

Daniel B. Pourreau, Ph.D. Technical Advisor Lyondell Chemical Company 3801 West Chester Pike Newtown Square, PA 19073

Phone: 610-359-2411 Fax: 610-359-2328 Email: dan.pourreau@lyondell.com

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Clerk of the Board California Air Resources Board 1001 I Street Sacramento, CA 95814

Re: Architectural Coatings Proposed Suggested Control Measure.

Dear Board Members,

As the developer and producer of tertiary-butyl acetate (TBAC), Lyondell Chemical appreciates the opportunity to comment on the proposed Architectural Coatings Suggested Control Measure. TBAC can now be used as a VOC-exempt solvent in architectural and industrial maintenance coatings in 48 out of 50 States and also in Industrial Maintenance coatings in the South Coast District (rule 1113). The PA DEP is now considering an update to its AIM coatings VOC definition to allow the use of TBAC as a VOC exempt solvent.

We are concerned that CARB staff's comments on TBAC in the proposed SCM send the wrong message to the Districts and the regulated community. Staff's 2006 Environmental Impact Assessment on TBAC included an analysis of the potential impacts of a VOC exemption in several product categories, including Architectural and Industrial Maintenance Coatings. Despite using a speculative hazard assessment from OEHHA to estimate a potential chronic risk from TBAC use, the EIA concluded that exempting TBAC would result in significant reductions in ozone and VOC reductions that outweighed any potential chronic concerns. CARB came to essentially the same conclusion in its automotive coatings SCM and advised the Districts to conduct their own CEQA analyses to determine if the exemption of TBAC would result in unacceptable chronic risks. The SCAQMD and SJVUAPCD did so and concluded that a TBAC exemption was appropriate in most, if not all, automotive coating operations.

SCAQMD's 2006 CEQA analysis for rule 1113 included an analysis of the exemption of TBAC in Industrial Maintenance coatings. This analysis used OEHHA's hypothetical chronic risk factor for TBAC and worst-case occupational exposure scenarios. Despite these worst case assumptions, this CEQA analysis showed that exempting TBAC would not result in a significant health risk. Had it been conducted, a similar analysis in architectural coatings would have likely led to the same conclusion, since exposure to architectural coatings is less frequent and less likely to result in chronic exposures than industrial maintenance coatings.

Staff's failure to recommend the exemption of TBAC in this SCM and the reiteration of OEHHA's speculative concerns about the TBA metabolite might suggest that there is more reason for concern about TBAC today than there was in 2006. In fact, the opposite is true. Since CARB published its Environmental Impact Assessment for TBAC in 2006, we have shown to

OEHHA and CARB staffs the results of new studies that cast further doubt about OEHHA's speculation that TBAC "may be considered to pose a potential cancer risk to humans." Furthermore, the US EPA has recently stated that the observed response to TBA in male rats is "probably not relevant to humans for the purpose of risk assessment." This view is consistent with that of several leading experts in carcinogenicity. IARC also concluded that TBA is "not classifiable" as a carcinogen. The new studies also confirm that TBAC has lower acute toxicity than previously estimated and than most solvents in use today; that TBAC has low subchronic toxicity; and that it is unlikely to pose a chronic human risk under either occupational, consumer, or environmental exposure conditions.

Furthermore, there is no doubt that exempting TBAC in AIM coatings would result in significant reductions in VOC emissions from these products, resulting in lower ozone and PM levels statewide. CARB's own EIA for TBAC states that a 1% reduction in VOC emissions at the state level would result in 770 fewer premature deaths over a lifetime. Exempting TBAC in Industrial Maintenance alone would allow CARB and the Districts to lower the VOC content limit from 250 to 100 grams per liter, resulting in additional VOC reductions of 2.21 tons per day, producing an estimated 4.9 tons ozone per day from these emissions, excluding the South Coast District. Statewide, we estimate that the VOC exemption for TBAC in AIM coatings, thinning, and cleanup would result in a VOC reduction on the order of 53 tons per day resulting in approximately 117 tons per day less ozone formed.

There is also little doubt that, if the Districts do not exempt TBAC, there will be an increase in the use of VOC-exempt carcinogens like PERC and methylene chloride in several product categories where they are not specifically banned. Acetone is highly flammable and failure to exempt TBAC would result in more hazardous products due to increased use of acetone. As CARB and the Districts continue to reduce the amount of VOCs permitted in AIM coatings, the need for exempt solvents like TBAC increases. If TBAC is not exempt, some manufacturers will have no choice but to use more flammable, expensive, and carcinogenic exempt solvents. The health and environmental impact of the increased use of these other exempt solvents in AIM coatings has not been evaluated.

Therefore, we request that the Board instruct Staff to recommend the exemption of TBAC in AIM coatings and provide the risk assessment guidance the Districts need. We thank you again for the opportunity to comment and look forward to continuing to work with CARB to achieve the full exemption of TBAC in California.

Sincerely,

Daniel B. Pourreau, Ph.D. Technical Advisor