



Henry McMaster
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SOUTH CAROLINA
DEPARTMENT OF COMMERCE

Robert M. Hitt III
Secretary

Recycling Market Development Advisory Council (RMDAC) Meeting
Thursday, March 18th, 2021
10:00 AM – 11:30PM

Meeting ID: 959 5365 5639
<https://zoom.us/j/95953655639>
+1 646 876 9923 US (New York)

RMDAC

Wes Westbrooks, BMW
Tina Huskey, Mumford Industries
Norman Chandler, Republic Services
Carol James-Gilchrist, Sonoco Recycling
Dr. Andy Spicer, USC Darla Moore School of Business
Bill Laursen, Universal Environmental Services

ABSENT

Kristen Brown, WasteZero
Allison Brockman, City of Greenville
Chris Fisher, GlassWRX SC
Brad Dutton, Dutton Polymers
Joseph McMillin, Atlas Organics
Angel Lara, Southeast Recycling Resources
Tyler Smith, Michelin
Chad Prescott, Mid Carolina Steel
Vic Carpenter, Kershaw County
Ronnie Grant, Retired

GUESTS

Glenn Odom, Retired
Jana White, DHEC
Josh Chronopoulos, Triumvirate Environmental
Joseph Sadlier, BestPlus
Steven Kayton, BestPlus
Dayton Ward, SC Department of Commerce
Chuck Bundy, SC Department of Commerce
Ashely Teasdel, SC Department of Commerce
Chantal Fryer, SC Department of Commerce
Sonja Barkley, SC Department of Commerce



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STAFF

Anna DeLage, SC Department of Commerce
April Chaffins, SC Department of Commerce
Ashley Jenkins, SC Department of Commerce

CALL MEETING TO ORDER

Wes Westbrooks motioned to call the meeting to order at 10:06 AM.

MINUTES

Glenn Odom agreed to be Chris Fisher proxy for the meeting. The January 2021 RMDAC meeting minutes were approved.

Wes Westbrooks welcomed the guest and introduced the speakers.

Chuck Bundy presented information on the COVID Vaccine.

Chuck: Presented a presentation on vaccination updates. Daily COVID-19 cases are coming down. 455,495 confirmed cases of COVID-19 in South Carolina. SC businesses loaned 10 million dollars since the start of COVID. This money comes from the Paycheck Protection Program (PPP).

They have administered 1.5 million vaccines to people in South Carolina. About ½ million received their first dose, and approximately 1 million received the second dose. The allocation as a state has remained fairly stable. SC is moving ahead but not as quickly. Absenteeism/Employee wellness is real, and the supply chain disruption is real. Some markets have gone away, and some markets are bombing.

SC is in Phase 1, totaling 2.7 million South Carolinians. Phase 1 includes essential frontline workers, teachers, and manufacturers. SC is on schedule to open up Phase 1c on April 12, totaling another 1.9 million South Carolinians. Phase 2 begins May 3 (open for everyone).

There are not enough vaccines for everyone to be vaccinated. Things are moving forward, and more vaccines are coming online. DHEC will distribute the vaccine on a per capita basis, regionally. CARE (Community Assessment Review Equity) Panel will provide advice to DHEC.

In your company, you can become an Approved COVID Vaccine Provider. Develop a relationship with an Approved Provider. Most are activated more each day (i.e., Provider prepared to give a shoe immediately). Send employees to the DHEC Vaccine Locator maps or individual appointment-making with a Provider.



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Help employees find doses in an area/region, explain how to use the Vaxlocator map. The best shot is the first one you can receive. Use the QR code to access Vaxlocator Map in the plant or give the DHEC Vaccination Information line a call, 866-365-8110. Continue the conversation with your Provider. Use DHEC collateral material. Give employees the tools for vaccine search or keep them posted on your efforts. Continue CDC, DHEC, and OSHA guidelines for most effective workspace safety.

Get vaccinated! If you have any questions, contact Chuck
Bundy cbundy@scommerce.com Cell: 803.413.6777 Office: 803.737.0440 or April
Chaffins achffins@scommerce.com Cell: 803.542.1990 Office 803.737.0425

Josh Chronopoulos and Joe Sadlier presented on Recycled Plastic Lumber.

Josh: Gave background information on Triumvirate Environmental. Triumvirate started in 1988 as an environmental service company. The company grew to service four vertical markets: Industrial, Higher Education, Heavy Manufacturing, and Health Care. The core services are Waste Management & Recycling, Field Services, Onsite Support, and Consulting Services.

Triumvirate Environmental also provides technical services. This service was born out of client and industry need. They have operations in Canada that focus on being a one-stop-shop for all environmental health and service needs.

Eight years ago, the CEO had an idea concerning plastic waste/hard materials. They took on material that was difficult to recycle. The CEO wanted to find a way to put this material into a product. The goal was to create a circular economy, and that's how BestPLUS was created.

Joe: BestPLUS was born out of a need to create a circular economy. Everyone needs to recycle, but you are not genuinely recycling if you don't have an outlet for the material. All you are doing is changing the form of the garbage. BestPLUS develops markets for products. BestPLUS has a history of recycling products that are typically a challenge to recycle. Their customers include many Fortune 100 companies and worldwide leading healthcare companies.

A company may have some opportunities to create that circular economy where we generate materials from its plastic waste stream to go back into the product's manufacturing. It could be dunnage for your product, pallets, cages, etc. The material that would typically go into the landfill can be purchased by the company, and those products can go back into those materials the company would buy anyway.

We have a lot of success in the retail industry and selling products at Home Depot and selling products for consumer use. 6x6 retain walls and create several new markets for consumer goods products and create products that close the loop in organic gardening and develop products for raised garden beds. The products are waterproof, will not decay or rot, and sustainable.



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BestPLUS create park benches and picnic tables, gardening-edged retaining walls, and raised garden beds.

BestPLUS has also created products that are unique for a specific industry. They help create a circular economy for artificial turf. The goal is to take away the waste stream, make a product from that waste stream, and then complete the circular economy needed to keep the recycling going.

Steven: Point of contact out of the Charlotte Southeast Business Development. Steven is the contact person for SC, NC, and surrounding states. He handles quoting, assessments, and directing the person on how to purchase the product if it is at the retail level.

Glenn: Can you use a recycled PET carpet on any of these applications? Joseph: We primarily focus on polypropylene and polyethylene rather than PET. Today we are not recycling PET in a significant amount into the lumber we are producing. Can it be done? YES. Glenn: I know companies are doing it now. They are making decking boards out of recycled PET carpet. On the polypropylene, can you use polypropylene carpet (the backing as well as the carpeting itself)? Joseph: Polypropylene is something that we are looking at and using right now in the turf industry. We have not gone into the carpet industry. We have some strategic partners we are working with right now. We are working with Shaw Industries, and we have several large companies that we are working with, some on a high level and some on an experimental working level. Most of the turf produced in Dalton, GA, and most companies are working with us to recycle their product. Glenn: I am an advisor on the Carpet America Recovery Effort (CARE) Board, and we are doing a lot of work with Polyethylene and PET. Did you have any application that this material would work in? Joseph: Glenn, please contact me to discuss further opportunities and share ideas on what we can do. Glenn: Thank you.

Dr. Spicer: We created a tool, Recycling Markets Directory, to create demand for recycled products and bridge people within SC. Talk to Anna for more information. It's fascinating that combining the supply and demand side within a single company, is it helpful to be in both markets, and do you think that's the recycling industry's feature, to be on both sides of the markets at the same time? Joseph: Basically, everyone in the recycled plastic lumber industry has failed. I succeeded because we had strategic partners we sold to and had partners we develop products for. We changed the inter-market in the transportation and trailer industry. We developed plastic scuff boards. We brought it to market and used the material that our customers were using and discarding to create that synergy. Is it the future of the market? I don't think it's 100% of the market, but if we don't create products that our companies and customs need, then it's a complex sale to sell the up sale of that plastic. If you are tied to a company that is creating the waste, it's not a financial decision anymore; it's a moral imperative. Joseph: We deal with any waste stream that can come in. Customers kept coming to them saying they have a single-use product made out of Polypropylene or Polyethylene or any other material, and they didn't have an outlet for it. It would go to the landfill or waste to energy. Now the companies are creating a product from their waste streams. It is a circular economy. Wes: Now that wood has gone through the roof from a financial standpoint, is your material more compatible on a price



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level? Joseph: We found out with the entire pressure-treated lumber market that we are much more compatible. We had our best year last year. It was market-driven and by us presenting products and alternatives. Today, there is absolutely some interest that would not have been there having lumber prices not been where they are. In the next several years, lumber will go up in price and not down in price. Glenn: Do you use polypropylene and polyethylene labels? Joseph: Unique challenges are using any film material. BestPLUS has invested over 2.5 million in the ability to process film and film scrap. Some of this is just coming to fruition in the last month. Yes, to your question, label material can be used. I need more details to give you the exact yes.

Jana White presented on Electronics Legislation.

Jana: Presented updates and gave an overview regarding information of the Electronics Program. House Bill 4035 was introduced and approved by the House and go to the Senate next week. The Electronics Bill was passed in 2011, and it is set to sunset at the end of 2021. The Association of Counties has proposed a Bill to extend the sunset date out for two years. Extending the sunset will provide additional time to work on a substitution program, maybe another Bill; it remains to be seen.

SC Code Section (48-60-05 et sec.) became effective on July 1, 2011, and revision effective on March 4, 2014. It will expire December 31, 2021, except for the landfill ban (Section 48-40-90) on specific devices. Most of the Bill goes away except for the landfill band of covered devices. It entails consumer computer monitors, television, and printers.

This does not apply to anything that is generating by commercial operations. This applies to residential consumer material and its only computer monitors, television, and printers. The statute includes landfill ban, manufactures requirements, fees- registration and shortfall, recycling requirements, and retailer requirements. The retailer requirements – they can only sell devices made by manufacturers that have registered with the State and paid their annual registration fee.

Manufactures requirements include annual registration. Annual fees can be made individually (\$3500) or as an organization with other manufactures (\$20,000). Everyone has to have a take-back program. Only television and monitor manufacturers only have a take-back requirement, 80% weight by of their sales. Whatever they sell in SC, they have to take back 80% of that weight from South Carolina to make that quota the following year. If they don't make their quota, they will have to pay specific shortfall fees. Nobody has paid shortfall fees because they are allowed to carry the costs forward for a year.

The following requirement is the Recycling Certification. The business must be certified by the R2 program, e-Stewards program, or recognized by DHEC or EPA to recycle the devices. Retailers cannot sell devices from non-compliant manufactures, and retailers cannot sell without a brand name label.



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Regulation 61-124 went into effect on February 26, 2016. The regulation addresses statutory requirements and specific RO requirements. The regulation also addresses the need for in-state and out-of-state recyclers, including registration and financial assurance.

The concerns are that the landfill bill does not sunset, and counties and cities in South Carolina still cannot place them in a landfill. Counties and Cities in SC must pay a recycler to come and pick the electronics devices to be recycled, but there are no more manufacturing take-back requirements. In the past, the counties have been getting subsidies from these manufacturers because they had to take back the material. When the legislation goes away, the support will also go away. The biggest concern is the cost to local governments—also, concerns about the definition of the devices.

A workgroup includes County Government, City Government, Manufactures, Recyclers, Retailers, SC DOC, Environmental, and Disposal Industries to figure out the next steps. As of now, we are extending the legislation and statute to December 31, 2023. Working with the group to come up with some response, action, or next steps. If you have questions, please contact Jana White, (803) 898-1346, swregdev@dhec.sc.gov

Dr. Spicer: How can we help, and what's the appetite for doing this? Is your working group too diverse? What moves the legislature to do this? Does this require lobbying? Jana: The group is so large we have formed a smaller working group to create some language and thoughts. The Consumer Electronics Association represents the manufactures. The manufactures and the County governments are at odds because that will determine who will carry the responsibility. Both parties feel like they have the more significant part of the responsibilities because it also cost the manufacturers a lot of money to run this program. The push and pull are coming from those two groups, and it will take a lot of negotiating to get to a solution. Stay tuned, there may need to be some lobbying, but it's too early to make that decision. Any support for the Bill is very appreciated. Dr. Spicer: It seems you want help outside of consumer electronics, firms that care about recycling. I can see electronic companies not wanting this to happen, but this is a no-brainer from a recycling point.

Jana: Because the landfill ban does not sunset, and the rest of the Bill does, they win because it can't go in the landfill. The manufactures can say their devices are not being landfilled because there is a landfill ban in place. Anna: Would you want RMDAC to weigh in on the extension (H4035)? Jana: Owen McBride with the Association of Counties has been dedicated to this Bill. Reach out to Owen, and see what he thinks. Owen feels like it is moving quickly and getting the support for the extension. The Horry County delegation push this because they have a lot of e-waste coming out of their County. Optimistic about the Bill pasting.

RMDAC UPDATES



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RMDAC Annual Report: Ashley gave an overview of the 2020 RMDAC Annual Report. The Recycling Rate for 2020 is 25.5%. Circularity is a massive topic for package design, so it was best to include a statement that encourages circularity in the recommendation. SC Industry Snapshot (5 years) - IN 5 years: \$1,290 Million in Capital, Investment, 1, 958 New Jobs, and 31 New/Existing Business.

Carol provided the Paper Summary, and the summary discussed China was shifting its mill systems and how COVID-19 had a significant impact on the global paper markets. 2020 Top 5 Exports for Paper - China, India, Japan, Italy, Poland.

SC is the #1 state in the country for manufacturing tires and 2020 Top 5 Exports for Tires - Thailand, Hong Kong, China, Malaysia, Pakistan.

In the Southeast, recycled PET pricing started strong in Q1 of 2020, but after COVID19 hit the southern states, PET dropped and only started to recover in Q4. 2020 Top 5 Exports for Plastic Hong Kong, India, Malaysia, Vietnam, South Korea.

SC has more than 100 companies involved in metal recycling. 2020 Top 5 Exports for Recycled Cooper - China, Malaysia, Belgium, Russia, Germany. 2020 Top 5 Exports for Recycled Aluminum - Malaysia, India, Indonesia, Thailand, Russia. 2020 Top 5 Exports for Ferrous Metals -Pakistan, India, Malaysia, Thailand, United Kingdom. 2020 Top 5 Exports for Nickel - Netherlands, Canada.

DHEC continues the DWFSC campaign - prevent, donate, and compost. Glass WRX SC is the only glass processor in the state. They are on the pathway to clean air, clean water, and clean building—2020 Top 5 Exports for Glass - France, Germany, Haiti.

The may by County/Region showcases recycling businesses in SC. The recycling businesses are recyclers that service residential or commercial clients that take their material to be recycled. Recycling Businesses: 99 Upstate, 90 Midlands, 56 Pee Dee Region, 52 Lowcountry Region The next page displays how many recycling businesses are in each County. The Recycling Market Directory showcases more than 300 recycling companies and allows manufacturers to find recyclers in the area easily.

COVID19 Highlights: This page highlights SC's resiliency, and even though the pandemic, SC continues to create a pathway for a sustainable environment. In 2020 - we had 204 new jobs, a capital investment of 119 Million, and 1 MRF temporarily suspended service. Spotlights Mumford Industry - on how they were able to pivot operation to produce plastic emergency ponchos.

Best Management Practices: April gave an update of the Best Management Practices (BMP). An initial draft was developed for plastics, paper, and biomass. Tina, Carol, and the Biomass Council were thanked for providing the information for the first draft for the BMP. The textiles



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and glass BMP are still in working format. The BMP (How To's) information included what recyclers can take, what contamination is, and providing the first questions recyclers will ask. Having the first question sections will give a general idea of what information is needed to answer questions and determine if the material can be recycled.

Also included in the BMP are the following categories: what innovations are in this commodity, the end products created, additional resources, and commodities maps—still determining the BMP form. Contact April for input or questions. Dr. Spicer: Give BMP to General Managers because some people may not understand the language. Ask what questions they have, and ask if the document can be simplified. One of the biggest questions is going to be on price. How do I know if someone is ripping me off? How do I know I can get multiple prices off this? Tina: We discussed doing a definition key for each commodity, because it is industry language in the BMP. April: We are developing a glossary for acronyms and terms to include in the BMP. Dr. Spicer: Why do prices keep changing? Tina: Don't look anywhere for your pricing? The pricing doesn't include transportation costs, etc. Dr. Spicer: How do I evaluate the cost? Tina: Plastic is not like any other industry; it is not a set price. The prices are constantly changing. Dr. Spicer: Why is it different by-product? Why can't I look up the price on the internet? Tina: There needs to be a definition for the commodities market placed in the glossary. Carol: There are so many different variables that come along with each commodity; it would be ten pages long for each one. April: Any form for BMP can be a five to a three-hundred-page analysis of what a Best Management Practice is. That is not what we want to create. Having quick facts to get started is the goal, and if you want more information, the document will provide contact. This project is what we make it. Dr. Spicer: Best Practices is learning the details, paying attention, and getting multiple bids. Best Practices are figuring out what is recyclable and working with your recycling contact. April: Still discussing whether to call them BMP or How To's. What will a person search when they are looking for this information? Anna: How do we want to present this? Does this look like the annual report? Is it FAQ through a website? Any thoughts on the end product on the visual display. Dr. Spicer: I can see it on the same page of the Recycling Markets Directory. Wes: A digital format might be better. The simpler, the better, and the more people you will reach. Norman: If you wanted to do a deeper dive, it would be better to use a digital platform. April: the BMP will be a living organism, something that can be constantly updated and changed. Dr. Spicer: Build the FAQ alongside the Recycling Market Directory.

DISCUSSION

Markets Recovery: Anna suggests doing a deeper dive with the market updates as we move further into 2021.

MARKET UPDATES

Petroleum: The oil market is \$ 63 a barrel on the rise, which is down a little around from a week ago. As we get into the summer, the oil prices will continue to rise as things begin to open up for the summer. Higher crude prices are projected as a result of higher gas prices. The average gas



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price for Sc is \$2.66, which is less than the national average of \$2.85. Gas rose 0.8 cents to .010 cents from last week to this week. Prices will increase by the summer, and we may see \$3.00 regular for fuel. _

Plastics: Plastic process may be improving, but volumes if different material types are really on edge. We have some people saying they will be out of resin and will not produce the product. Some of that is driven by the lack of natural gas material that hasn't been made, which is PP. It's a great market, but the injection grade is scrabbling. There is an increase in the volume of the commodity. You will see supply chain disruptions. Carol: Seeing historical highs for HDPE through our MRF.

Paper: The export demand is up. OCC went up from \$80/ton to \$90/ton and SOP from \$90/ton to \$100/ton. Mix paper held at \$30/ton. The export markets are driving those increases. The problem is getting the booking and getting the carriers to the port for all paper mills. A lot of downtime for the paper mills in April and May, which may cause the markets to drop. A brighter forecast projected for the third and fourth quarter.

Carpet: Both Nylons are in demand, and the prices went up. The need for PP went up. Prices and the demand are high for PP carpet. The PET carpet trial failed at NC State. The PET carpet will not work on the buyer component line. It will work on the bi-ax line. The following steps, working with NC State to bring it to the marketplace.

Solid Waste: Nothing has changed in the Solid Waste Industry from a disposal standpoint. Landfills are open, and volumes are a little higher. On the recycling side with plastics, we see a lot more contamination in the material they are getting from the larger MRFs. The landfill volume went up because contamination is going up.

OLD BUSINESS

None.

NEW BUSINESS

Anna: We will send information about the Carolina Recycling Association Sustainable Business & Industry for the Conference in May. Nine hours of great content for businesses and industries. There is a possibility of rescheduling the fall retreat.

ADJOURN

The RMDAC board meeting was adjourned at 11:30 am.

The next RMDAC meeting May 18, 2021.