Massachusetts Extended Producer Responsibility Commission

July 16, 2025 | 9:30 a.m. to 12:30 p.m. In-person and via Zoom Meeting minutes

Commissioners present

- John Beling, Chair, and Deputy Commissioner, Massachusetts Department of Environmental Protection
- Rep. Christine Barber, House Chair, Joint Committee on Environment and Natural Resources Appointee, Massachusetts House of Representatives
- Sharon Byrne Kishida, Nominee, Senate Minority Leader
- Kris Callahan, Director of Policy and Regulatory Affairs, Bureau of Climate and Environmental Health, Massachusetts Department of Public Health
- Max Haworth for Leigh-Anne Cole, Executive Director, Community Action Works
- Jose Delgado, Councilor, City of Springfield, Arise for Social Justice
- Janet Domenitz, Executive Director, MassPIRG
- Lew Dubuque, Vice President, Northeast Chapter, National Waste and Recycling Association
- Magda Garncarz, Vice President of Government Affairs, Associated Industries of Massachusetts
- Sarah Kalish, Executive Office of Economic Development
- Andrew Potter, Chair, Select Board, Town of West Stockbridge
- Catherine Ratte, Director, Land Use and Environment Department, Pioneer Valley Planning Commission
- Bill Rennie, Senior Vice President, Retailers Association of Massachusetts
- Neil Rhein, Executive Director, Keep Massachusetts Beautiful
- Waneta Trabert, Vice President, MassRecycle
- Zeus Smith for Tracy Triplett, Senior Enforcement Counsel, Office of Attorney General Andrea Joy Campbell
- Abbie Webb, Vice President of Sustainability, Casella Waste Management

Commissioners absent

- Senator Mike Barrett, Senate Chair, Joint Committee on Telecommunications, Energy, and Utilities
- David Melly, Legislative Director, Environmental League of Massachusetts
- Conor O'Shaughnessy, Budget Director and Environmental Policy Analyst, Office of Representative Bradley Jones, House Minority Leader

Staff and consultants present

- Greg Cooper, Director, Hazardous and Solid Waste, Massachusetts Department of Environmental Protection
- John Fischer, Deputy Director, Solid Waste, Massachusetts Department of Environmental Protection

- Julie McNeill, Attorney, Bureau of Air and Waste, Massachusetts Department of Environmental Protection
- Jennifer Haugh, Vice President of Planning, GreenerU
- Madeline Rawson, Project Manager, Planning, GreenerU

Special guests present

- Marc Boolish, Executive Director, PRBA, Rechargeable Battery Association
- Scott Cassel, Executive Director, Product Stewardship Institute
- Jon Davine, State Fire Marshal, Department of Fire Services

Agenda and minutes

1. Welcome and roll call

Commission Chair John Beling welcomed the group and started the meeting at 9:32 a.m. He took roll call and noted a quorum.

2. Review of goals and agenda

Beling shared the meeting goals and agenda on slide 5. The meeting goals were as follows:

- 1. Roll call, approve agenda, and minutes
- 2. Discuss mattress EPR recommendation
- 3. Level set on past and present battery EPR efforts
- 4. Hear ideas, concerns, support
- 5. Identify and discuss support for proposed battery EPR recommendation

3. Housekeeping: approval of July 16 agenda and June 18 meeting minutes

Commissioner Andy Potter moved to approve the meeting agenda for July 16. Commissioner Jose Delgado seconded. The motion carried unanimously.

Commissioner Bill Rennie moved to approve the June 18, 2025, meeting minutes with the following edits:

- Page 4—Change Sarah Kalish's vote from "1" to "2."
- Page 6—McGowan: "The model is to recycle any mattress or box spring that fits the program description really being in recyclable condition are the two main pillars there." Eliminate sentence for clarity.
- Page 14—Change to Erik Dyson, CEO/co-founder of Hand-Up Mattress.
- Page 15—Change to Phil Goddard, Town of Bourne.
- Page 17—Change Waneta Trabert's vote from "n/a or abstain" to "4."

Commissioner Potter seconded the motion. The motion carried unanimously.

4. Mattress recommendation

Chair Beling explained that today's conversation will focus on a discussion, not a vote, on a mattress EPR recommendation. Current recommendation language for discussion is as follows:

The Commission recommends that the Massachusetts Legislature enact legislation on or before July 31, 2026, to establish an extended producer responsibility program for mattresses. The Commission recommends the development and implementation of a program that aligns with programs already in place in neighboring states (Connecticut and Rhode Island) to provide consistency across the region.

The Commission acknowledges proposed mattress EPR legislation under consideration before the Massachusetts legislature at the time of report publication—H.1023, H.3985, and S.614—but does not endorse any specific bill.

The Commission recommends consideration of the following questions:

- Should the mattress fee should be a flat fee or a variable fee based on size of mattress or cost? Current EPR programs have a flat fee regardless of the size (twin, full, queen, king) or cost of the mattress.
- Should the disposal cost of mattresses that cannot be collected and recycled through the program be included?
- Should the fee be collected at the wholesale or retail level? In current mattress EPR programs, the fee is collected at the point of retail sale.
- Should the EPR fee cover some form or partial cost of municipal curbside collection?

Commissioner Waneta Trabert: I actually disagree with the way that it's framed as aligned with programs in neighboring states. There was an effort in Oregon done in the past three years to improve upon that model. The law in Oregon is the most up-to-date in the country and it would be best if the Commission recommended that newer model. H.1023 does align with that model. I know I've said this in past meetings, but in the acknowledgment about the bills, I think it's very factual to state that a specific bill aligns with the above recommendation or has the same provisions as above. This is not endorsing a bill, but factually stating that this bill has the same model we are recommending.

Chair Beling: I think we did do that with paint; we didn't endorse it, but it aligned with the principles.

Commissioner Trabert: I don't think that language made it into the final recommendation.

Chair Beling: We expressed our concern with picking winners. As a creature of the legislature, my view as chair is we should be identifying bills, but would be overstepping for us to endorse.

Commissioner Trabert: I'm not saying that; I'm just saying this bill has same provisions as the one we are modeling.

Commissioner Rennie: Again, I don't think we need to acknowledge the bills, similar to what we did on paint. The legislature knows the bills they have before them. I think that the recommendation itself, particularly that we recommend that we enact legislation prior to July 2026, given that we have I think significant questions that still remain, this is not something I would particularly endorse. I think that the Commission's initial recs are due by January 2026. We have discussed mattresses for an hour, maybe 90 minutes; I don't think we've gotten at all the answers that remain. We have a state program that is comparable to the percentage recycling rates to those programs in other states. There is a program in Rhode Island and now recyclers have left Rhode Island. There's more information that could be gleaned from that. There are significant concerns that still remain before I would vote to recommend that they enact. I would prefer wording to recommend the legislature look to address and further dig into some of these questions. I'm not comfortable with endorsing at this point.

Commissioner Abbie Webb: I have a comment on the background document itself. On pages 3 and 6, there's a list of undesirable disposal outcomes for mattresses, and combustion is part of that list. I would add that alongside the billing, legal domain, etc. One question that came up with my team was whether it's our intent for EPR to go in on top of the ban or to replace the ban. A follow-up question is whether there is a ban along with EPR in other states. Are there pros and cons? My sense is the ban would remain in place, and the EPR program would serve to supplement the ban and set up a process or programs to make it easier for folks to get rid of their mattresses.

Chair Beling: My sense is the ban would stay in place, and EPR would be supplemental to complement the ban. Process and programs to make it easier for folks.

Commissioner Webb: That's something worth clarifying in the document.

Commissioner Rennie: Just to add, the curbside question is still significant in that the programs in other states don't do curbside pickup and a significant percentage of the population lives in municipalities that currently rely on that. Residents would expect that going forward. They buy a mattress. They pay a fee. They live in a city and have no means to transport the mattress, so they're going to have to pay that fee to go ahead and transport it. There are remaining questions and concerns.

Commissioner Christine Barber: I'm a legislator and I understand the challenges of endorsing a specific bill—we don't even know what the bills are, so calling out the earlier point, if there are learnings from the Oregon program, which I believe is new, and that is similar to a bill, we are not necessarily recommending it. That's helpful context. I do agree on the curbside piece; it's challenging to represent communities that have curbside now, which is a significant expense and probably honestly the only way they would get picked up. That's a big challenge that we're facing here.

Chair Beling: Do you think we should call it out here or should we leave to the legislature? I don't know how Oregon does it.

Commissioner Trabert: In Oregon discussions, in order to improve upon the model from Connecticut and Rhode Island and from experience in California, there was robust discussion about curbside collection,

but ultimately it was deemed not feasible to include within the EPR program costs because the costs are so variable. Similar to Oregon, we have a very urban and very rural parts of our state. Our state is much smaller, but costs are a lot more here. So they looked at this extensively, but it was not able to be solved. It's considered a premium service, and collection points need to arrange premium service if they so choose. That could be a municipality hiring a service. There is not a good solution because costs would vary so much throughout the program. It is a significant issue, but wearing my municipal hat with the City of Newton, having this EPR program in place would cut costs in half even without a curbside option.

Chair Beling: I think we'll sharpen our pencils, but I expect we'll take into consideration comments we've received and redistribute the recommendations based on some of these comments. Then we'll take a formal vote at the meeting in September. That will give enough time to get approval folks need from their respective organizations.

Commissioner Sarah Kalish: Regarding the vote in September, when do you plan to circulate updates?

Jennifer Haugh, GreenerU: I expect within a couple days.

5. Presentation: batteries

Marc Boolish, PRBA, presented slides 10–27 on battery EPR efforts, the PRBA model bill, performance in other states, metrics of success, and transportation and safety.

6. Presentation: batteries in Massachusetts

Greg Cooper, DEP, shared slides 28–29 of statistics and programs on battery recycling efforts in Massachusetts.

7. Presentation: State Fire Marshal

State Fire Marshall Jon Davine shared a few words on lithium-ion batteries and fire hazard potentials.

The majority of lithium-ion batteries are safe and appropriate for consumer use in an overwhelming majority of cases. Like alkaline batteries, they're in hundreds of devices. We depend on them every day, but unlike alkaline batteries, they fail rapidly and violently, and sometimes with catastrophic results. They release toxic and flammable gases and can explode and ignite nearby combustibles. When larger battery packs go into thermal runaway, they can be almost impossible for firefighters to extinguish.

I began by developing a tool for Massachusetts fire investigators. We here at the Department of Fire services have been able to gather much better data on these lithium-ion battery fires than we ever did before. We have a national incident reporting system. Every time your local fire department responds to a call for service, they write a fire report that is submitted to us at the state level, and it's also put into a national fire incident reporting system database at the national level. Now that database is probably 42 years old at the federal level. When the folks write these reports, there is no code in there for a lithium-ion battery fire. So that was one of my first

initiatives. When I took over as fire marshal back in almost two years ago in July 2023, we just had no data. I knew this from my previous life as a fire chief in Northampton. The last four fires I had before I left the city were lithium-ion battery fires. Talking to other fire chiefs, I knew that we had an issue in the state. But we just had no data to prove it.

One of the things we did at the Department of Fire services was create a lithium-ion battery checklist form for these types of fires, and it's available on the Department of Fire services website. So if a local department responds to one of these fires, they can go in, click on the link on the website, fill out the form, and hit submit. Then it comes back to us at the state level.

We're finally getting some decent data back, and we've been able to gather some very good data, and it paints a pretty good picture. Lithium-ion battery fires occur much more often than we previously believed. We've had at least 135 lithium-ion fires in Massachusetts last year alone. About three dozen injuries to firefighters and civilians have been reported since late 2023.

Because of this tool, which is voluntary—I'm sure I still have fire departments out there that just forget about it, or just don't do it—so I'm sure that number is probably higher than the one we actually have.

But, moreover, these numbers don't include a rising number of fires and trash disposal vehicles and transfer stations that some experts believe are driven by large numbers of improperly discarded batteries.

The exact cause of these fires can be almost impossible to determine, as you can imagine. In a trash truck, there's everything in those things. So they're very hard to investigate and determine. But they are consistent with what you'd see when you crush, puncture, or otherwise damage a consumer-grade, lithium-ion battery.

The bottom line is as these batteries grow in usage, so do the number of associated fires. And policy needs to keep pace with the hazard.

We're really dealing with four major sets of batteries. One is your personal devices: cell phones, portable chargers, laptops, stuff like that. Then there's micromobility devices: hoverboards, ebikes, e-scooters. Then there's electrical vehicles, and then our energy-storage systems—house batteries, industrial batteries, and then your grid-level systems.

When we look at the equipment involved in lithium ion-battery fires, we see some patterns. Micromobility devices, such as e-bikes and scooters, were the most common ones involved in fires. These account for nearly 20% of total fires. And this is troubling because these battery packs are much larger than those in the cell phones, tablets, laptops, etc., and they're also more likely to be stored near doorways and stairways that residents would use as an escape route if there was a fire. It's also where your firefighters would most likely make entry into that building to extinguish the fire.

As we look to the future of lithium-ion battery policy in Massachusetts, I would like to make two suggestions.

First, we need to maintain and improve the public's awareness of safe storage use, charging, and disposal of lithium-ion batteries. We at the Department of Fire services have been aggressive with leveraging news and social media. Ideally these messages should come from all stakeholders,

including retailers, distributors, waste management companies, and our partners in local and state government.

Second, we should explore the possibility of better isolating and recycling these batteries when the consumer is done using them. Lithium-ion batteries can be safely disposed of. But currently that process is time-consuming and inconvenient. You can buy a number of lithium-ion battery products quickly and easily online. As we all know, we need to make it just as easy for folks to recycle those, too. Providing isolation bins for residential buildings, commercial facilities, and drop-off centers could make it easier for consumers to discard their batteries in a way that won't lead to a trash fire so long as the appropriate fire protection measures are in place, and the personnel who work with them are well trained in the hazards, and how to mitigate those hazards.

Thank you for opportunity to speak and give you an update.

Beling thanked the Fire Marshal Davine.

8. Clarifying questions

Commissioner Janet Domenitz: I have a question about metrics in PRBA. Who is responsible for this, how does it get done, how does it get evaluated? Is this just concept of what we need? I just wanted to hear more about this slide.

Boolish: We would file a plan with the state and the state would have the opportunity to provide comments on that plan as far as what would work best for that state.

Commissioner Domenitz: Regarding awareness, what is a measurement of that? How do we know that the public is aware of the law and understands what to do?

Boolish: Yes, the stewardship does work in the background where they do surveys with consumers, businesses, etc., and ask them the question about their awareness of the program and whether they know where to drop batteries off.

Commissioner Trabert: Marc was describing different collection opportunities and it was voiced as household waste, but it's household hazardous waste collection—that is a distinction I just wanted to offer for clarity for the group, because it's very different.

Boolish: Sorry, it's household hazardous waste. It's not meant to be a curbside program.

Zeus Smith for Commissioner Tracy Triplett: You identified that there were studies being done on embedded batteries and those would be completed July 2027?

Boolish: I just saw Peg's comment in the chat and it is 2027. Apparently I said 2017.

Commissioner Barber: Regarding the global program, do you have a sense of how? I'm sure it varies across the municipalities. Are they drop-off programs?

Director Greg Cooper, MassDEP: Yes, they're going to be predominantly drop-off programs for trash and recycling at the transfer station, but they can also collect at other locations and at a recycle box, at the board of health, or something like that. But I would say predominantly those 268 will be municipal drop-off programs.

Smith: I have a question for Fire Marshal Davine. I'm curious about micromobility device fires. Are these spontaneous? Is there a sense that these are due to mismanagement or from a potential defect?

Fire Marshal Davine: With most of the causes have been due to improper charging, such as using after-market charger that wasn't designed for that device. That's been a big problem for us. The new National Incident Reporting System has a way to report on battery now. We are hoping for better data, as there's actually a module to write down type of battery, manufacturer, etc. The majority of fire departments will be onboarded soon with goal of having everybody in the new system by January 2026. Hopefully by this time next year we'll have much more accurate data.

Commissioner Rennie: I have follow-up question on that. The fires that start with improper charging I get, but the fires that then occur at waste transfer facility or town dump, there's just a bucket full of these batteries. How do these fires start?

Davine: Most of these are getting crushed or damaged by machinery or heavy equipment, they're getting crushed and there are combustibles around them.

9. Discussion

Trabert: I believe that the proposed PRBA program would work in Massachusetts. It would enhance the collection network, make a more cohesive system than the patchwork that exists right now, have educational requirements that would be uniformly executed across the state, which is not something we have right now, and certainly there is a cost element for some municipalities that are collecting batteries that that would be eliminated. In context, it's certainly not the same level of cost as a mattress program or even handling paint. I believe the amounts would be much less, but there is still a cost borne by taxpayers currently that this program would eliminate.

Commissioner Lew Dubuque: The NWRA completely supports the PRBA program. We think this is a great idea for Massachusetts. Battery safety is the number one issue right now, and a couple years ago, NWRA and RRS put together a report that estimates that 5,000 battery fires are taking place each year. This is a very important issue that needs to be addressed.

Commissioner Rennie: I just want to recognize and appreciate the fact that it is a true EPR model and it's not consumer-financed. Some legislation I've seen specifically prohibits a charge at the point of sale, and I think that's important.

Commissioner Webb: Just to echo what Lew said, we absolutely see the risk of fires from batteries in our facility every day, and we just had a truck fire a couple weeks ago from battery. There is a real and

present risk. There is no other way to effectively tackle this. The product is widespread and prevalent, and people generally don't know what to do with them. Some recommendations out there are to put them in the trash, which we are actively trying to combat. We need to say not just "no, don't put them here," but "yes, this is where you take it."

Commissioner Jose Delgado: I learned a lot from this discussion and echo my colleagues' sentiments. Just hearing about EV battery fires, but seeing from perspective from fire and safety risk, this one is definitely one that we should be looking into. I do have a question because with some of the topics we've discussed, there's been some pushback or "cons," but I'm curious to know if there are any specific pushbacks from other states that we should understand. I like to see all sides of an issue before I push for it. This one so far seems like a no-brainer.

Boolish: I see a hand raised from Mr. Zotos, and will let him speak for himself. We have been talking with Redwood and will continue that dialogue.

Chair Beling reminded the group that this section was for Commission discussion only, but that public comment would be next.

Commissioner Trabert: I'd like to address Commissioner Delgado's concerns. Marc Boolish touched on this in his presentation about some of the exemptions for this law, so one of the biggest areas of concern or what doesn't get addressed at the program as presented is embedded batteries. It is a major concern for municipalities and the waste industry, because the program doesn't solve the problem 100%. It would dramatically improve things from where they are right now, but if you have a rechargeable razor that stops working, you as a consumer have to figure out what to do with that. And from municipal point of view, we'd still have to educate consumers as to what to do with those, because it's not included in this program. It's a big topic of conversation across the country. There have been studies of the embedded battery, discussion on how to find solutions, but as of right now, it's exempt from the program.

Commissioner Delgado. Thank you. Batteries are different from paint or mattresses in that we use these items on a daily basis. Public awareness is important.

Commissioner Kishida: I'm thinking this is more rhetorical—and maybe Rep. Barber is in the room—but as the legislation is currently written, we have a two-year legislative session. Should this pass, this bill, this law, would then be implemented in January 2028 and rolled out in July 2028, which is three years from now. I think we have heard and will continue to hear the urgency and need for passage of this bill. I know there are positive changes happening in our legislature. If somehow the purpose of this Commission is to really motivate our legislators, we should get this one passed as quickly as possible.

Chair Beling: At present, the proposed legislation would take too long to go into effect. I think that's something we can talk about further. Any other concerns about the proposed approach?

Commissioner Trabert: I would like to raise the issue of recalled batteries, which is one of the exemptions. There has been discussion among local and state government officials in states that have either passed this legislation or are looking to pass it, that have identified that a lot of battery recall

notices describe the process to the consumer of what to do with the battery that is being recalled, and it is very typically—one person in the State of Washington looked into this—eight out of nine consumers were directed to take those batteries to household hazardous waste programs. For now recall batteries are exempt, but would like to see that include din the program to take responsibility off local governments. I can speak from personal experience but right after that conversation a couple weeks ago, I got a notice form Amazon that a device has been recalled, and it says to take to local household hazardous waste. I wondered, why don't we get a say? It's been an interesting evolution about the development of these programs.

Commissioner Webb: I saw a comment from Scott [Cassel] about if anyone read his document; I wanted to assure him I did. I'm used to reading his documents and looked for the term "eco-modulation." Is there anything in the fee structure to address that? Is that an element of these programs, or has that not been a part of it?

Boolish: Currently in the model legislation, eco-modulation is something extremely complicated to manage, because what exactly is it? Is it that you use renewable energy or recycled content? Who manages and polices it? There's not really a standardized approach to doing that, so it's just complicated. I know the French government has actually had eco-modulation in their transposed regulations from the battery directive going back ten years, and they haven't completely figured out how to do it yet. It's in their law but they can't figure out how to do it. It's definitely a talking point that happens behind the scenes, but it's not something that has come to a standardized approach yet.

Commissioner Webb: That's helpful. I want to see renewables and recycled content as much as possible, but in this context, it's about safety. Are there certain design elements that would make safer? I would like to see that—we're at the end of the pipeline. I would like to see potential of influencing product design.

Commissioner Trabert: I would like to see fee structure incentivize safer product design.

Scott Cassel, Product Stewardship Institute: Just weighing in on a few of the comments here. In terms of fee structure here, not every battery is treated the same way internally from Call2Recycle or those who are processing these batteries. They cost something different per battery. When we use the term ecomodulation, we are referring to overall cost structure, so a large versus small battery or different types or chemistries of batteries. I believe that the industry through the product stewardship organization Call2Recycle is assigning the cost in a certain way. They're already doing this to a certain degree. The concept is consistent with the way the industry does business now. They are looking at environmental impacts, not only a cost to system, and that is more complicated in terms of doing a lifecycle assessment and greenhouse gas impacts. I think this is a great topic for continued discussion, but there are ways to look at costs that the industry is using now. A second thing is on exemptions: I just wanted to comment that all exemptions should be considered free-riders and are not paying into system now. That's of interest to everybody. When Commissioner Trabert mentioned recalled batteries, if they are exempted from the bill but still come to household hazardous waste centers and they still need to pay for it, the companies that are putting those batteries into the system are not paying their fair share. That's something of concern to all of us.

Chair Beling: Just so I'm clear on that, if this is set up in the way it has been elsewhere, wouldn't the manufacturer have already paid in? They don't know in advance that they'd been recalled.

Cassel: That is a good question—if it is a free-rider or is it apportioned by the market share for the companies already paying into the system.

Boolish: There is a provision in the model that does talk about recalled batteries. If they do end up in the program, the stewardship organization can seek compensation from them. Recalls are intensive. The organization issuing the recall is supposed to have communications and background materials, packaging, etc., required to manage those batteries. One of the big things is there's a different training component for damaged, defective, and recalled (DDR) batteries, so if there's a retail or even a municipal component, there's a certain level of training that everyone who touches those batteries has to have. It is a reduced version of complete, dangerous-goods training. Because there's recognition from the Department of Transportation that we're not going to be training someone who is operating a kiosk at a retail location to be fully dangerous-goods trained, but they don't give exemptions on that for the DDR batteries. There is a provision in the bill to seek that compensation but ultimately the batteries can go through the same stewardship organizations that are managing a program. That cost, then, is just easier if it's done on the front end versus the back end.

Commissioner Webb: On the metrics of success piece, some of other programs like mattresses, we talked a fair amount about recycling percentage targets getting 80–90% of whatever is generated in the state, and I didn't see that on the list of batteries. And maybe that's just because I think the documents that show we're at about 12% nationwide now is probably quite low. If the goal is protection and safety in collection and recycling, and that's a big part of the driver here, then maybe we need to have ambitious and robust targets for recovery.

Boolish: We tend to focus more on convenience metrics and awareness, because there's a certain portion of population that will do it and will seek it out. Others won't. There is a provision in the program or plan that is filed. The plan has to have targets for what they think they're going to get and how they can improve that. So it is in there. But there's not hard targets listed in the model as a target by this date or new target by second or third date.

Zeus Smith for Commissioner Triplett: You mentioned the model bills and private action, and I wondered if you could just expand a little bit on what that looks like? Is this something that we really anticipate? Are there a lot of problems and free-riders to the extent that a product stewardship organization would regularly be pursuing these actions?

Boolish: As I mentioned, it's not something that's regularly been used to this point. It's something that's reserved. There's always going to be free-riders and it's the law of diminishing returns. If you're pursuing someone who's only putting maybe a thousand batteries on the market, they're not worth pursuing. But if you had a major player that was flooding the market with product and was not paying their fair share, we default to the state to enforce. The state has the ability to do that. That's why it's a law. This is just in the

case where if you have a major player that is not with the PSO, you could pursue them in civil court to pay their fair share.

Commissioner Rennie: We don't have metrics in the program states or percentages of what they're actually collecting?

Boolish: The other states have convenience and awareness targets, but do not have specific dates in there. But that's part of the plan. When the stewardship organization submits a plan, there is a number that the state will review and ideas based on when the plan is filed future dates for where they can and should be.

Commission Rennie: This is not really a question on success; I'm curious about the goals. Is it actually working? How much are you actually collecting? The consumer awareness piece is so important, particularly for small batteries, the pocket batteries, that a lot of people would just throw in the trash. I think a lot of people would just throw away medium things. Maybe for the medium and larger batteries, people would recognize they shouldn't just throw this away. I'm curious about how successful this has been in other states.

Cassel: Since we work with all these states, I want to go back to our database. We can put that together and send that to you. We should be able to get that to you. I think it's a great question that Bill raises—what's the performance? How is it doing? It's more difficult to calculate this, but we can. We should be able to come back with some numbers. Work with Marc and Carin Stuart from Call2Recycle about this as well.

Boolish: The states that I showed in my slides are just in the process of beginning, so only the District of Columbia actually has the program running right now. The other states are at their plan submission points, or prior to that right now. So we don't know exactly how they're running, because they're not running completely yet. The other side of it is I can look to the European system where the battery directive has been in place since 2006. The EU's 27 member states are divided in three parts. Some member states exceed the current 45% target, some are right at it, some are below. So it really depends. There are a lot of different reasons why. We can look at Europe and say Europe's been collecting batteries for nearly 20 years under the law, and a third of the member states aren't at the collection target right now. There are collection points everywhere you go. That's just a snapshot, a data point. Here in the U.S. it's hard to know because programs aren't fully functional yet.

Chair Beling: I've heard a few other policy recommendations. One was whether or not battery recall should be exempted. Another was whether or not the fee structure should perhaps encourage proper design. Another was we should not wait three years to do this. Any other policy recommendations this group would like to make? Mr. Rennie identified getting more information on success in other states. Any other information folks would like to see?

Commissioner Kalish: I was looking at the page of notable program exemptions. What percentage of batteries are reflected here in terms of market size?

Boolish: Some exemptions such as lead acid batteries don't count, because they already have a program. In the case of consumer medical devices, which are exempted, that's about 8–10%. We're not advocating for that exemption. For non-consumer medical devices, that's very small: 0.1%, maybe lower. Automotive batteries are a rounding error on top of that. So exemptions would cover far less than 1% of all the different batteries out there, assuming consumer-based medical devices are included.

Commissioner Webb: I was focused on front end of this whole program, but are there limitations on what then happens to batteries once they're collected? Sometimes things get exported to places with lower regulation.

Boolish: Most stewardship organizations are based in North America. Most of them are in the U.S., actually. Most will have foreign options in the case that they have a disruption in processing capability, but today most of those batteries are processed in the North American market. It makes it far easier from a transportation perspective and keeps the materials locally as best as possible, too.

Commissioner Webb: As I understand it, mattresses have a revenue stream from viable materials. Is that true of batteries too?

Boolish: There is definitely a business model for us processors. They want the material and actively seek it out. So that helps fuel their recycling engines, if you will.

Commissioner Trabert: Is that true for all battery chemicals?

Boolish: It's fairly consistent. There may be a specialty chemical system or something like that that does not have local processing, but when you look at the vast majority of the chemistries that are used like lithium ion, alkaline, etc., there is robust capability in the U.S. market.

10. Public input

Daniel Zotos, Redwood Materials based out of Nevada, and resident of Kingston, MA: Redwood Materials has a few thoughts on the proposed model. We have been working pretty closely and conversing with PRBA on some of these proposals lately. We've also worked with a number of PRBA's members in terms of direct partnerships with battery recycling. There are a few things I'd like to level set on in terms of this important work. There is a brand new and ascendant battery recycling industry getting off the ground here in the United States. A lot of work recently went into stimulating this downstream processing work in the Inflation Reduction Act in terms of certain federal policy maneuvers. My company in particular holds the outsized market share for all lithium-ion battery recycling in North America. Upwards of 70% of all lithium-ion batteries actually end up at our doors for processing and recovery. We actually think EPR models are great for smaller format and consumer batteries; we recognize the problems. We see the fire safety concerns and work across fire, safety, and emergency response. What we'd love to see in a more cohesive Massachusetts effort would be accounting for this downstream processing capability as well as market participants like my company that outwardly and proactively try to get batteries from consumers. Some of these current proposals actually don't allow or wouldn't allow for independent collection outside of a stewardship programs. There's been a lot of work over the past

year, not just for my company, but others in this space, including a trade organization called ReMA, or the Recycled Materials Association, and that reflects a broader part of the value chain. Waste management companies, metal recycling companies, and battery recyclers who have made recommendations to this model to essentially allow an independent path for battery collection that can also supplement the proposed stewardship program as well. So I know there's probably a lot more to discuss, but we'd love to be able to express some of those concerns more clearly with this group, but also in support of a path here to increase collection rates. We think we could have this proposed stewardship model work robustly. We'd love to help support that with our own direct work to the public where we offer take-back battery programs, drop-off bins, direct mail programs, and collection events. What we've seen with some of these proposals is it would actually limit some of the players who are able to accept or publicly collect batteries as well.

Beling reminded that written comments were welcome.

Andreas Heiss, LKQ Corporation. We are the largest vehicle recycler in the United States. We recycle close to a million vehicles a year and harvest their parts and resell them on the market. I know this discussion is more focused on small-format batteries and not vehicle batteries, but when we are looking at motor vehicle batteries, EPR has been pushed in multiple states across the last year and it hasn't really been with success. We don't support an EPR for any vehicle batteries. There's already a stream. They don't end up in trash bins or landfills as other batteries. It's a different animal. We're more under the assumption that there should be a stakeholder process for how these should be recycled. There's also a robust remanufacturing process which we're a part of. Some of the EPR regulations that have been put forth for these larger batteries have interfered with getting the best use out of these batteries. I'm kind of new to this discussion here in Massachusetts, and I just want to make sure that vehicle batteries are being looked at differently than the small-format batteries.

Andrew Ferrara, Berkshire Environmental Action Team, Pittsfield, MA. We offer battery recycling through Call2Recycle boxes at our office to the community. This is at cost to us, but free for community member drop-offs. I wanted to echo a comment made earlier that embedded batteries are a really big issue. We see that with people trying to bring them to us and need to know what to do with them. We do annual river and park cleanups and see embedded battery devices all the time, especially vapes. Battery recyclers don't take electronics, hazardous waste disposal won't take them, and there's really no good or safe or correct solution out there. That's something that really needs to be addressed.

Phil Goddard, Town of Bourne, and advisory group member, Massachusetts Product Stewardship Council: We spent a lot of time this winter with Representative Hogan and Senator Creem on a bill gave some flexibility with multiple PROs that could be created. We didn't want to prohibit inclusion. The main thing to Mr. Zotos' comments is we have a great recycler here. But you've got to report the information, be part of the system, have a plan. Let's see if we can bake this into a program that works for people who are doing the job already. Try to have that flexibility. We don't want folks outside the system to have multiple different ways to get data. So I think that was part of the reasoning behind that. So I encourage Redwood to work with PRBA. And if you could let all of us know, keep us informed, so we can work with legislative teams to work with PSC and others to learn and adapt to the best quality bill that we can get because we need all these locations. I work in a landfill. We had a fire two weeks ago with six

batteries and we're next to 15,000 acres of a military base, which is a tinderbox. So there are a lot of reasons we want these out of the landfills and the transfer station. So let's see if we can adopt it. But I think there was some room in the legislation, and Scott is the expert, and Waneta. We try to be accommodating, but I think there is some tweaking we can do.

Garrett Trierweiler, Director of Public Affairs, Waste Management: Greg mentioned his comments the impacts that batteries can have on waste and recycling facilities. As a national company, this is an issue we face very frequently, and all the states I deal with, battery EPR is one of the top priorities, as Lew from our trade association had mentioned. We've had a number of fires in New England over the past years, including one in New Hampshire that caused some serious damage. I want to point out that in Massachusetts we had a three-alarm fire at our Avon recycling facility. It cost \$3 million in structural damage. The facility was shut down for several months, and there was another \$3 million in lost revenue as a result. Just want to say how important this and support all the efforts of this Commission.

Anne Germain, National Waste and Recycling Association: I work with my colleague, Lew Dubuque, who's already spoken. As Lew already mentioned, NWRA supports this bill. We think it will go a long way to address a lot of the battery issues we're experiencing in our facilities. We recognize it's not the only solution and needs to be multi-pronged approach to that end. NWRA is launching a national campaign with Woodsy the Owl. We're also going to be working on the safety aspects and everything else for our facilities. As everybody has already mentioned, it has to be addressed in this manner as well. The fires we're experiencing are an existential threat to our members. Lew has already mentioned the number of fires, but our insurance rates are skyrocketing. They've gone up between 10–100-fold over the past few years. And so this is something we absolutely need.

Greg Cooper, Director, Solid Waste, MassDEP: One question I put to the Commissioners and to anyone here is should this coincide with a ban on the disposal of those types of batteries? Would this be something we'd want to consider?

Chair Beling: Marc, my understanding this was a feature of the ones you described previously?

Boolish: Yes, it's in the model bill.

Chair Beling: How does that work in practice?

Boolish: Again, with U.S. states, they're just getting started. Some states "don't want to make criminals out of their constituents." In practice, it tends to be enforced more at a commercial or industrial level than at the average consumer level.

Chair Beling: Where is the ban put in place? At disposal or retail sales?

Boolish: It would be a prohibition on retail sales if you're not part of a program, and then a ban on landfill disposal.

Goddard: Just a quick follow-up. NWRA has several representatives here. I am the past president of the Southern New England chapter of the Solid Waste Association of North America, which represents mainly municipalities, over 10,000 members, and the parallel organization, if you will, to NWRA. Those organizations have partnered together on safety. SWANA CEO Amy Lestition Burke and NWRA CEO Michael Hoffman have partnered on this issue and have submitted comments on these bills. And I'm also part of a national battery working group with SWANA, so you have another trade organization that's highly supportive of these efforts.

Daniel Zotos: I wanted to quickly respond to Phil's offer. We'd love to work more closely with you on some recommendations. Just to better articulate one key pain point for this industry here is there's language that blanketly requires any entity independent of a stewardship organization—if they collect batteries from the public, they must forfeit the batteries they collect to the stewardship organization. That's really the big pain point for any advanced battery recyclers or others in this space who are fully subsidizing the collection of batteries because of their inherent value. That's why we've been showing up in more of an oppositional posture. We want to see a policy; we want to see a bill, but it's provisions like that that actually don't allow for the flexibility Phil mentioned. So we've love to take Phil up on that. We have really good recommendations we've already submitted to the legislature. There has been an ongoing national group working group on this in terms of ReMA metal, recyclers, etc., that I mentioned. So I just wanted to articulate why and exactly where the paint point is for industry to be able to show up here, not instead of a stewardship program, but alongside, and possibly in coordination and support of it.

Commissioner Domenitz: Couple of comments. I think it's different if you're going to ban the sale. But just in terms of the track record in Massachusetts of success in banning items from disposal, I think the most recent numbers from a few years ago are that more than 40% of what goes into trash in Massachusetts are materials that have long been banned by DEP—paper, cardboard, glass, etc. How do we measure awareness and how do we know we're succeeding? My contention is that it's a throughline starting with awareness, and then we need to get to final enforcement penalties for disposal. How do people understand? How's the outreach? What's the infrastructure to enable the bans? Because from 20,000 feet, as much as I am a proponent for banning certain items, the track record is not what I would say is great so far. So we need to look at that overall. With batteries in particular, it seems dangerous if it's not complied with.

Commissioner Kishida: I would like to hear from Marc about Redwood's comment and how that would impact an EPR program. Financially, what does that do?

Boolish: Part of reason batteries go through a stewardship organization has to do with state oversight. As part of that plan, the stewardship organization submits a plan, but then the organization gets data from plan members about what they're importing. The number that's used is a percentage of the population based on what's in the U.S. Because most members don't know what they sell in an individual state. In some cases, what they know is what they import or manufacture and sell in the U.S., but once it goes to a retailer, it can go to ten different states from a distribution hub. They'll know the denominator but not the numerator of products that aren't recorded as part of stewardship program. So if we get into metrics, that's part of the reason, to get an accurate number for what's actually collected. The stewardship organization has to know what those products are or what is being collected. That's one of the big reasons

for making sure they go through the stewardship organization. The other one is that there are a lot of key parts in the model bill that talk about best practices and making sure products are processed domestically and they go through best practices so they're being recycled properly. Not that those in the room here don't recycle properly; I'm just saying it's just a provision so that the state has oversight to make sure they're managed appropriately. Those are really the two key components: oversight and accurate numbers.

Commissioner Kishida: I would be concerned if Redwood does it and someone else wants to do it, reporting is important and it really kind of fractures it. So thank you.

Commissioner Delgado: I was curious about same topic as well. I think the reporting piece is important, but as I also see it, are Redwood or other organizations asking for a specific piece of this or are they allowed to continue doing the work they're already doing? It's better to have multiple options for folks to be able to recycle, which is the whole point of why we're here in the first place. I wouldn't want to see us do something that would hurt other businesses already doing the work we're trying to have done. I know I'm simplifying the issue and not understanding all the other pieces of it, so thank you, Marc, for making sure there's accurate reporting. If the goal is to recycle, then the more folks to have that opportunity, the better, in my opinion.

Zotos: Counselor Delgado, I think you distilled the issue pretty succinctly here. It's pretty simple. What Redwood and other industry players in this space are proposing is not hypothetical; it's work we're already doing. When we launched to recycle lithium-ion batteries at end of life, we literally started having consumers sending us old iPhones, tablets, lithium-ion batteries from drills, just to our office, and we decided there's a massive need and avenue for consumers here to recycle these batteries. So we extended a national program for a consumer recycling program that we're really proud of. We have a lot more work to do there. It's still earning innings on what we could offer. We work with other people on this call and recycle a lot of the batteries they collect. To Commissioner Delgado's point, if we're looking at abysmal collection and recycling rates for batteries writ large, we do need to bring more solutions to bear. We shouldn't penalize industry players who are subsidizing collection free to consumers. That's what Redwood does, at least in order to acquire feedstock for what we do with the materials, which is that we recycle them very sustainably here in America at a 95% or better metal recovery rate. We take that lithium, that nickel, that cobalt, and we remanufacture battery components that go toward clean energy technologies right here in America. So that's why we've been very vocal on these topics; we think broader collection and a stewardship program is a good thing here for batteries. We just think there is a more cohesive approach rather than a limited one, which that material forfeiture provision would legally limit what companies like mine could do or collect. So in terms of questions on reporting with the collection work we already do across ecosystems, we recycle EV batteries as the largest EV battery recycler in the country, as well as stationary storage. We have to adhere to very robust federal, state, local compliance, shipping, packing, EPA guidelines. We are more than okay to report on any data here. We actually already have to do this for our consumer collection efforts across states. So some of the language we've offered up has been very forthcoming to, say, let recyclers who are already directly collecting provide that data. We could actually help the stewardship program in areas where they may be failing to meet convenience standards. We could help them with some of our existing collection work as well. So

that's what we're saying. We have a lot of good work and proposals that have gone into this. We think there's an easy way to reimagine some elements to this bill to really account for that broader response.

Commissioner Trabert: I'm wondering if Marc or Carin Stuart of Call2Recycle could elaborate on how a collector separate from the stewardship organization harms other players in the program?

Carin Stuart, Director, Steward Services, Call2Recycle: I wouldn't say harm. I think there's a way to thread the needle, as Daniel mentioned before, where there has to be a balance to understand the pros and cons of each element that right now in the current laws the PSOs battery stewardship organization is held accountable to. If there are ways in which batteries leave the system that aren't accounted for in the current law, the program gets penalized because we don't collect them. And we've said in our plan, this is what we're going to do. In future laws, that can be worked out—for instance, the collection rate, as we were talking about before, we have to propose in the plan the rate for the first three years of the program, and we do a lot of analysis. We do lot of research and analysis and we propose that if we're held accountable to that. But then batteries just leave the system, then that's an issue. Because we as representing the industry look like we're not doing our job. But if that's not part of the law, we can collectively collect them together. And we're not held accountable to that. There could be multiple players in the battery collection scheme. With respect to marketing, there are awareness metrics that was brought up before we do an annual survey of residents to understand. Do they know that they can recycle batteries, and can they? And so we do a lot of education outreach in that vein. So we would just again want to make sure that we're not pointing consumers in opposite directions. There has to be a collective voice so that together we are all pushing this information. There are opportunities for partnership and I think we just have to keep that conversation open.

Zotos: I think in terms of harm to the program or things like that, we've heard previous comments about it. If certain market players only take the valuable batteries, how can we subsidize the rest of the program? Our very candid response to that has been, what is the legacy of EPR that has existed? It's for producers to manage, and is very hard to manage possibly unwanted or negative-value products. If the market is showing up to manage wanted materials, that's a good thing, especially if we look at the stark nature and broad, sweeping impact of battery safety. In the first place, to Commissioner Delgado's point, we need more players collecting batteries. So I don't think there's this cannibalizing nature out there. I've yet to see any demonstration as to how that would occur, and I would continue to say, at least speaking for Redwood here, we are more than willing to hold ourselves to high standards. We've proposed definitions for advanced battery recyclers that would hold us to a high standard in terms of the processing we're supposed to do to meet the environmental standard associated with that, etc. I think there's some goodwill language put forward from the industry here that would ensure a lot of the things this bill speaks to in spirit, which is domestic manufacturing, onshoring, critical minerals, things like that to make sure recycling processing is happening. There are lots of ways to thread that needle. I appreciate the commentary from numerous colleagues on this call. This is not an issue that has been worked out in other states, to be clear. There was a comment earlier about what's the data from other states and the answer to that is, we haven't seen it yet. It's very early innings in terms of bills that have been passed, and I would also join the advocates in their commentary around urgency, for some of these bills Redwood is very publicly stated. We'd like to see sooner phase in times for these programs. We've joined with a lot of metal recyclers across the country and scrapyards who are dealing with fires today who want more

immediate responses today as well. So we hear that urgency and welcome that urgency and improved timelines. And we want to help everyone out here with work. We do. We just want to be allowed to do it.

Goddard: Listening to this conversation reminds me that we were working on paint for many years. The Cape was a DEP grantee for paint collection, and we continue to do latex paint collection. Bringing this up because a very good recycled-paint company in Massachusetts called Recolor, and they're very well established, and their fear from talking to the owner is that a program might exclude them, or they'll not get what they've been building for a lot of years. It's kind of a similar topic here. So it's just for the Commission overall on these programs: just consider that those who have done the work have a valid point. They're up there doing it now. So as a corollary with paint, we want to reward them for making that effort. But at the same time, as Carin says, the industry needs to get the credit for it and it needs to be tracked properly. So there may be a way to thread this needle on these programs because they've gone on so long without any programs in the state. Others have come up, but I know that one particular entity in the paint world is a similar kind of situation. I don't know if that's the answer, or anything right now, but it's just something I want to put out there for consideration.

Boolish: Briefly, one thing we often hear in discussions in some of the other states that are either in the process or have passed laws is making sure we eliminate confusion. Going back to Waneta's comment about a recalled battery and not knowing what to do there, the big point is that we don't want consumers to get turned away. So in the legislative language, it requires the collection of all the different battery types, and there are a lot of things that happen behind the scenes in legislation, such as the plan, submission, the reporting, the marketing, the education, things that were talked about just a little bit ago. Those are all items that are part of the bill. And just to be clear, in the model bill, we don't say that there should be one product stewardship organization. The industry welcomes competition and multiple players in the market. Some states choose not to do that, but that is not part of the model bill. We look at it and say, we like the option to have one or more stewardship organization to be able to increase that footprint, provided that everybody is following the same set of rules, because there are a lot of rules. And there's a lot of background work investment, things that have to happen to be able to make a program a reality.

John Fischer, Deputy Director, MassDEP Solid Waste Division: I just wanted to offer the observation on the heels of Phil's comment and the discussion we've had here with batteries, and the note that the same concern has come up with our existing mattress recyclers, so we're three for three on that issue right now that existing recyclers are interested and concerned about how they would fit into an EPR system. I just wanted to note that that theme seems to be emerging here.

Zotos: I appreciate John's comments on this. I'd say the very important distinction between battery and mattress recyclers here is mattresses don't contain strategic critical materials important for national security and clean energy adoption, such as batteries do. We're really talking about lithium-ion batteries. So that is a huge distinction where industry players and recyclers having direct access so long as they're playing by the rules, of course, should be able to continue the work they're doing. Mattresses don't contain lithium, cobalt, nickel, etc., so that's a really important distinction in terms of inherent value within this scheme or ecosystem that really needs to be accounted for if we're going to uphold domestic clean energy goals and critical mineral security aspirations as well.

Commissioner Webb: It strikes me that this hasn't been solved for batteries in other places, but I think it's something that's very much discussed elsewhere. Whether it's additional multiple stewardship organizations or simply a system of having service providers register with stewardship organizations, but not be the designated one contractor or other, I do think this is resolvable, it seems.

Commissioner Trabert: I wanted to circle back to Janet's comment before about the ban on disposal of batteries that is currently part of this model bill. While I do think it's important to have that enforcement capability, I don't think that's the function of it—more so in the marketing and education of a collection program that it can be an added motivation to let public know that it's against the law to put a battery in the trash. That can be a helpful parameter not specifically from an enforcement perspective because players on disposal end of supply chain don't want batteries in trash. But it's important for a large business to be managing a large amount of material to be disposing of it in an appropriate way; it's an important provision, but not enforcement from a penalization perspective for what ends up in the trash. I'm not sure if that's helpful. I thought it was a different take on the function of a disposal ban.

Chair Beling: I see this as complementary; we want to say "you can't do this," and we're giving you an opportunity to dispose batteries appropriately. "I'm sorry you can't dispose of lithium-ion batteries in the trash, and we're giving you and opportunity to handle them appropriately." We're not going to be running around grabbing people off the street. But it helps to have education, like this is so bad we're actually making it illegal. It's not just bad for the environment; it's a safety issue. And we're going to make it easier for you to get rid of them. So I think they're complementary features.

Cassel: I just wanted to confirm what you're saying. Around the country, there are some states comfortable with it being just a message to consumer that it's against the law, and I shouldn't do this, it's a real hazard, but states don't intend to enforce. You all know how difficult it is for something so small as primary batteries. I want to go back to the comment on banning the sale of batteries: really a way of ensuring producers of batteries covered into the law are actually paying into the system. It does get more complicated with what Daniel has mentioned with the outside of the system and not needing those funds, but every single EPR law does have that provision in it. I haven't seen a state enforce in that way, but have seen some states say, hey, this large company is selling to a retailer and calling them out and saying these guys aren't part of this plan, and when retailer sends a letter to that company, they actually become part of that program. It's kind of a nuclear option for states because having a company not be able to sell into a state is a big deal, but by sending that letter saying you've got to be in compliance has worked.

Zeus Smith for Commissioner Triplett: I'm struck by this conversation because we not only don't want batteries in landfills, but industry wants these recycled batteries—it's different from other industries where they are useless products. I wonder in leading into this by increasing consumer awareness if there's been some sort of discussion of consumer rebate, and whether anyone can comment on that and how that functions in the financial analysis.

Cassel: I can say that there have been products where there have been deposits put on or rebates, so when you get it back, it's \$5. Thermostats for example in Maine there's a \$5 rebate called a bounty, so if you bring it back there's a good incentive. This does add a lot of costs: it's not going to get producers to contribute to that if those batteries can be collected without those added costs. There's a big demand for

getting those batteries back. There are still mining issues and others along the supply chain in terms of impacts, but that's not typically thought of for something. And then you see the deposit law, and you know how difficult that is where the consumer is paying something and they get that same amount back. I think the bounty is more typically used for a toxic product like thermostats and has not been discussed around the country for batteries at this point.

Stuart: I just wanted to mention some facts from our program. When we operate in all battery programs, almost 65% of the weight collected is an alkaline battery, which is actually a cost negative. There's very little value in those batteries when they are recycled. The batteries with the highest value are the high cobalt, high nickel, high lithium ion, and that's typically what everybody's scrambling over. But they are probably 20% or less of the total weight we collect annually in our all-battery program. So I just wanted to clarify what we see when we operate these and where the money comes from or where it does and where it's an expense.

Commissioner Rennie: Following up, does the ratio at which you collect correspond with market presence of alkaline vs. lithium ion?

Stuart: It correlates with use—alkaline batteries are used within two to three years of purchase. Lithium ion used within five to ten years. They stay with the consumer much longer than a single-use battery.

11. Discussion: battery EPR recommendation

Beling reviewed slide 36 and asked whether there was any firm opposition. None was offered. Beling said that we will attempt to capture some of the comments made from today's discussion.

12. Next steps and adjourn

Beling reviewed slide 37.

Commissioner Webb moved to adjourn. Commissioner Rennie seconded. The motion carried unanimously.

The meeting adjourned at 12:09 p.m.

Respectfully submitted, Jennifer A. Haugh GreenerU