



Maryland

Department of the Environment

SB 222 EPR Advisory Council Meeting

Thursday, May 30, 2024, 9:00am-11:00am E.T.

Meeting Location: Online via Google Video

Attendees

| Member Names | Affiliation | <i>Present</i> |
|--------------------------|--------------------------------------|----------------|
| Lee Zimmerman | Frederick County on behalf of MACo | X |
| John Neyman | Republic Services | X |
| Frankie Sherman | Charles County | X |
| Chris Pilzer | WM | X |
| Eileen Kao | Montgomery County | |
| Angie Webb | Maryland Environmental Service | X |
| Vinnie Bevivino | Bioenergy Devco | X |
| Michael Okoroafor | McCormick | X |
| Ellen Valentino | MD-DE-DC Beverage Association | X |
| Mario Minor | Market Fresh Gourmet | |
| Scott DeFife | Glass Packaging Institute | X |
| Dan Felton | Ameripen | X |
| Abigail Sztein | America Forest and Paper Association | X |
| Delphine Dahan Kocher | Constellium | X |
| Peter Hargreave | Circular Action Alliance | X |
| Chaz Miller | Maryland Recycling Network | X |



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|------------------|----------------------------------|------------------|
| Shari Wilson | Trash Free Maryland | Milan McWilliams |
| Martha Ainsworth | Sierra Club | X |
| Crystal Faison | Shepherd Design and Construction | X |
| Miguel Lambert | Repurpose Aggregates | X |
| Gurcharan Singh | WAH Global | |
| Bradley Baker | MDE | X |
| Dave Mrgich | MDE | X |
| Sara Weitzel | MDE | X |
| Shannon McDonald | MDE | X |
| Tim Kerr | MDE | X |
| Tyler Abbot | MDE | X |

Non-members

Alexandra Keane
Andrew Kays
Aretha Franklin
Bente Tony Cooney Loscaizo
Brenda Platt
Brooks Scoville
Carol Patterson
Caroline Barry
Aretha Franklin
Drew Rak
Drew Vetter
Frazier
Jason Browne-Denali
Jason Weintraub
Jen Terrasa
Jenna Sublett
John Hite
Jordan Bellamy
Julia Spector
Kelly Doordan
Kitty McIlroy
Lisa K Smith
Lorenzo Bellamy
Megan Mabin
Pamela Kasemeyer
Pau Nolan
Peter Blair



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Peter Hargreave
Samantha Kapplaman
Sarah M. Peters
Simrata Keshav
Sue Bush
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Why we are here, Schedule, Introductions, and Expectations

- Opening remarks from Bradley Baker and Tyler Abbott
 - Bradley: The role of the advisory council (directly from SB 222) is “to provide advice and make recommendations regarding establishing and implementing a producer responsibility program in the State for packaging materials”. So, as you’re going to see we have a very diverse group of stakeholders who are sitting members on the advisory council. We also have folks that are invited that aren’t on the advisory council that are going to be bringing in their perspectives. And when we are developing a law as impactful as what this is likely to be, it’s very important to get different perspectives when we’re making these recommendations which are ultimately going to inform an EPR law that will likely happen in the 2025 legislative session.
 - For folks that are newer to the recycling world; what is EPR? It is a policy that tries to shift some of the burden of funding recycling infrastructure from tax payers to producers. There are many types of EPR - electronics, tires, and potentially EPR for solar panels. This is specifically for packaging materials here.
 - [Agenda introduced - see slide]
 - Introduction of CAA: CAA will be talking about the CO needs assessment. Some states have started this process already, including CO, OR, CA, ME, and MN. There are meetings in which Maryland coordinates with other states for consistency. In these meetings, differences and approaches with other states are considered.
 - Introduction of Chaz Miller: Chaz Miller will be talking about Recycling Markets. Recycling markets are like a roller coaster - sometimes prices are good and sometimes they are not so good which can impact supply and demand for recycling.
- Members introduced themselves
 - Bradley Baker, Program Manager for Resource Management Program at MDE
 - diverse group of stakeholders who are sitting members on advisory council plus those not on the council who are bringing their perspectives. It is important to get their perspectives when we are making recommendations for EPR law likely during 2
 - Lee Zimmerman - Frederick County on behalf of MACo
 - Interested in what happens with this bill moving forward to bring some of this back to the producers, as we think it should be.
 - John Neyman - Republic Services
 - Concur with these earlier comments.
 - Frankie Sherman - Charles County
 - Chris Pilzer - WM
 - My expectations are: Who’s going to own the material? Where is it going to? What other materials do we want to recycle? Those types of questions getting answered.
 - Eileen Kao - Montgomery County
 - Angie Webb - Maryland Environmental Service
 - Vinnie Bevivino - Bioenergy Devco
 - I expect to be contributing to food packaging and its recyclability particularly with depackaging equipment
 - Michael Okoroafor - McCormick
 - My expectation is that we will get to some of the things we’ve seen globally.



- Ellen Valentino - MD-DE-DC Beverage Association
 - I am looking forward to the conversation and helping formulate good recommendations that will help the state move forward around recycling and help our members recover their beverage products as well. I think we can bring a lot to the table from a manufacturing perspective nationally and internationally.
- Mario Minor - Market Fresh Gourmet
- Scott DeFife - Glass Packaging Institute
 - Here to help MD to shape an EPR proposal that will improve the system, get better quality materials back to market manufacturers who need it as a raw material, and avoid recyclables back to landfills.
- Dan Felton - Ameripen
 - The needs assessment in our view is critical. It's got to be done right and thoroughly. Setting that base so that if a future law comes through, it can be set up as successfully as possible.
- Abigail Sztejn - America Forest and Paper Association
 - The ability for this project to collect all of the data and have robust information to inform future policy is crucial in order to move projects forward in a way that is productive and effective.
- Delphine Dahan Kocher - Constellium
 - One of main products we're doing are cans, which we need back to create our products. We are very interested in recycling and what we can do to increase recycling in MD.
- Peter Hargreave - Circular Action Alliance
 - [PRO representative.] About 20 years experience in the development, implementation and oversight of EPR policies across North America.
- Chaz Miller - Maryland Recycling Network
 - Looking forward to making sure the needs assessment covers MD's unique infrastructure including publicly and privately owned MRFs and the reliance of the eastern shore on the MRF in DE.
- Shari Wilson - Trash Free Maryland (Milan McWilliams standing in as representative)
- Martha Ainsworth - Sierra Club
 - Interested in getting the best in class EPR bill that focuses not only on recycling, but also reducing and reusing packaging and redesigning to make things more recyclable. Looking to gain from best practices learned worldwide.
- Crystal Faison - Shepherd Design and Construction
- Miguel Lambert - Repurpose Aggregates
 - Believe in building a more circular economy around those [construction] materials because our landfills and aggregate materials are coming up shorter and shorter, increasing the price of development.
- Gurcharan Singh - WAH Global
- Non-members made introductions in the chat.
- Schedule



| JULY 25 | SEPTEMBER 26 | OCTOBER 24 | NOVEMBER 14 | NOVEMBER (TBD) |
|---|---|---|-------------|----------------|
| Needs Assessment Update | Needs Assessment Update | Needs Assessment Update | | |
| <u>Presenters:</u> ♦ SCOTT CASSEL (PSI) Confirmed ♦ MARY CUMMINS (RPRA Canada) "EPR Implementation in Canada" Potential | <u>Presenters:</u> ♦ CHRIS PICHÉ (RPM eco) "EPR Considerations for non-standard packaging collection" Potential ♦ REID LIFSET (Yale) "Eco-Modulation" Potential | <u>Presenters:</u> ♦ Speakers from CA, CO, OR, and ME "States that will be implementing EPR" Potential ♦ Speakers representing packaging material types | TBD | TBD |

- Ellen Valentino: I just want to flag that it is unusual that the needs assessment would need to be completed by this timeline.
- Mike Okoroafor: What would be the time frame required to develop and draft legislative language for the general assembly?
- Tyler Abbott: We are probably going to take the previous bill as a baseline and then talk about how we want to tweak it. We can talk about that later on. We'll keep pushing for timelines, as they were the timelines that were given.
- Bradley: [Discussion of schedule in above image] November will be focused on the needs assessment and drafting the report for the General Assembly. If there are any recommendations for speakers, please share them.
- Milan McWilliams: Steven Alloway would be a great speaker (from Oregon)
- John Nyman (republic services): Will the schedule be virtual?
- Bradley: We intend to stay virtual with such a large group.
- Mike Q.: Could we reach out to Minnesota and add them as presenters?
- Bradley: Yes I can reach out.
- Milan McWilliams: Trash free MD is also in support of meeting in person.
- Bradley: Yeah that's definitely something we could take a look at for a future meetings

Recommendations for Co-chairs

- Bradley: The co-chair typically helps kick off the meeting, guide and facilitate conversation. Do we have any recommendations for co-chairs?
- Ellen Valentino: It is important that one of the co-chairs (as a suggestion, either the PRO or McCormick) is someone who is very specific to the packaging industry). They would be a good co-chair that would align with a county [as the second co-chair] - maybe MES or someone else who comes forward.
- Mike Q.: I'm all in.
- Tyler: The final decisions are made by the secretary, so Bradley and I will take that back to Secretary McIlwain..
- Milan: We've expressed interest in being a co-chair before. We are the only advocacy group that solely deals with trash and litter. Sherri has had experience building programs from scratch. We're still interested in throwing our hat in.



- Chris Pilzer: [suggested a] processor as co-chair.
- Ellen Valentino: Again, I would like to push forward that I think it's important that a county or MES be represented. It is important to have partnership on that next level from a county. It's just a recommendation, trying to look full circle.
- Bradley: As we look for that balance, right now we have four recommendations and only two seats. Just keep that in mind.
- Angie Webb: MES would be glad to be co-chair.
- [From comments]: Chaz Miller was recommended
- Chaz Miller: Angie would also be excellent.

Needs Assessment Update

- Bradley: At this point, we have narrowed down a decision but have not made it official. There are some other parts of the selection process that we need to take into consideration. There are some parts of the selection process that we can't talk about by law, but we are hoping to extend that offer very soon. The final appointee needs to be approved by the board of public works.
- Ellen: In the other states, a needs assessment is extensive. It would be surprising if a needs assessment could even get into the market by October. If we're incomplete, then we're incomplete, I just think we have to have open minds moving forward.
- Bradley: CO does not collect data that MD does that are already in our recycling report. If the data already exists, we point people to the report. There are some parts that are different than CO's assessment that may speed up the process due to extensive reporting already happening in the state of MD.
- Scott DeFife: [Agreed with Bradley's above statement]. I am concerned about time getting a legislative package to do this in the timeline. We only have an hour.
- Milan: OR has done a needs assessment and they are planning to do another later, so there's always an opportunity to do one again later in the process.
- Daniel: Could we do a review of statutory deadlines around the needs assessment. I have in my mind that we're already a little behind on that.
- Chaz: Just a thought - it's better to do it right than to do it fast.

Colorado Needs Assessment and updates on what other states are doing regarding EPR (CAA)

John Hite - 1st presenter

- We dove in deep in CO, CA, and other states. I will be first giving a producer engagement update.
- Background on CAA
 - CAA is a 501c3 nonprofit. 5% states with PRO requirement require this kind of nonprofit. We work with groups focused on mostly food and beverage, but also other sectors.
 - "EPR" and "obligated producer" across the states differ in definition.
 - We've been approved as PRO in CA, CO, and MD. We are the only PRO to submit a program plan in OR (program plan approval is the PRO requirement in OR).
- State Updates
 - CO: The needs assessment was the primary first step. Who is responsible for the needs assessment differs; in CO CAA as the PRO was responsible for the needs assessment
 - CA - CAA has been approved as the single PRO. Calrecycle kicked off (informal) rulemaking. Formal rulemaking officially kicked off in January



- OR: We are working with stakeholders on a revised stakeholder plan with resubmission in September. We expect the program to be launched July of next year
- ME: We are involved with stakeholder workshops. The bulk of attention is focused on western states, given their tighter timelines.
- July 1 2024 is the registration deadline for producer registration (currently registering producers) in Western states.
- August 2025 CO and CA

Peter Hargreave - 2nd presenter:

- I will be talking about the CO timeline and key obligations.
- In CO, the needs assessment has been submitted CO is in the process of developing a program plan, due in February.
- Key obligations in CO (see slide)
 - Differences exist between each state
- Differentiation between the needs assessment and program plan
 - The needs assessment helps provide information about what the baseline currently being achieved in CO is. It allows the PRO to identify gaps and opportunities. In CO specifically, the needs assessment is used to develop different scenarios. The recommendation put forward sets the boundaries for the pathway the PRO will take in meeting targets.
 - The program plan looks forward to improvements to be made
- Needs assessment roles and responsibilities
 - In CO, the state agency helped approve selection, brought forward recommendations to the joint budget committee, and engaged the advisory board as the needs assessment was developed.
- CO needs assessment timeline
 - Released RFP, provided time for Bid, and moved forward in August. During the August to January timeline, we reported as research was being done to provide opportunities for input. For nuances that were being captured, getting feedback from the advisory board during that process was extremely helpful.
- CDPHE Assessment of Data Gaps
 - Limited data is available from reports in CO. Therefore, CO needed to capture a lot of information. (see slide for more detail). The starting point in CO was low in all categories. We had six months, so a very quick time frame.
- Procurement of Services
 - 2 proposals came back. Who was selected had a broad national understanding of systems in place, people experienced on the EPR side, and local partners to ensure that we were understanding unique pockets in CO.
 - [Highlighted the process of looking for fragility in data and considering how to overcome that.]
- Each element of the needs assessment provides us with information about implementation
 - Ex: demographics. We want to understand what's happening on the ground. Population size, education, and age will inform educational endeavors.
 - Contamination: how much is there?
 - Non-residential collection tends to be a gap area.
 - Processing capacity: what is the ability to take in new/more materials? What is the structure of the current system? Where can we look at expansions/adjustments to be made to current systems?
 - Minimum recyclables list - how do we look at how many programs are currently accepting materials and problems with sorting and end markets. Bradley, you spoke earlier about used oil containers.
 - End markets: opportunities to expand and improve



- Technologies: new sorting technologies
- Reuse:
- Education: Best practices, and how we can leverage and build upon that system. Fund infrastructure developments to improve the effectiveness of processing compostable materials.
- 3 Projected Scenarios were presented
 - The two major considerations were recycling rates and capital costs.
 - What are the factors that impact cost and performance?
 - Looked at: access, collection, materials, education, infrastructure, waste generation
 - Developed a low, medium, and high scenario to put forward as options
 - The medium scenario was chosen.
- Highlights
 - We need to set the stage for effective collaboration and make sure the Advisory board, PRO and state department clearly understand roles moving forward. There was some confusion in past experiences. So that everyone understands their roles and responsibilities, it is important to clarify that ahead of time.
 - Carefully consider timeline and scope. Even disclosure agreements can take weeks back and forth to get signatures. Data analysis also takes time. We needed to make sure that we can do quality control checks on data received. Additionally, you need to make sure you have time to get feedback and properly respond.
 - On “scope” - is there a way to narrow down what you’re asking for?
 - Consider Data Gaps. There will be times when you get insufficient data. There might be smaller (or larger operators) that may not be tracking information in the way that you would like to see for the needs assessment. Data isn’t uniformly covered and may be reported using different data categories. Therefore, data may not be readily comparable side by side (for example, contamination is often recorded in different ways). Data isn’t always in a form that you might want it
 - On the topic of disclosure, even when data is available, some entities are unwilling to provide it.
 - Make sure there are different ways that you are approaching data to fact check and correct. Have a backup plan to assess and address data in a different way.

Chris Pilzer: What is the lead time on accepting different materials from a process standpoint?

Hargreave: It depends on the infrastructure that’s in place. Those are discussions we need to have with the private sector. Sometimes it’s a sorting gap, which could be much larger. Your facility may not have the space to make a quick change.

Chris Pilzer: The quicker we can get that information... I guess we’ll let it play out. There is a definite interest in producers to collect more flexible packaging, which is something the waste sector has had concerns about. You can collect the material separately, not curbside, but you may not get the same amount of material.

Markets Update (Northeast Recycling Markets May 2024)

Chaz Miller:

- I will be using priced from Recyclingmarkets.net. They get their data from MRF’s throughout the country - these are MRF selling prices. Covers all curbside recyclables. More data available in PDF of speaker notes.
- [Highlighted the Montgomery county dual stream program].



- Key factors affecting recycling markets:
 - Markets vary by material and their prices fluctuate (that's the nature of commodities).
 - Product unit sales are incredibly important - the more products that are sold, the more unit sales you have of packages, the stronger markets are for recycling. A lot of product unit sales are down. Revenues are way up (because of inflation) unit sales are down (also inflation).
 - Housing and infrastructure construction: A lot of recyclables end up in construction markets.
 - Differences exist between different markets, but also similarities:
 - They tend to go down when Covid started, peaked at one time or another, went down, and then most of the markets have been going up in the last couple of months
- Markets by material:
 - Metals
 - Aluminum
 - Become aluminum cans
 - Steel Cans
 - Hoping that they become part of the new Key Bridge.
 - Glass
 - The price rarely changes
 - Under deposit and some dual stream systems, you can make new bottles out of recycled bottles, but you need to keep the colors separated.
 - Can also become mixed glass cullet used for: fiberglass, aggregate, bead in reflective paint
 - Paper
 - OCC Corrugated Containers (paper):
 - One of the best markets out there - it has started to flatten out because this is a very expensive raw material for the paper industry.
 - Become the materials that become new boxes
 - Residential Mixed Papers
 - Their prices tend to track OCC because essentially they are a supplement to OCC.
 - Becomes just about any kind of paper product
 - Plastics
 - nHDPE - highly versatile material, translucent, undyed
 - tends to go into color HDPE bottles because it is a good market that will pay for this. It's only as an inner layer because they dye their resin for marketing reasons, which then cannot be used to make new bottles (or you'll use the resin as inner liner).
 - color HDPE (= cHDPE).
 - End market for cHDPE - because it is colored - is often pipe.
 - PET - steady rise since July 2023.
 - Can become PET bottles (largest market), however, fiber products are what created the market for PET (second largest market).
 - PP - barely above where it was after covid started. Price came up due to expanded market.
 - Can be made into paint pails, durable products, fiber, garden tools.
 - Durable markets for plastics not very strong at the moment.
- Better market on the East Coast than West Coast



- In terms of value at a MRF - value peaked in 3rd quarter of 2021, then they start to go down. What has stabilized 4th quarter numbers is the strength of those paper markets. If you look at recycling markets as a cake, paper markets really compose the volume of the recycling market “cake”. Everything else is the icing. Functionally, a MRF is a paper recycling facility with add-ons. So you have to keep that in mind when you look at markets.
- Exports:
 - We export very few aluminum cans, very little cullet. When we look at data for exports - metal and paper are in millions of tons. Plastic is in hundreds of millions of pounds.
 - Paper exports: significant decline.
 - Plastic exports: collapsed tremendously when China pulled the plug on imports of recycled plastics. Canada and Mexico get the majority of the plastics that we export. Mostly mixed plastics, film.
- [Mentioned New Recycled Content Capacity - paper and plastic]
 - Increased capacity to use recycled content in paper and plastic industries
- Where are markets headed?
 - A problem with this economy is that things happen to upset predictions [for example, the pandemic.]
 - Probably into a soft landing.
 - ISM manufacturing and new order indices - are negative in terms of expansion. Negative on manufacturing activity and new orders.
 - Consumer sentiment is down. Consumer spending is tightening.
 - Recycled Paper Market Drivers
 - Demand: strong
 - Supply: weak. Residential supply is failing to step up.
 - Recycled Plastic Market Drivers
 - Recycled plastic is no longer less expensive than virgin. Global oversupply of virgin resin.
 - Consumer spending on goods is soft.
 - Final predictions
 - Trends to watch
 - Will consumers continue cutting back on spending due to inflation/dwindling savings? Many big brands are cutting prices to get consumers to buy more
 - Will housing construction pick up?
 - Mexico is now a bigger exporter to this country than China. What does that mean, especially for paper markets?
 - Hurricane season
 - Ukraine and Israel

Open to public

Commenter: Is there a targeted recycling percentage in mind for this program?

Bradley: Goals will need to be negotiated through the legislative process. Goals from the previous plan will be our starting point. At this point, we don't have any goals, and that will be hashed out to the legislative process. However, the state does have goals to meet certain recycling rates.

Scott DeFife: That was an entirely accurate snapshots of what MRFs will get paid. We need to look beyond single stream. There are some materials that are highly recyclable, but don't belong in single stream.



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Peter Blair: It's extremely important to understand that different programs were created with different goals. CO doesn't have a lot of recycling services. A lot is focused on expanding, which may not be comparable to MD. Just something to keep in mind.