



AmericanCoatings
ASSOCIATION

May 5, 2016

Joan Niertit
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4178

RE: April 20 SCAQMD Method 313 Round-Robin Conference Call, ACA Comments

Dear Joan:

The American Coatings Association (ACA)¹ would like to provide the following comments on the April 20 SCAQMD Method 313 Round-Robin Conference Call.

1. **Enforcement and Reproducibility:** ACA asked that SCAQMD focus on enforcement and reproducibility as it evaluates the round-robin process. ACA requested a “round-robin” in the first place in order to ensure measurable and enforcement and compliance metrics. ASTM standards (including ASTM D6886) include reproducibility/repeatability numbers so that companies can account for the method precision in the VOC content of the product. The lab to lab reproducibility of Method 313 has never been determined so labs currently cannot account for lab to lab reproducibility discrepancies. The District 10% is out of date and doesn’t account for potential issues with Method 313. As such ACA requests the District utilize the resultant data from this roundrobin/survey to update or revise the dated 10% enforcement policy.
2. **Scope of Round-Robin:** ACA request that the District maintain a full ASTM round-robin to ensure more precise and reliable results. SCAQMD suggested during the call that a full ASTM type round-robin consisting of at least 7 samples, duplicate samples, 6 labs would be too resource intensive both for SCAQMD and the labs participating in the round-robin. Instead SCAQMD suggests a “survey” where 3 coatings are analyzed with no duplication. Once the initial survey is complete, the results will be reviewed and additional steps would then be taken--including more testing, changes to the method, etc.

ACA understands that an ASTM style round-robin will require more resources, however we believe the extra work will be worth it since ASTM methods are well tried and tested and produce statistically significant and precision results. It is unclear what the SCAQMD survey will produce, and how the

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.

information will be used and where it will be documented. ACA suggests increasing the sample size to 7 (as recommended by ASTM) and run duplicates in order to provide the necessary info needed to get a fair and accurate picture of the methodology and to ensure statistically meaningful results.

Finally, ACA suggests that additional coatings be included in the round-robin/survey, including metal parts, plastic parts, adhesives, etc since the District intends to include Method 313 is all coatings rules. While Method 313 has been adopted for Rule 1113 (architectural coatings), ACA believes that including additional coatings in the round-robin allow is essential should SCAQMD broaden the use of Method 313 to different coatings categories.

- 3. Prequalification Process:** While SCAQMD has commented that the poor ASTM 6886 precision numbers resulted from industry labs not properly following D6886, however the SCAQMD's prequalification process, by design, will bias the results and make the Method 313 reproducibility numbers "better". In addition, the District needs to better explain why the prequalification process is needed and what the process will entail, so that labs can determine if they want to participate in this survey. ACA suggests a detailed and published procedure for how labs are to be qualified or disqualified. It appears some of the pre-screening process may be outlined in Section 11.2 of the Method, however the attachments presented on the call (discrimination profile; Page 2 and Page 3) do not appear to be part of the Method. A standard should be a stand-alone document where in theory, two people using the same standard, analyzing the same coating, should be able to produce results that are very similar. If not the standard needs to be adjusted.

Notwithstanding our suggestions above, ACA questions the need for a prequalification process if the quality assurance/quality control (QA/QC) procedures are properly spelled out in the standard, and there is a commitment from labs that they will follow the standard. Further the prequalification process will likely limit the number of participating labs. As an alternative to prequalification, we suggest that labs certify that they will follow the SCAQMD Method 313. ACA is concerned that if too many labs are not qualified (less than 6) it would call into question the reproducibility/repeatability of the method and therefore its validity.

There is also a risk of bias in the data analysis by disqualifying labs with a "pre-qualification step." One option would be to use blind standard mixtures along with the paint samples and if too much variation exists in the control samples, it may lead to revisions to the method or better understand the different scenarios where the method may not work as intended, i.e., different equipment.

Finally, one industry lab does not have the capability of having two detectors on the same column. These labs are not set up to have part of the column eluent going to an FID detector and the other part of the eluent going to MS. As such they can run the column to the FID detector and then in a separate run go to the MS, but cannot do both at the same time from one column. Will this be a problem? Also THF and methanol are mentioned as extraction solvents. Can a different solvent such as acetonitrile, assuming that we demonstrate good recovery?

- 4. Types of coatings to be tested:** ACA suggests at least a flat and a semigloss coating (VOC contents near the 50 g/l limit) and a polyurethane (near the 275 g/l limit - since there have been problems with self-crosslinking polyurethanes since they can decompose at the 255 C injection port temperature of Method 313 – possibly leading to an overstatement of VOC content).
- 5. Lab Visit:** ACA suggests a lab visit would be very helpful, and suggests the visit possibly occur in July, once some of the round-robin/survey parameters have been nailed down.

Please let us know if you have any questions

Sincerely,

/s/

David Darling, P.E.

Managing Director, Health, Safety and Environment