

www.roofcoatings.org
October 24, 2007

Ms Barbara Fry
Chief, Measures Assessment Branch
Stationary Source Division
Air Resources Board
1001 I Street
POB 2815
Sacramento, CA 95812

Re: Comments on the Final 2007 draft SCM for Architectural Coatings

Dear Ms Fry:

Thank you for the opportunity to participate in the development of the new Suggested Control Measure for Architectural Coatings.

The Roof Coatings Manufacturers Association (RCMA) is the North American trade association representing the producers of bituminous and non-bituminous (acrylic and elastomeric) roof coatings and cements, which are applied in new and resurfacing roofing systems and are also used as repair and maintenance products.

Our members produce functional coatings which could be variously classified under the proposed SCM as Aluminum Roof Coatings, Basement Waterproofers, Bituminous Roof Coatings, Bituminous Roof Primers, Concrete/Masonry Sealers, Driveway Sealers, Industrial Maintenance Coatings, Metallic Pigmented Coatings, Primers, Sealers, Undercoaters, and coatings in other specialty categories.

While RCMA understands and supports the efforts of the California Air Resources Board we still have several concerns with the final version of the proposed SCM. RCMA's comments are given below.

Reactivity – Based Regulation

Many products manufactured by our members use binders, which have viscosities that are strongly sensitive to the quantity and solvency strength of the solvent used. These binders include a variety of bitumen, rubbers and elastomers. It is highly likely that the proposed reductions of mass-based VOC content in some coating categories will result in a net increase in the actual ozone generation as formulators convert existing solvents to lesser concentrations of more ozone-reactive solvents, to obtain comparable viscosity characteristics.

While we realize that some Air Districts are unable to support reactivity-based regulations at this time, we strongly urge the ARB to begin the process needed to switch the SCM for

Architectural Coatings to one based on the actual ozone-generating potential of a coating, rather than the arbitrary mass (weight) of the VOC blend in the product. RCMA recommends and supports basing the SCM on the MIR-based calculation of "grams of ozone generated per liter (or gallon) of product."

RCMA also recommends the inclusion of an "Innovative Product" exception to the SCM. To establish a fixed baseline formula for each specialty-coating category, we suggest using a hypothetical product that uses the Sales-Weighted Average solvent mixture for the product category, based on the most recent ARB survey.

Aluminum Roof Coating

With the addition of this new category, there has been no explanation of the technical merits for the increase in the minimum metal content of these coatings. RCMA is perplexed as to why the Metallic Pigmented category remains at 0.4 lb/gal of elemental metal content, while this new category has been raised to 0.7 lb/gal. While many bituminous aluminum coatings do contain substantially more than 0.4 lb/gal, non-bituminous coatings (those which utilize clear binders) can provide substantial reflectivity and durability with less than 0.4 lb/gal of pigment.

This requirement to increase the amount of aluminum paste in any products, which do not have 0.7 lb/gallon at this time, will inevitably increase the product cost, since aluminum is typically the most expensive ingredient. There has not been any suggestion as to how increasing the aluminum content is related to reducing tropospheric ozone. The additional cost of the extra aluminum paste has not been shown to have any benefit to the end user, nor does it appear to have been included in the estimated additional cost of compliance presented in Table 5 of the Staff Report.

In addition, many producers of aluminum roof coatings have earned the right to qualify their products as meeting EPA's Energy Star Roof Products program. The proposed reduction in VOC limits, coupled with the change in minimum elemental metal content, and the likely resulting incorporation of one or more different, higher ozone generating solvents in new formulations, will undoubtedly necessitate a re-evaluation of Energy Star rated aluminum coatings by producers of those products, taking their current products off the regulated market for a period of more than three years while they reformulate and submit to new three year outdoor testing. So while California wants products that meet Energy Star and other standards on low-slope roofs in California, this regulation has the effect of removing one of those qualified products from the choices its user residents can currently make.

We encourage the ARB consider withdrawing this category and allow these products to remain under the category of Metallic Pigmented Coatings.

Bituminous Roof Coatings

The proposed reduction in the mass-based VOC content of this category from 300 g/l to 50 g/l is a simple ban on the solvent-borne coatings in favor of water based roofing emulsions.

Solvent borne bituminous roof coatings are used for different purposes in California. While much of the roof inventory is compatible with water based roofing emulsions, there remains a fraction of roofs to which emulsions simply cannot be applied. There are a variety of reasons for this, including chemical/material incompatibility of the substrate, the inability to perform

adequate surface preparation, and roof slope. In addition, climate (cool and damp conditions) limit the functionality and performance of water based roofing emulsions. Finally, there are instances when unsuspected roof leaks are discovered where a water-based product cannot be used to effect repairs before the next rain.

RCMA believes that roofing emulsions have already displaced virtually all applications in California for which they are suited, and that much of the residual 15% of users will be unable to convert to emulsion-based products if solvent-borne products are banned from the marketplace.

CARB as a SCM Model in Other Air Quality Management Districts

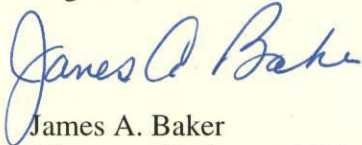
RCMA is greatly concerned with the speculation that other AQMD will be looking to CARB as the model for revisions to there own rules and SCMs. During the revision process, CARB staff acknowledged that climate differences have the ability to impact the application of water based emulsion roof coatings because of low to freezing temperatures, high relative humidity, and frequency of rain, dew, and/or snowfall. For example Chapter 5 Technical Assessment of Categories, Section 3 Bituminous Roof Coatings, Subsection 3 Coating Description:

...other parts of the country (e.g. Northeast and Midwest) are subject to colder or less temperate climates that may not permit the use of waterborne emulsions. Emulsion Bituminous Roof coatings can be adversely impacted by unexpected rain, heavy dew, thick fog, and extremely cold temperatures due to slower cure times compared to solvent borne coatings. Traditional solvent borne bituminous products may be beneficial in less temperate climates because they have the potential to adhere better and withstand sudden shifts in climate.

It is RCMA's expressed hope that other AQMDs will solicit the input of RCMA and industry professionals prior to adopting a rule that is functional for one climate, yet inappropriate for another climate. RCMA and its members are committed to working on developing rules with other AQMDs to find feasible solutions based on their particular climate and conditions.

Lastly, RCMA will continue to discuss and work with the California Air Resources Board to bring about equitable and logical solutions to achieving their goal of overall emission reductions.

Regards,



James A. Baker
Director of Industry Affairs

Cc: Jim Nyarady, California Air Resources Board