# CHURCH & DWIGHT CO., INC.

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February 27th, 2020

Mr. Joe Calavita
Manager, Consumer Products Implementation Division
California Air Resources Board (CARB)
Sacramento, CA 95812-0806
jcalavit@arb.ca.gov

<u>Subject:</u> Comments on California Air Resources Board Proposed Amendments to the Consumer Products Regulation presented on November 7<sup>th</sup>, 2019.

Dear Mr. Calavita,

Church & Dwight Co., Inc., (C&D) a leading Consumer Packaged Goods Company, appreciates this opportunity to comment on the Proposed amendments from CARB, which were presented at a public workshop on November 7<sup>th</sup>, 2019.

The VOC regulations developed by ARB staff are at the leading edge of technology. The CARB regulations have and continue to be a leading example and baseline for regulations all over the United States and are currently being considered by Canada. Therefore, the outcome of the current amendments will have a dramatic and immediate effect on our company, industry and consumers.

C&D shares ARB's interest in improving the Air Quality of California as well as in other areas of the country. Our comments today are solely focused on the No Rinse Shampoo category.

## **Rename Category:**

We fully support the staff's proposal to rename the category from No Rinse Shampoo to Dry Shampoo. Our product has a long, successfully proven and efficacious history of use and has been known as Dry Shampoo to the general consumer since its inception. This product is used by a variety of consumers in a variety of scenarios. The uses vary greatly, but some examples include hospitals, nursing homes, areas where water use is limited, and active individuals who need to refresh their hair after strenuous activities.

#### **Definition for category:**

The definition that is currently in the regulation is technically invalid. Combing, brushing or toweling does not remove all Dry Shampoo. Rather, any excess is removed from the hair by combing, brushing or toweling. Product stays in the hair and continues to remove oil and eliminate odor until the product is washed from the hair during a conventional shower.



Dry Shampoo products remove oil and odor to refresh, renew or revitalize the hair and in doing so, the hair has its natural volume restored.

# Below is the definition that C&D has developed and proposes:

"Dry Shampoo" means a product designed or labeled to be applied to dry hair to clean, absorb oil, or eliminate odor. The product is typically combed, brushed or toweled through the hair, for the purpose of renewing, refreshing, revitalizing (or bringing back volume to the hair) or to maintain personal hygiene. "Dry Shampoo" does not include dry conditioners. Some variants of dry shampoo use colorants to mask the white color of the starch.

# **Proposed VOC Limits for 2023:**

Church & Dwight has spent significant time and resources over the last several years working on a technically feasible solution to reduce the VOC content of our products. In addition, our marketing department has done significant consumer research in this area. As the CARB staff is aware, the current sales weighted average (SWA) VOC content of this product category is well into the high 80% range. The current proposal from ARB staff released on November 7<sup>th</sup>, 2019, is to regulate this product at 50% VOC by 2023.

Unfortunately, C&D cannot support the 50% VOC limit in 2023. C&D can and would support an achievable limit of 55%. A 55% VOC limit for Dry Shampoo category has been proven to be Technologically and Commercially viable. Significant time and resources have gone into this determination.

C&D cannot support 50% VOC in 2023 because testing results have not and cannot be obtained by the effective date. However, C & D can and will support the slightly higher VOC limit of 55% VOC.

C & D understands ARB staff 's desire to have products within the hair care category have the same VOC limits. However, currently the 50% VOC limit for Dry Shampoo is not technically feasible. However, a 55% VOC limit provides substantial VOC reductions over the currently non-regulated product.

#### **Proposed VOC limit for 2027:**

Several comments on the future effective limit for the Dry Shampoo category.

- First, there does not appear to be any reason for the 2027 date. C&D would respectfully ask
  that this date be delayed at least until 2029 or 2030. These dates would give significant time
  for emission reductions before the 2031 State Implementation Plan (SIP) deadline of 2031. In
  addition, this added time would allow the Industry more time to reformulate and refine our
  products to meet this stringent VOC limit.
- Second, the proposed VOC limit of 45% VOC may not be technology feasible. C&D will continue
  its efforts while maintaining open dialogue with CARB to meet this stringent VOC level.
  However, given there is not a commercially viable technology at this time to meet this limit,
  C&D respectfully requests a technology review in 2027. This time frame would allow sufficient
  time if the VOC limit needs to be adjusted.



Lastly, the current emission reductions beyond the 55% VOC limit are not significant. Are these
additional VOC emissions needed considering the amount of resources that will be needed to
accomplish this goal?

## Reactivity for future effective date:

C&D is exploring the possibility of using the Science of Reactivity to meet future effective VOC requirements. The Science of Reactivity is well known and accepted by ARB and EPA. Reactivity reduction is aimed at reducing ozone and not just VOC content. The reduction of an MIR value for a product is an actual reduction in ozone. This same concept cannot be stated for weighted VOC reduction. A VOC reduction does not always ensure a reduction in ozone. The reduction depends on the Reactivity of the actual VOC compounds being reduced.

To consider Reactivity reduction, C&D has to rely on ARB staff to provide Industry information on the Dry Shampoo category, namely the measured amounts of equivalent reductions for the MIR values versus the weighted VOC reductions. ARB staff requested reactivity information during three years of survey data supplied by the Industry, and it is vital that our R & D staff have this information to better assess future options and targets. Without this information our R&D staff does not know what MIR values to target. As has been seen in other categories, namely Aerosol Coatings and Multi-Purpose lubricants, the use of reactivity can provide flexibility and potentially more emission reductions for a category.

C&D respectfully requests this information.

## **Conclusion:**

C&D supports a name change for the No Rinse Shampoo to Dry Shampoo category. In addition, we have submitted a refined Dry Shampoo definition for ARB to review and consider. While C&D cannot support a 50% VOC limit, we can and will support a slightly higher VOC limit of 55%. This higher limit still provides the ARB staff with a significant amount of VOC reduction for this category. Regarding the future effective limit, C&D respectfully request a delay of the proposed effective date as well as a technology review. Lastly, C&D believes Reactivity is a viable option to potentially reduce both VOC and ozone levels and should be considered from a scientific approach. C&D respectfully requests ARB staff to supply much needed Reactivity data.

Thank you for your consideration to these issues. If you need additional information please do not hesitate to contact our VOC consultant, Doug Raymond, at 440-339-4539 or at <a href="mailto:djraymond@me.com">djraymond@me.com</a>.

Sincerely,

Jeffrey Shaul

Director, Global Regulatory Affairs

Church & Dwight Co., Inc.

