

KEVIN J. WILLIAMS

From: Marcks, Barry A@DOT <barry.marcks@dot.ca.gov>
Sent: Wednesday, July 15, 2015 11:55 AM
To: Marc Cooley
Subject: Reactive Penetrating Sealers

Hello Marc,

Caltrans owns and manages 235 State highways with over 50,000 lane-miles of roadways and 13,101 bridges (846 of these are structural steel bridges). Caltrans is an active participant in the Climate Action Team (CAT) which coordinates State agencies climate change efforts. Caltrans also promotes measures and business practices to minimize greenhouse gas (GHG) emissions.

Silane-based reactive penetrating sealers provide a breathable, waterproof barrier for concrete surfaces. This waterproofing surface treatment; reduces the intrusion of chlorides that cause corrosion of rebar, improves freeze/thaw resistance, and it inhibits a process called alkali/silica reactivity that can cause concrete to crack. Caltrans needs to keep silane reactive penetrating sealers as a tool in our maintenance tool box due to their unique chemical properties and effectiveness at protecting concrete. Using reactive penetrating sealers on concrete reinforced bridge structures helps increase the life-cycle and sustainability of California's infrastructure, reducing contributions to GHG emissions associated with bridge replacement.

I noticed in the proposed changes to SMAQMD Rule 442- Architectural Coatings, a definition was added for "Reactive Penetrating Sealers". It looks as though the wording was cut and pasted directly from the CARB 2007 SCM, which is fine. The only problem is in section (250.2) the 2% criteria for water vapor transmission. This is an arbitrary number made up by CARB in the original 2007 SCM to make the category more restrictive. No studies were ever done to verify it. I have not read or heard of a study anywhere that supports it. It is not a criteria or recommendation in ASTM E96/E96M or the National Cooperative Highway Research Report 244 (1981). Nowhere does it mention a 2% water vapor transmission criteria. In a recent Caltrans laboratory study, "Report on Evaluation of Reactive Penetrating Sealers for Concrete", six products were tested to see if they could meet the criterion for "Reactive Penetrating Sealers" as stated in the CARB definition for that category. None met the 2% criteria listed for the water vapor transmission. Four of the six products met the other criteria for VOCs, water repellency and chloride screening. They were found acceptable by Caltrans and placed on a qualified products list for "Reactive Penetrating Sealers".

I propose the language be changed as follows:

250.2 The Reactive Penetrating Sealer must provide a breathable waterproof barrier for concrete or masonry surfaces that does not prevent or substantially retard water vapor transmission. This performance must be verified on standardized test specimens, in accordance with ASTM E96/E96M-12 or ASTM D6490, incorporated by reference in Section 502.4.v

Please call if me you have any questions,

Thanks, Barry Marcks
Associate Chemical Testing Engineer
California Dept. of Transportation Laboratory
5900 Folsom Blvd. Sacramento, CA. 95819
Ph: 916-227-7918
Fax: 916-227-7168

KEVIN J. WILLIAMS

From: Robert Wendoll <Robert.Wendoll@DunnEdwards.com>
Sent: Wednesday, August 05, 2015 2:42 PM
To: KEVIN J. WILLIAMS
Cc: David Darling
Subject: Comments on Proposed Amended Rule 442: Architectural Coatings

Kevin,

Thank you for a succinct presentation at the workshop today.

To recap my comments:

- (1) In the definitions of categories to be eliminated, the statement that “[t]his definition will sunset on (six months after date of adoption)” is problematic, because it implies that the category will still exist, but not be defined. The definition needs to remain (at least in the archived version of the rule) because it will be applicable to coatings that may be covered under the Sell-Through Provision. Alternative wording similar to that used by other local districts that have adopted the SCM would be: “Effective (six months after date of adoption) this category is eliminated and any coating meeting this definition will be subject to the VOC limit for the applicable category in Table 1, except as provided in Section 302.”
- (2) Simplifying the Sell-Through Provision will make it easier to read and comprehend. Again, this is language similar to that used by other local districts: “A coating manufactured prior to (six months after date of adoption) may be sold, supplied, or offered for sale for up to three years and six months after date of adoption, provided that the coating complied with all applicable provisions of Rule 442 (effective January 1, 2004; incorporated by reference) at the time of manufacture. Such coating may also be applied at any time, both before and after (six months from date of adoption). This section does not apply to any coating supplied in a container that does not display the date or date code required by Section 401.1.”
- (3) Thanks for proposing to add an Early Compliance Provision. Suggested language: “Prior to (six months after date of adoption), any coating that meets a definition in Section 200 for a coating category listed in Table 1, and complies with the applicable VOC limit in Table 1 and with Sections 302 and 401 shall be considered to be in compliance with this rule.”

If you have any questions regarding these comments, please feel free to contact me.

Regards,

RWendoll

.....
Robert Wendoll | Director of Environmental Affairs

Dunn-Edwards Corporation

4885 E. 52nd Place | Los Angeles, CA | 90058-5507

323.826.2663 office | 323.826.2653 fax

robert.wendoll@dunedwards.com | www.dunedwards.com

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August 7, 2015

Mr. Kevin Williams and Mr. Marc Cooley
Sacramento Metropolitan AQMD
777 12th Street, 3rd Floor
Sacramento, CA 95814

RE: Sacramento Metropolitan AQMD's Proposed Amended Rule 442 for Architectural Coatings; ACA Comments

Dear Mr. Williams and Mr. Cooley:

The American Coatings Association (ACA)¹ appreciates the opportunity to submit the following comments on the proposed amended Sacramento Rule 442 Architectural Coatings rulemaking.

A. Compliance Date

ACA appreciates that the District has included a six-month compliance period after the adoption date of the regulation in the draft rule. However, ACA requests a one-year compliance period after the adoption date of the regulation to give manufactures adequate time to develop and launch compliant products, as well as set up product "lock-out" programs and inform distribution networks and customers of the impending changes to the regulations. Other air districts in California such as the South Coast Air Quality Management District allow three plus years for compliance. Under the circumstances, we believe that one year is appropriate.

B. Existing Rule 442

ACA urges the District to retain the existing Rule 442 to maintain continuity and clarity in the rule. The District should keep the existing Rule 442 on the Sacramento Metropolitan AQMD website to assist the regulated community in understanding and referencing the existing architectural coatings rule details—such as the VOC limits, definitions for coating categories that have been eliminated, and sell-through products. The Sacramento Metropolitan AQMD should, however, include a short description before each rule letting the user know that regulated entities must comply with the updated Rule 442 dated X-XX-15, and the 5-24-01 version is included solely for reference.

C. Eliminated Category Definitions

In the definitions of categories to be eliminated, the statement that "[t]his definition will sunset on (six months after date of adoption)" is problematic because it implies that the category will still

¹ The American Coatings Association (ACA) is a voluntary, nonprofit trade association working to advance the needs of the paint and coatings industry and the professionals who work in it. The organization represents paint and coatings manufacturers, raw materials suppliers, distributors, and technical professionals. ACA serves as an advocate and ally for members on legislative, regulatory and judicial issues, and provides forums for the advancement and promotion of the industry through educational and professional development services.

exist, but not be defined. The definition needs to remain (at least in the archived version of the rule) because it will be applicable to coatings that may be covered under the Sell-Through Provision. Alternative wording similar to that used by other local districts that have adopted the SCM would be: “Effective (six months after date of adoption) this category is eliminated and any coating meeting this definition will be subject to the Volatile Organic Compound (VOC) limit for the applicable category in Table 1, except as provided in Section 302.”

D. Sell-through Provision

Simplifying the Sell-Through Provision language will make it easier to read and comprehend. Again, this is language similar to that used by other local districts: “A coating manufactured prior to (six months after date of adoption) may be sold, supplied, or offered for sale for up to three years and six months after date of adoption, provided that the coating complied with all applicable provisions of Rule 442 (effective January 1, 2004; incorporated by reference) at the time of manufacture. Such coating may also be applied at any time, both before and after (six months from date of adoption). This section does not apply to any coating supplied in a container that does not display the date or date code required by Section 401.1.”

E. Early Compliance Provision

Early compliance is critical for certain new and evolving coating types. ACA recommends the following language in Rule 442 to clarify that early compliance is acceptable: “Prior to (six months after date of adoption), any coating that meets a definition in Section 200 for a coating category listed in Table 1, and complies with the applicable VOC limit in Table 1 and with Sections 302 and 401 shall be considered to be in compliance with this rule.”

F. 2-amino-2-methyl-1-propanol (AMP)

ACA requests that the Sacramento Metropolitan AQMD exempt AMP, or 2-amino-2-methyl-1-propanol, as a VOC in Rule 101 (General Provisions and Definitions) consistent with the U.S. Environmental Protection Agency’s exemption for this compound. The coatings industry is under constant pressure to reformulate products to lower VOC content and reduce emissions. As a result, coating formulators need all available tools to formulate lower-VOC and lower-reactivity coatings, and there is a critical and urgent need for safe, effective, and affordable exempt solvents like AMP. AMP is a very useful solvent for coatings formulations, and we urge the Sacramento Metropolitan AQMD to exempt it.

Thank you for your consideration of our comments. Please feel free to contact us at (202) 462-6272 if you have any questions.

Sincerely,

/s/

David Darling, P.E.
Senior Director, Environmental Affairs

/s/

Timothy Serie, Esq.
Counsel, Government Affairs

*** Sent via email ***

ARB Comments on Sacramento Metropolitan Air Quality Management District Rule 442:
Architectural Coatings

SECTION 200: DEFINITIONS

1. Please revise the Faux Finish Coating definition (Section 222.5) to indicate that clear topcoats must be sold and used as part of a system:

A clear topcoat to seal and protect a Faux Finishing coating that meets the requirements of Section 222.1, 222.2, 222.3, or 222.4. These clear topcoats must be sold ~~or~~ and used solely as part of a Faux Finish coating system, and must be labeled in accordance with Section 401.10.

2. As the word “intumescent” is used in the definition of Fire-Resistive Coating you may wish to define intumescent, as the San Diego Air Pollution Control District did in Rule 67.0.1:

INTUMESCENT: A material that swells as a result of heat exposure, thus increasing in volume and decreasing in density.

3. Please modify the definition of Quick Dry Primer, Sealer and Undercoater (Section 249) to cite Section 502.4.f, not 502.4.f.1:

QUICK DRY PRIMER, SEALER AND UNDERCOATER: A primer, sealer or undercoater that is dry to the touch in 30 minutes and can be recoated in 2 hours when tested in accordance with ASTM Designation D1640-9503(2009), incorporated by reference in Section 502.4.f.1. (This definition will sunset on (six months after date of adoption)).

4. The definitions for Waterproofing Sealer (Section 276), Waterproofing Concrete/Masonry Sealer (Section 277) and Waterproofing Membrane (Section 278) do not appear in alphabetical order.

5. Please remove the extraneous parenthesis appearing at the end of the definition for Wood Preservative (Section 280):

WOOD PRESERVATIVE: A coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with both the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code (U.S.C.) Section 136, et seq.) and with the California Department of Pesticide Regulation.)

SECTION 300: STANDARDS

1. Please place a "1" by the entry on Table 1 (Section 301) for Low-Solids Coating to cite the footnote indicating the VOC limit is expressed as VOC Actual.
2. Please modify Section 307 as follows, referencing corrected definition section numbers:

COATINGS NOT LISTED IN SECTION 301: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table 1 in Section 301, the VOC content limit shall be determined by classifying the coating as a Flat coating or a, Nonflat, or Nonflat - High Gloss coating, based on its gloss, as defined in Sections 2245, 23442, 240 and 23543, 241 and the corresponding Flat, Nonflat, or Nonflat - High Gloss Coating VOC limit in Table 1 shall apply.

SECTION 400: ADMINISTRATIVE REQUIREMENTS

1. As the 2007 Suggested Control Measure for Architectural Coatings (SCM) indicates that Industrial Maintenance Coatings are to be labeled for industrial and professional use only, please modify Section 401.4 as follows:

INDUSTRIAL MAINTENANCE COATINGS: In addition to the information specified in Sections 401.1, 401.2 and 401.3, each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of the container in which the coating is sold or distributed one or more of the descriptions listed in Sections 401.4.a through 401.4.e~~b~~.

- a. "For industrial use only."
- b. "For professional use only."
- c. ~~"Not for residential use" or "Not intended for residential use."~~

2. Please insert the words "clear topcoat" in the labeling requirements for Faux Finishing Coatings (Section 401.10). This wording was inadvertently left out of the 2007 SCM:

FAUX FINISHING COATINGS: Effective (six months after date of adoption), the labels of all clear topcoat Faux Finishing coatings shall prominently display the statement "This product can only be sold or used as part of a Faux Finishing coating system."

3. The 2007 SCM requires that all Zinc-Rich Primers be labeled for professional use only. Please modify Section 401.14 as follows to reflect the 2007 SCM:

ZINC RICH PRIMERS: Effective (six months after date of adoption), the labels of all Zinc Rich Primers shall prominently display ~~one or more of the descriptions listed in Sections 401.14.a through 401.14.c.~~ statement

~~a. "For industrial use only."~~

~~b. "For professional use only."~~

~~c. "Not for residential use" or "Not intended for residential use."~~

KEVIN J. WILLIAMS

From: Steckel, Andrew <Steckel.Andrew@epa.gov>
Sent: Friday, July 24, 2015 10:16 AM
To: KEVIN J. WILLIAMS; Sutkus, Carol@ARB
Cc: Lazarus, Arnold; Drake, Kerry
Subject: EPA no comment on Sacramento rule 442



**United States Environmental
Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901**

July 24, 2015

Transmittal of EPA Rule Review Comments

To: Kevin Williams, Sacramento Metropolitan Air Quality
Management District
kjwilliams@airquality.org

Carol Sutkus, California Air Resources Board
csutkus@arb.ca.gov

From: Andrew Steckel, Rulemaking Office Chief
steckel.andrew@epa.gov

Re: Rule 442, Architectural Coatings (rev.7/1/15)

We have reviewed the draft rule identified above and have no comments or recommendations at this time. Please direct any questions in this regard to me at (415) 947-4115 or to Arnold Lazarus at (415) 972-3024.



www.roofcoatings.org

September 18, 2015

Mr. Marc Cooley
Associate Air Quality Engineer
Program Coordination
Sacramento Metropolitan Air Quality Management District
777 12th Street, 3rd Floor
Sacramento, CA 95814

RE: Sacramento Metropolitan Air Quality Management District – Proposed Amended Rule 442 on Architectural Coatings

Dear Mr. Cooley:

The Roof Coatings Manufacturers Association (RCMA) and its member companies appreciate the opportunity to provide the following comments in regards to Sacramento Metropolitan Air Quality Management District (SMAQMD or the District) Rule 442.

Background on the Roof Coatings Manufacturers Association

For over 30 years, RCMA has served as the national trade association representing the majority of manufacturers of asphaltic and solar reflective roof coatings and the suppliers to the roof coatings industry. Roof coatings protect commercial and residential roofs against water, chemicals, and physical damage extending the life of the roof system, reducing building-owner costs and preventing tear-off waste. Roof coatings have numerous benefits to energy use and the environment. Reflective roof coatings reduce roof temperatures, which in turn reduce the Urban Heat Island Effect, air conditioning costs, and peak energy use. The vast majority of RCMA member companies are family-or employee-owned, privately held small businesses.

Over the last few decades, ninety percent of VOC content has been eliminated from roof coatings. Of significant concern to RCMA members are the ever-increasing regulations governing volatile organic compounds (VOC) in coatings. VOCs are contained in roof coatings for several reasons. Solvent-based coatings typically cost less, they can be used as an alternative to waterborne technologies; especially where freeze/thaw resistance and product application and storage in cooler climates or in winter months is required. VOCs are used to dissolve solids, and to keep coatings in a liquid phase, allowing them to be applied prior to the solvent evaporating and the product curing to form a solid layer. Another key reason that coatings may be formulated with VOCs is because of the solvents' ability to soften the substrate that the coating is being applied to, improving adhesion, application, and the ultimate performance of the coating. As VOC content limits are lowered in different roof coating architectural and industrial categories, the effectiveness of the product is compromised.

Proposed Definitions & Comments

RCMA would like to provide the following comments and suggested revisions for further clarification and to minimize confusion on the proposed amended AIM rule:

A. Roof Coatings

RCMA and its members know of the variety of uses and benefits to roof coatings. We suggest *adding* the various uses of roof coatings to round out the definition.

253. "Roof Coating: A non-bituminous coating labeled and formulated for application to exterior roofs for the primary purpose of preventing water penetration into the underlying surface; or reflecting heat and ultraviolet radiation, or sealing and protecting the substrate or restoring; or preserving the surface appearance and integrity."

B. Exempt Compounds

The District is proposing that based on CARB reasoning, TBAC is unnecessary for industrial maintenance coatings, and pose a health risk per the California's Office of Environmental Health Hazard Assessment's (OEHHA) evaluation.¹ RCMA strongly believes the District should fully exempt tertiary butyl acetate (TBAC) to be consistent with the Environmental Protection Agency. TBAC was exempted for industrial maintenance coatings after SCAQMD staff conducted a very conservative risk assessment and found that TBAC-based coatings would not pose a health threat.²

Additionally, the District's reasoning that there are waterborne coatings that manufacturers can use as a viable option is only partially true. Our members report that with the removal of TBAC, water based coatings will not work as well, which will impact the duration of the product, or more use of it for effectiveness. Therefore, we suggest that the District exempt TBAC for industrial and architectural coatings.

Conclusion

RCMA and its member companies are dedicated to developing products that minimize negative impacts on air quality while offering coatings with performance characteristics consumers require. We are pleased with the progress that SMAQMD has made, but would like to continue the progress in a feasible manner that does not impact quality of the end-product.

The Association appreciates the positive relationships we have built with the Sacramento Metropolitan Air Quality Management District and looks forward to continuing collaboration to work toward improved air quality and achievable regulatory activities.

Sincerely,



John Ferraro
Executive Director
Roof Coatings Manufacturers Association (RCMA)
750 National Press Building
529 Fourteenth Street, NW
Washington, D.C. 20045

¹ "Environmental Impact Assessment of Tertiary-Butyl Acetate." CARB, January 2006.

² "Staff Report Proposed Amended Rule 1113." SCAQMD. April 2011