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The Journal of the Southern Aerosol Technical Association

Spring 2015



President's Message

Elena Badiuzzi ITW Pro Brands

Dear colleagues,

I hope this newsletter finds you and your organizations doing well. I am pleased to announce that **SATA**'s Aerosol 101 and Spring Meeting were both well-attended, successful events. First, I would like to thank all the speakers who donated their time and expertise to make these meetings possible. In addition, **Pierce Pillon** (ITW Techspray) and **Irene Bolling** (Zep/Amrep), with the support of **SATA**'s Technical and Regulatory Committees, did a wonderful job coordinating both events. I would also like to thank **Ryan Dailey** (CyCan Industries) for his AV support and **Larry Beaver** (RSC Chemical Solutions) for again moderating the Regulatory Roundtable.

In truth, every Board member (and **SATA** member for that matter) contributes to the success of the association. As a **SATA** member, I think it is important for you to know that your Board is a group of very dedicated individuals who are always interested in your feedback. Please feel free to approach any one of us to share your thoughts.

As we turn our attention to this year's **SATA** Fall Meeting being held in Hilton Head, you will notice two changes that were driven by your suggestions. First, Thursday night's reception will be held outdoors, weather permitting. The second change is that Saturday night's dinner will be more casual. If you haven't already done so, please mark September 24-27th on your calendar and make plans to attend. Enclosed is registration information for both the hotel and conference.

Have a great summer and see you this fall!

All the best,

Elena Badinggi

UPCOMING EVENTS

September 24-27, 2015

SATA Fall Meeting

Hilton Head Marriott Hilton Head, SC

CHECK OUT THE NEW SATA WEBSITE!

www.southernaerosol.com

Registration and details for the Fall Meeting will be available there.

PLEASE BE SURE TO UPDATE SATA

In our continued efforts to ensure you are receiving the most value from your SATA membership it is important that we have your correct email address. Please be sure to send changes to

southernaerosol@gmail.com

BECOME A WEBSITE SPONSOR

What a wonderful way to get your web site advertised while at the same time helping to keep the public and our membership abreast of what's happening in the aerosol industry!

Allow us to link our web site,

www.southernaerosol.com to yours
and receive immediate results. Your cost
is only \$120 per year with paid fall event
sponsorship!

Contact: Pat Martin southernaerosol@gmail.com

2015 SPRING EDITION AEROSOL 101 SUMMARIES

BUDDY CARHART's, Exal, presentation Aerosol Can Technology (Aluminum) kicked off Aerosol 101. Setting the stage by explaining that the typical extrusion line is over 300-feet long, Buddy began by reviewing the process that takes an aluminum slug through the extrusion press and all the way down the line to a finished product. Several steps including trimming, washing, and coating were reviewed. Once the can is produced, Buddy explained the process of lithographing a customer's label onto the can. Following lithography, it's time for the cans to be necked down and finally bundled or palletized for shipment. Any scrap aluminum is sold to a recycler and, in many cases, ends up as a beverage container within 60 days! Conversely, since aluminum is infinitely recyclable, new aerosol can technology such as the 3000 Series alloy utilizes recycled beverage stock to make aerosol cans. Once the audience had a good feel for the manufacturing process Buddy delved into can sizes, pressure ratings, shoulder profiles, curl styles and types. The presentation wrapped up with a review of the information a customer must provide to place an order: can size, pressure specification, inside lining, size of opening, shoulder profile, curl type and plain vs. printed can.

JOHN SAALWACHTER, Ball Corporation, as a new format, the A101 committee decided this year to combine the 2-part and 3-part steel can presentations together. We were fortunate to obtain John Saalwachter to present *Aerosol Can Technology (2 pc & 3 pc steel)*. John gave a thorough discussion of the manufacturing similarities and differences of the 2-part and 3-part container construction, lithography, and testing. Also included were step-by-step progression of the can process from sheet to final product. Of particular note was the fact that John included data and examples from his competitors to give a fully rounded picture of the entire steel can aerosol package to the audience.

KEVIN VERVILLE, **Technical Service Manager**, **Summit Packaging Systems**, **Inc.**, presented an introduction to *Aerosol Valve and Actuator Technology*. The objective of the presentation was to provide a basic overview of aerosol valves including valve types, components, product design, and valve technology. Kevin reviewed industry nomenclature for the valve components, discussed the basic considerations that must be used in selecting valves and actuators, and summarized the technology available today. Some of the details that were highlighted during Kevin's presentation were the use and selection of barrier packs (bag-on-valve), the variety of actuators available and how their designs meet formulation and product demands, mounting cup and gasket technology and testing, the valve body design, and finally dip tube selection.

SEAN FITZGERALD, **Cobra Plastics**, presented a value added approach to aerosol **Caps**. Beginning with various materials used in the manufacture of the cap. He explained the different resin types available, colors and styles to enhance the overall aerosol package. He explained various mold design considerations that add specific functionality to cap consideration as in child proof, tamper resistance, spray though and other interactive styles. Key point considerations included can style, material options, and designs. He also explained the various quality control steps used from initial design through manufacturing and delivery. He also explained the overall importance of the cap as a primary component of the aerosol package.

AEROSOL 101 SUMMARIES

DOUG RAYMOND, Raymond Regulatory Resources, (3R), gave the attendees a powerful presentation concerning VOC issues that face our industry. He kept the format simple, progressing from what a VOC is in the regulatory sense to what a VOC is in the physical sense, its role in air pollution and the steps industry has taken to mitigate this. As a second issue, he discussed the trend of some agencies to move from VOC percentage reporting to Maximum Incremental Reactivity (MIR) values, specifically in coatings. We're sure the attendees gained a basic and thorough understanding of a term they've all heard (VOC) yet because of their different areas of expertise, may not have known exactly what a VOC is or how critical this issue has become.

WILLIAM VANOVER, **RSC Brands** presented a very insightful talk on the principles of quality control. Using RSC operations as his guiding examples, William discussed compliance methods, defining noncompliance, verification stations in a high level process operations flow, and statistical process controls (SPC). Of considerable interest was his inclusion of continuous improvement teams and the role the team "DNA", or makeup, plays in the team's success. The objective of assembling a well-balanced team relies on the correct balance among the four types of personalities – taskmaster, energizer, participator, and analyzer. This was a very well-received presentation.

DANIEL BONNER, Aeropres presented Propellants Use & Safety. He opened the presentation with the basic definition of an aerosol as being a substance enclosed under pressure which is released as a fine spray driven by a propellant. Propellants usually consist of either liquefied or compressed gases. Examples of liquefied gases are natural gas liquids (propane, butanes), di-methylether, 152A, and 134A. Compressed gases are CO2, nitrogen and compressed air. Mr. Bonner named several properties to consider when choosing a propellant for a certain aerosol product. Identified were vapor pressure which influences how the product will be dispensed (spray, foam or stream) and solubility/miscibility which determines whether the propellant has the capability to mix with solvents or other products. Further consideration was given to product formulation by taking into account the density of the propellant and the pressure effects of azeotropic blends. LPG (liquefied petroleum gas) or natural gas liquids propellants may consist of propane, isobutane, normal butane, pentanes or blends of either. LPGs used as propellants are derived from the natural gas stream via a separation or fractionation process. Further processing is required to remove sulfur compounds and moisture in order to bring the gases to proper aerosol specification levels. Common NGL blends consist of propane and n. butane and/or isobutane to reach a vapor pressure of between 32 to 110 psig at 70 degrees F. Propellant blends most common to the industry are A-70, A-46 & A-85. Daniel also covered alternative propellants such as 152A, 134A, DME and the recently commercialized 1234ze. Each has its own assets such as DME's solubility advantages, 152A's non-VOC classification, 134A's non flammability and 1234ze's non flammability and non GWP value. Compressed gases, consisting of CO2 (carbon dioxide) and nitrogen were discussed and the role they play in a smaller percentage of aerosols. Daniel touched on the regulatory restraints on propellants headed by VOC (volatile organic compounds) legislation which became effective in the 1990s. The EPA defined VOCs as a reactive substance which contribute to smog formation. The MIR (maximum incremental reactivity) scale, adopted by CARB and the EPA, measures the tendency of a chemical to form ozone. A chart was presented indicating the MIR values of propellants. Also, discussed was propellant flammability, storage tank farm safety and gas detection.

2015 SPRING EDITION AEROSOL 101 SUMMARIES

JIM McBRIDE, MBC Aerosols, presented the section on *Production and Filling Technology*. As well as giving a history of aerosol filling machinery (the first ones from the 1950's), Jim explained the various stages of the process including product filling, crimping, and different types of gassing technologies. Ancillary equipment such as tippers, cappers, & tube tapers were also seen. Gas house technology was reviewed followed by bag-on-valve, continuous spray, and piston product filling methods and equipment. A look at future packaging requirements and the challenges these pose to the equipment manufacturers concluded Jim's presentation.

SPRING MEETING SUMMARIES

DOUG RAYMOND, Raymond Regulatory Resources (3R) presented Aerosol Regulatory Update: Federal, Regional, Canada.

CARB - Consumer Products Survey & general enforcement actions. Interestingly, hair styling products and windshield account for the highest amounts of fines.

LVP Exemption - review of the CARB/SCAQMD research on the fate of LVP-VOC's in the environment. There are questions remaining that still need to be addressed by the studies.

Rule 1177 (SCAQMD) – This has targeted delivery of LPG gases since 2012 (the suppliers took the "hit"). Mr. Raymond discussed the need to prevent downstream users from being targeted in the rule.

Rule 1161 (SCAQMD) - concerns mold release products. Noted that these products are already regulated per CARB, not SCAQMD.

SNAP - amendments released in Summer 2014. The target of interest here is HFC 134a and the intent is to remove this ingredient from all consumer aerosols and many technical aerosols as well. The amendments are set to be finalized in Spring 2015 despite industry requests for extensions.

Also, Mr. Raymond reviewed a draft plan for Green Chemistry (California) categories to be selected over the next 3 years.

DAVID PASIN, President and Founder of TBF Environmental Technology Inc., presented Green Solvents-The Bottom Line. After giving an overview of the company and the markets it serves, he discussed some of the issues with both traditional solvents and green solvents. Although there are increasing environmental and regulatory pressures to limit use of traditional solvents, there have been serious limitations with green solvents that have prevented their widespread adoption. Green substitutes are typically more costly and less effective than their traditional counterparts. David went on to highlight some of the new and proposed regulations that affect solvent choices in various applications, with the main driver being California. Finally, he highlighted the properties and benefits of several 0 VOC green solvent alternatives offered by his company. For more information visit www.tbfenvironmental.com



Spring 2015 www.southernaerosol.com

2015 SPRING EDITION SPRING MEETING SUMMARIES



KELLY HOSKINS, Manager of Regulatory Affairs for Sergeant's Pet Care Products - A Perrigo Company spoke to the assembly on *The Challenges of Additional Claims for EPA Registered Disinfectants and Insecticides*. Mr. Hoskins detailed the process for submitting and obtain approval of your Master Label for your FIFRA product, but cautioned that this was not were things end. Registration (and fees) can apply in the 52 states and territories, as well as County Level Board approvals for use. In addition, if the product is general consumer facing there are also CPSC considerations for your label. Knowledge is the key to managing your submissions. Use your trade associations, shared

knowledge is invaluable. Get to know the staff at EPA, know their protocols and processes. Learn what claims have been accepted previously by EPA, get examples when you can. Start with a premeeting, have a plan. Check and double check your paperwork, have all of the studies needed to support your claims. Be proactive, follow up on a regular basis with the EPA on the process of your submission. Just know that the EPA is consistently inconsistent. Mr. Hoskins also warned that you should be prepared to explain to your management and marketing departments why your submission is not going through as planned. How long will the delay be, what has to be changed on the label and what to do when the EPA says NO. Registering pesticides of all types is a give and take process both with the agency and within your own company. Be prepared.

DOUG FRATZ, Consumer Specialty Products Association, provided a regulatory update covering areas of concern for all of our members. Included in Doug's presentation was an update on the status of the CARB Consumer & Commercial Products Survey. He noted that this survey is just the first to occur over the next several years. Doug also reminded the SATA membership that the LVP-VOC issue is still very much alive in California as the CARB-sponsored studies are ongoing and preliminary results are under review by CSPA and various industry associations. We were reminded that the interim reports from the two California universities conducting the research must be reviewed and commented upon by industry to ensure that accuracy of both the modeling and interpretation of the results so as to not be misinterpreted and used as an opportunity to justify the elimination of the LVP-



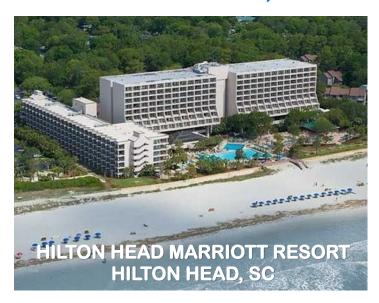
VOC exemption. Doug also reviewed status of the CARB 2016 State Implementation Plan for reduction of ground level ozone. The USEPA SNAP amendments were also discussed. The USEPA is proposing eliminating HFC-134a as of 1/1/16 in almost all consumer products where it is currently used. The final rule has not yet been published but the 1/1/16 date is expected to go through as proposed. Several additional topics were covered by Doug in his presentation that's available for review at www.southernaerosol.com. Doug is Senior Science Fellow and Aerosol Products Division Staff Executive for the Consumer Specialty Products Association in Washington, DC, a trade association representing the formulated chemical products industry.



DAVE NIEMUTH, who heads up the **Labeling Technology Division of Krones**, **Inc.** in North America, presented a detailed examination of the current **Labeling Technology** as it pertains to the aerosol package. Mr. Niemuth reviewed and explained in more detail the differences among contiroll, multireel, and linadry systems. He also gave us a look into the future options that will be available as new technologies come on line as alternatives to screened or lithographed cans.

FALL MEETING 2015

35TH ANNUAL SATA TECHNICAL CONFERENCE SEPTEMBER 24-27, 2015



MEETING REGISTRATION

To register for the SATA Fall Meeting, visit www.southernaerosol.com.

<u>Register by August 28, 2015 to avoid late fees</u>. Sorry no refunds for cancellations after September 10 however registration fees are transferable to another person within your company.

HOTEL REGISTRATION

For hotel reservations, click on this link <u>Book your group rate: SATA 2015 Fall Meeting ></u> or call (888) 511-5086. Reference SATA to receive the following group rates: Resort View \$165; Ocean View \$175; and Ocean Front \$195. Taxes and fees are extra. Attendees and their guests staying at the Marriott receive a 20% discount on spa services.

Hotel reservations must be made by 5:00pm on August 28, 2015 to guarantee SATA rate.

FALL MEETING AGENDA

35TH ANNUAL SATA TECHNICAL CONFERENCE HILTON HEAD MARRIOTT SEPTEMBER 24-27, 2015

AGENDA

Thursday, September 24

4:00-7:00pm	Meeting Registration	Ballroom J Foyer
5:15-5:30pm	1st Time Attendees 'Meet the Board'	Bullhead

5:30-7:00pm Welcome Reception (spouses & guests) Bullhead

Friday, September 25

7:00-8:00am	Continental Breakfast (spouses & guests)	Ballroom J
8:00-12:00pm	Technical Conference	Ballroom J
12:00-1:00pm	Lunch (spouses & guests)	Ballroom G-H
1:00-4:00pm	Technical Conference	Ballroom J
6:00-7:00pm	Reception (spouses & guests)	Basshead
7:00pm	Dinner (spouses & guests)	Basshead

Saturday, September 26

7:00-8:00am	Continental Breakfast (spouses & guests)	Ballroom J
8:00-12:00pm	Technical Conference	Ballroom J

12:00pm Lunch on own

1:00pm Golf Tournament Palmetto Dunes

7:00pm Reception (spouses & guests) Sabal 8:00pm Dinner (spouses & guests) Sabal

Sunday, September 27

Departures

Agenda details will be on the website as they become available.

SPONSORSHIPS

35TH ANNUAL SATA TECHNICAL CONFERENCE HILTON HEAD MARRIOTT SEPTEMBER 24-27, 2015

SPONSORSHIP OPPORTUNITIES

SATA offers sponsorship opportunities to all members as a means of promoting your business to other members. Sponsorships are offered on a first-come, first-serve basis. Using your company-designed logo, SATA will execute the appropriate signage or item. To purchase sponsorships visit SATA's website www.southernaerosol.com.

EVENT SPONSORSHIPS

Golf Hole-36 sponsorships, \$250 each Signage placed at holes for the golf outing on Saturday.

Golf Skill Shot-4 sponsorships, \$275 each Choose from Closest to the Pin, Longest Drive, Longest Putt, Accuracy

MEDIA SPONSORSHIP

Media Sponsor-1 sponsorship, \$275 Your company's logo and message is displayed on the video screen throughout the Fall Meeting.

PREMIUM SPONSORSHIPS

Tote Bag-1 sponsorship, \$750
A SATA-imprinted tote bag with your logo added to the reverse side. Bag will contain meeting materials and given to all attendees.

Stylus Pen-1 sponsorship, \$300 Imprinted with your company logo and given to all attendees.

*ELECTRONIC SPONSORSHIP

Web Sponsor-unlimited, \$120 each
Have your company's link on the SATA
website for a one-year period.
*This is only available in tandem with the
purchase of another sponsorship.