are facing much larger reductions such as a drop in limit from 15% VOCs to 6% VOCs. Other industries have faced similar reductions on other years – and have been able to innovate and comply.

In summary, we believe that the time is right for CARB to sunset the 2% exemption for fragrance. CARB is the primary state agency responsible for actions to protect public health from the harmful effects of air pollution. The 2% fragrance exemption, unfortunately, both promotes and encourages the unnecessary use of excess fragrance in consumer products, which both harms public health and results in greater air pollution. This is antithetical to the mission of CARB. We support the decision to sunset the 2% fragrance exemption as soon as is feasible.

Sincerely,

Alexandra Scranton Director of Science and Research Women's Voices for the Earth

ⁱ Steinemann A (2016) Fragranced consumer products: exposures and effects from emissions. Air Quality and Atmospheric Health. Volume 9, Issue 8, pp 861–866. December 2016.

ⁱⁱ Schnuch, A., Lessmann, H., Geier, J., Frosch, P.J.and Uter, W. (2004) Contact allergy to fragrances: Frequencies of sensitization from 1996 to 2002. Results of the IVDK. Contact Dermatitis. Vol. 50. pp. 65-76. 2004.

ⁱⁱⁱ Schafer, T., Bohler, E., Ruhdorfer, S., Weigl, L., Wessner, D., Filipiak, B., Wichmann, H.E. and Ring, J. (2001) Epidemiology of contact allergy in adults. Allergy. Vol. 56. pp: 1992-1996. 2001.

^{iv} Sama SR, Kriebel D, Gore RJ, DeVries R and Rosiello R. (2015) Environmental triggers of COPD symptoms: a cross sectional survey. COPD Research and Practice (2015) 1:12

^v Ritz, T.R., Steptoe, A., Bobb, C., Harris, A.H., and Edwards, M. (2006) The Asthma Trigger Inventory: validation of a questionnaire for perceived triggers of asthma. Psychosomatic Medicine. Vol. 68. pp: 956-965. 2006.

^{vi} Kumar, P., Caradonna-Graham, V.M., Gupta, S, Cai, X, Rao, P.N. and Thompson, J. (1995) Inhalation challenge effects of perfume scent strips in patients with asthma. Annals of Allergy, Asthma and Immunology. Vol. 75, pp: 429-433. November 1995.

^{vii} Peris F, Donoghue S, Torres F, Mian A and Wöber C. (2017) Towards improved migraine management: Determining potential trigger factors in individual patients. Cephalalgia. 2017 Apr;37(5):452-463.

viii Silva-Neto RP, Peres MP and Valenca MM (2014) Odorant substances that trigger headaches in migraine patients. Cephalgia, Vol. 34 (1) pp 14-21. (2014)

^{ix} For example, RB is disclosing the names of 15 fragrance ingredients used to create the fragrance in their Lysol Smart Multipurpose Cleaner - Fresh Waterfall scent. http://www.rbnainfo.com/product.php?productLineId=2659

* https://www.unileverusa.com/news/press-releases/2019/unilever-completes-landmark-fragrancedisclosure.html https://www.unileverusa.com/news/press-releases/2019/unilever-completes-landmark-fragrancedisclosure.html

^{xi} https://chemicalwatch.com/58435/procter-gamble-to-reveal-all-fragrance-ingredients-by-2020